Peakview Environmental LLC

September 5, 2018

Claudia Smith
Tribal NSR Permits Lead
USEPA Region 8
1595 Wynkoop Street
Denver, CO 80202

RE: Oil and Natural Gas Minor Source Registration Form Part 2 – Emission and Production Information
EP Energy E&P Company, L.P.
Ute Tribal 2-26A1 Well Site

Dear Ms. Smith:

On behalf of EP Energy E&P Company L.P. (EP Energy), Peakview Environmental, LLC (Peakview) is submitting the enclosed Oil and Natural Gas Minor Source Registration Form Part 2 – Emission and Production Information for the Ute Tribal 2-26A1well site and tank battery.

Please contact Chelsea Cantrell, EP Energy at chelsea.cantrelle@epenergy.com or me at julie@juliespear.com with any questions.

Sincerely,

PEAKVIEW ENVIRONMENTAL, LLC

Julie Spear

Julie Spear, PE
Principal Engineer

Enclosures

cc: Chelsea Cantrelle, EP Energy
Bruce Pargeets, Director, Ute Indian Tribe Energy & Minerals Department
Minnie Grant, Air Coordinator, Ute Indian Tribe Energy & Minerals Department

EPA Form No. 5900-391
EPA ICR No. 1230.27
OMB Control No. 2060-0003
Approval expires 4/30/2017

United States Environmental Protection Agency
http://www.epa.gov/air/tribal/tribalnsr.html

Part 2: Submit Within 60 Days After Startup of Production -- Emission and Production Information

FEDERAL IMPLEMENTATION PLAN FOR TRUE MINOR SOURCES IN INDIAN COUNTRY IN THE OIL AND NATURAL GAS PRODUCTION AND NATURAL GAS PROCESSING SEGMENTS OF THE OIL AND NATURAL GAS SECTOR

Registration for New True Minor Oil and Natural Gas Sources and Minor Modifications at Existing True Minor Oil and Natural Gas Sources

Please submit information to:

Attn: Ms. Claudia Smith
Air Program (8P-AR)
1595 Wynkoop Street
Denver, CO 80202-1129
Phone: 303-312-6520
Email: smith.claudia@epa.gov

&

Attn: Minnie Grant
P.O. Box 70
988 South 7500 East
Fort Duchesne, UT 84026
Phone: 435-722-5141
Email: minnieg@utetribe.com

A. GENERAL SOURCE INFORMATION (See Instructions Below)

1. Company Name EP Energy E & P Company, L.P.	**2. Source Name** Ute Tribal 2-26A1
3. Type of Oil and Natural Gas Operation Oil and Gas Well Site	**4. New Minor Source?** ☒ Yes ☐ No **5. True Source Modification?** ☐ Yes ☒ No
6. NAICS Code 211111	**7. SIC Code** 1311
8. U.S. Well ID(s) or API Number(s) [if applicable] 43-047-55785	

9. Area of Indian Country	10. County	11a. Latitude	11b. Longitude
Uintah and Ouray Reservation	Uintah	40.371902 (NAD 83)	-109.96724 (NAD 83)

ED_004016P_00001287-00002

B. CONTACT INFORMATION (See Instructions Below)

1. Owner Name EP Energy E&P Company, L.P.	Title Asset Owner
Mailing Address P.O Box 4660 Houston, TX 77210-4660	
Email Address chelsea.cantrelle@epenergy.com	
Telephone Number 713-997-6206	Facsimile Number 713-455-8380
2. Operator Name (if different from owner) (Same as Owner)	Title
Mailing Address	
Email Address	
Telephone Number	Facsimile Number
3. Source Contact Jeff Crozier	Title Landman
Mailing Address 17900 West 3750 North Altamont, UT 84001	
Email Address jeff.crozier@epenergy.com	
Telephone Number 435-823-4999	Facsimile Number N/A

4. Compliance Contact Chelsea Cantrelle	Title HSER Advisor
Mailing Address P.O. Box 4660 Houston, TX 77210-4660	
Email Address chelsea.cantrelle@epenergy.com	
Telephone Number 713-997-6206	Facsimile Number 713-455-8380

C. EMISSIONS AND OTHER SOURCE INFORMATION **See attached document**

Include all of the following information in the table below and as attachments to this form:

Note: The emission estimates can be based upon actual test data or, in the absence of such data, upon procedures acceptable to the Reviewing Authority. The following procedures are generally acceptable for estimating emissions from air pollution sources: (1) unit-specific emission tests; (2) mass balance calculations; (3) published, verifiable emission factors that are applicable to the unit (i.e., manufacturer specifications); (4) other engineering calculations; or (5) other procedures to estimate emissions specifically approved by the Reviewing Authority. Guidance for estimating emissions can be found at http://www.epa.gov/ttn/chief/efpac/index.html.

[X] Narrative description of the operations.

[X] Identification and description of any air pollution control equipment and compliance monitoring devices or activities.

[X] Type and actual amount (annually) of each fuel that will be used.

[X] Type of raw materials used (e.g., water for hydraulic fracturing).

[X] Actual, annual production rates.

[X] Actual operating schedules.

[X] Any existing limitations on source operations affecting emissions or any work practice standards, where applicable, for all regulated New Source Review (NSR) pollutants at your source. Indicate all requirements referenced in the Federal Implementation Plan (FIP) for True Minor Sources in Indian Country in the Oil and Natural Gas Production and Natural Gas Processing Segments of the Oil and Natural Gas Sector that apply to emissions units and air pollution generating activities at the source or proposed. Include statements indicating each emissions unit that is an emissions unit potentially subject to the requirements referenced in the FIP, but does not meet the definition of an affected facility under the referenced requirement, and therefore, is not subject to those requirements.

[X] For each emissions unit comprising the new source or modification, estimates of the total allowable (potential to emit) annual emissions at startup of production from the air pollution source for the following air pollutants: particulate matter, PM_{10}, $PM_{2.5}$, sulfur oxides ( ), nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compound (VOC), lead (Pb) and lead compounds, fluorides (gaseous and particulate), sulfuric acid mist (H_2SO_4), hydrogen sulfide (H_2S), total reduced sulfur (TRS) and reduced sulfur compounds, including all calculations for the estimates. Allowable annual emissions are defined as: emissions rate of an emissions unit calculated using the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical

or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation, or the effect it would have on emissions, is legally and practically enforceable. You must determine the potential for emissions within 30 days from the startup of production.

[X] For each emissions unit comprising the new source or modification, estimates of the total actual annual emissions during the upcoming, consecutive 12 months from the air pollution source for the following air pollutants: particulate matter (PM, PM_{10}, $PM_{2.5}$), sulfur oxides (SO_x), nitrogen oxides (NOx), carbon monoxide (CO), volatile organic compound (VOC), lead (Pb) and lead compounds, ammonia (NH_3), fluorides (gaseous and particulate), sulfuric acid mist (H_2SO_4), hydrogen sulfide (H_2S), total reduced sulfur (TRS) and reduced sulfur compounds, including all calculations for the estimates. Estimates of actual emissions must take into account equipment, operating conditions, and air pollution control measures. You should calculate an estimate of the actual annual emissions using estimated operating hours, production rates, in-place control equipment, and types of materials processed, stored, or combusted.

D. TABLE OF ESTIMATED EMISSIONS

Provide in the table below estimates of the total allowable annual emissions in tons per year (tpy) and total actual annual emissions (tpy) for the following pollutants for all emissions units comprising the new source or modification.

POLLUTANT	TOTAL ALLOWABLE ANNUAL EMISSIONS (TPY)	TOTAL ACTUAL ANNUAL EMISSIONS (TPY)
PM	0.61	0.61
PM_{10}	0.31	0.31
$PM_{2.5}$	0.31	0.31
SO_x	0.02	0.02
NO_x	7.93	7.93
CO	18.54	18.54
VOC	10.21	10.21
Pb	N/A	N/A

POLLUTANT	TOTAL ALLOWABLE ANNUAL EMISSIONS (TPY)	TOTAL ACTUAL ANNUAL EMISSIONS (TPY)
NH3	N/A	N/A
Fluorides	N/A	N/A
H_2SO_4	N/A	N/A
H_2S	N/A	N/A
TRS	N/A	N/A

Instructions for Part 2

Please answer all questions. If the item does not apply to the source and its operations write "n/a". If the answer is not known write "unknown".

A. General Source Information

1. Company Name: Provide the complete company name. For corporations, include divisions or subsidiary name, if any.
2. Source Name: Provide the source name. Please note that a source is a site, place, or location that may contain one or more air pollution emitting units.
3. Type of Operation: Indicate the generally accepted name for the oil and natural gas production or natural gas processing segment operation (e.g., oil and gas well site, tank battery, compressor station, natural gas processing plant).
4. New True Minor Source: [Per Federal Indian Country Minor New Source Review Rule, 40 CFR 49.153].
5. True Minor Source Modification: [Per Federal Indian Country Minor New Source Review Rule, 40 CFR 49.153].
6. North American Industry Classification System (NAICS): The NAICS Code for your oil and natural gas source can be found at the following link for North American Industry Classification System: http://www.census.gov/eos/www/naics/.
7. Standard Industrial Classification Code (SIC Code): Although the new NAICS code has replaced the SIC codes, much of the Clean Air Act permitting processes continue to use these codes. The SIC Code for your oil and natural gas source can be found at the following link for Standard Industrial Classification Codes: http://www.osha.gov/pls/imis/sic_manual.html.
8. U.S. Well ID or API Number: Unique well identifier as assigned by the Federal or State oil and gas regulatory agency with primacy, using the American Petroleum Institute (API) Standard for number format (pre-2014) or the Professional Petroleum Data Management (PPDM) Association US Well Number Standard (2014-present). Provide IDs for all oil and natural gas production wells associated with the facility, if applicable. May not be applicable for downstream production sources, such as compressor stations.
9. Area of Indian Country: Provide the name of the Indian reservation within which the source is operating.
10. County: Provide the County within which the source is operating.
11. Latitude & Longitude (11a. and 11b.): Provide latitude and longitude location(s) in decimal degrees, indicating the datum used in parentheses. These are GPS (global positioning system) coordinates. This information should be provided in decimal degrees with 6 digits to the right of the decimal point, indicating the datum used in parentheses (i.e., NAD 27, NAD 83, WGS 84 – WGS 84 is preferred over NAD 27).

B. Contact Information

Please provide the information requested in full.

1. Owners: List the full name (last, middle initial, first) of all owners of the source.
2. Operator: Provide the name of the operator of the source if it is different from the owner(s).
3. Source Contact: The source contact must be the local contact authorized to receive requests for data and information.
4. Compliance Contact: The compliance contact must be the local contact responsible for the source's compliance with this rule. If this is the same as the Source Contact please note this on the form.

C. Attachments

The information requested in the attachments will enable the U.S. Environmental Protection Agency (EPA) to understand the type of oil and natural gas source being registered and the nature and extent of the air pollutants to be emitted.

Disclaimers:

The public reporting and recordkeeping burden for this collection of information is estimated to average 6 hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

Information in these forms submitted in compliance with the final Federal Indian Country Minor NSR rule may be claimed as confidential. A company may assert a claim of confidentiality for information submitted by clearly marking that information as confidential. Such information shall be treated in accordance with EPA's procedures for information claimed as confidential at 40 CFR part 2, subpart B, and will only be disclosed by the means set forth in the subpart. If no claim of confidentiality accompanies the report when it is received by EPA, it may be made public without further notice to the company (40 CFR 2.203).

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NEW MINOR SOURCE REGISTRATION - PART 2 ATTACHMENT

Ute Tribal 2-26A1
Remote Location
Duchesne County, Utah

Prepared For: EP ENERGY

EP Energy E&P Company, L.P.
P.O. Box 4660
Houston, Texas 77210-4660

Submitted By: Peakview Environmental LLC
2412 Iris Avenue
Boulder, Colorado 80304

September 2018 **Project No. EP0182016**

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1.0 INTRODUCTION

EP Energy E&P Company L.P. (EP Energy) owns and operates the Ute Tribal 2-26A1 site, a new oil and gas production site located in Duchesne County, Utah. The site services one well, Ute Tribal 2-26A1, API# 43-047-55785.

1.1 Site Description

EP Energy has installed and is operating the following equipment and emission sources at the site:

- Two (2) 500-barrel (bbl) oil storage tanks
- One (1) 500-bbl produced water storage tank
- One (1) 500-bbl overflow storage tank
- One (1) heater treater and various natural gas-fired heaters ≤7.5-MMBtu/hr combined total
- Controlled oil truck loading – emissions routed to flare
- Produced water truck loading
- One (1) 7.7-MMBTU/hr flare
- Four (4) intermittent-bleed pneumatic controllers
- One (1) 300-hp natural gas-fired generator engine
- Equipment fugitives
- Miscellaneous storage containers (motor oil, methanol, glycol, etc.) ≤500 gallons each and combined capacity of ≤ 1,600 gallons
- Electric pump jack

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2.0 PROCESS DESCRIPTION

The Ute Tribal 2-26A1 site includes one wellhead with separation and storage capability. The site will produce up to 150,000 barrels of oil per year (BOPY) or 411 barrels of oil per day (BOPD). The site will operate 8,760 hours per year. A general process flow diagram and applicable in Appendix A of this document. A site plan is included in Appendix B.

Well production is brought to the surface via an electric pump jack and routed to a heater treater to separate the well fluids into three constituent phases: oil, gas and water. The separated oil phase is routed to the oil storage tanks prior to truck transport offsite to sales. The separated water phase is routed to the heated produced water storage tank prior to being transported offsite for disposal. Both oil and produced water are transferred to tanker trucks utilizing the submerged loading method. The separated gas phase is routed to the gas sales pipeline. During an emergency upset condition oil or produced water may be rerouted to a produced water tank will be utilized as an overflow tank.

The natural gas fuel for the heaters and the generator engine is buy-back gas from the natural gas processing plant and is assumed to be pipeline specification quality. The total rating for all heaters is ≤ 7.5-MMBtu/hr.

Oil storage tank and produced water tank emissions are routed to a flare for ≥98% control of volatile organic compounds (VOCs). The crude oil loading emissions are routed to the flare via a vapor recovery line. The vapor capture efficiency is 70% and flare control efficiency is ≥98%. Produced water emissions are assumed to be negligible due to the low concentrations of dissolved VOCs present in the produced water and therefore produced water loading emissions are not controlled.

Site loads may be powered by a natural gas-fired generator or supplied electricity.

3.0 EMISSION CALCULATIONS

Emissions calculations for the emission sources at the site are included in Appendix C of this document. Calculation methodologies for each emission source are discussed in the following sections.

3.1 Representative Analysis

Emission calculations are based on a liquid sample collected from the separator at the Powell 2-13A2 facility on 6/17/16. Laboratory analysis of the flash gas evolved from hydrocarbon liquid and extended hydrocarbon analysis of the liquids were conducted on the sample. The laboratory report is included in Appendix C.

3.2 Storage Tanks

3.2.1 Oil Storage Tanks

Tank flash losses from the oil storage tanks were calculated using the gas-to-oil ratio (GOR) measured by laboratory procedures method and the flash gas composition from the laboratory flash liberation of liquid hydrocarbon analysis.

Working and standing emission losses from the oil storage tanks were calculated using EPA TANKS 4.09d to determine total annual emissions from the tanks. The output from a Promax simulation using the stable oil option was used to speciate the total emissions from the TANKs report. The detailed TANKs report and the Promax output are included in Appendix B.

The flash and working and standing storage tank emissions are routed to the flare for 98% VOC control.

3.2.2 Produced Water Storage Tank

The well fluids undergo separation in the heater treater where oil/water/gas are separated. Low levels of dissolved hydrocarbons remain in the produced water and VOC emissions from the water storage tank are assumed to be negligible.

3.2.3 Overflow Storage Tank

One produced water tank is utilized as an overflow tank and will remain empty except in emergency upset conditions when either the oil or produced water tanks are rerouted to the overflow tank. The overflow tank is emptied when practicable following the upset event. Total site production/throughput is not affected by the use of the of the overflow tank therefore; use of the tanks does not affect the site-wide VOC emissions.

3.2.4 Methanol and Glycol Storage Tanks

Emissions from the methanol tank were calculated using EPA TANKs v4.09d. Emissions for the glycol storage tank are negligible and are not included in the site-wide emissions.

3.3 Crude Oil and Produced Water Loading

Crude oil truck loading emissions were calculated using the AP-42 Section 5.2, equation 1 and submerged loading constants from Table 5.2-1. The crude oil loading emissions will be routed to the flare via a vapor capture line. The capture efficiency is 70% and flare control efficiency is ≥98%. Produced water emissions are assumed to be negligible due to the low concentrations of dissolved VOCs present in the produced water and therefore produced water loading emissions are not controlled.

3.4 Heaters

The combined heater emissions were calculated using AP-42 Section 1.4 emission factors. Pipeline quality natural gas is used as fuel for the heaters.

3.5 Pneumatic Controllers

The pneumatic controller emissions were calculated using the number of controllers, average annual hours of operation and UDAQ intermittent-bleed pneumatic controller emission factor.

3.6 Equipment Fugitives

Equipment fugitives were calculated using the flash gas composition and 40 CFR 98 Subpart W emission factors. Component counts were estimated based on 40 CFR 98, Subpart W, Table W-1B.

3.7 Internal Combustion Engine

The generator engine emissions were calculated using manufacturer supplied data and AP-42 emission factors and pipeline quality natural gas as fuel.

3.8 Flare/Combustion Device

Flare emissions were calculated using the tank emissions routed to the flare as fuel. A minimum 98% destruction efficiency was used to calculate VOC emissions and AP-42 Section 13 emission factors for criteria pollutants.

4.0 FEDERAL RULE APPLICABILITY ANALYSIS

The following section addresses the applicability the eight Federal Standards included in the Oil and Natural Gas FIP for Indian Country.

The facility is not located within a designated non-attainment area for purposes of determining Federal Non-Attainment New Source Review permitting applicability, the Facility is not an existing major source for purposes of evaluating the applicability of Prevention of Significant Deterioration (PSD) review requirements.

4.1 New Source Performance Standards (40 CFR Part 60)

Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

This subpart is not applicable, there are no compression ignition internal combustion engines at the site.

Subpart JJJJ: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

This subpart is applicable to spark ignited (SI) internal combustion engines manufactured after July 1, 2007. The 300-hp natural-gas-fired, lean-burn engine was manufactured after the applicability date and will be subject to the provisions of this subpart. The engine is certified by the manufactured as meeting the emissions requirements of Subpart JJJJ.

Subpart Kb: Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

This subpart does not apply to the storage tanks because they are used to store petroleum or condensate prior to custody transfer, and the design capacity of each tank does not exceed 1,589.874 m3 (3,061,721 gallons) according to 40 CFR §60.110b(d)(4).

Subpart KKKK: Standards of Performance for New Stationary Combustion Turbines

There are no stationary combustion turbines located at the site; therefore, this subpart does not apply.

Subpart OOOOa: Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution

The site is subject to this subpart since the well was initially completed, pneumatic controllers and storage tanks installed after the September 18, 2015 applicability date. Therefore; the site will comply with the applicable requirements of 40 CFR of this subpart for the well, oil storage tanks, controls and facility leak detection and repair.

4.2 National Emission Standards for Hazardous Air Pollutants (40 CFR Part 63)

Subpart DDDDD: National Emission Standards for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters

The site is not a major source therefore the site is not subject to this subpart.

Subpart HH: National Emissions Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities

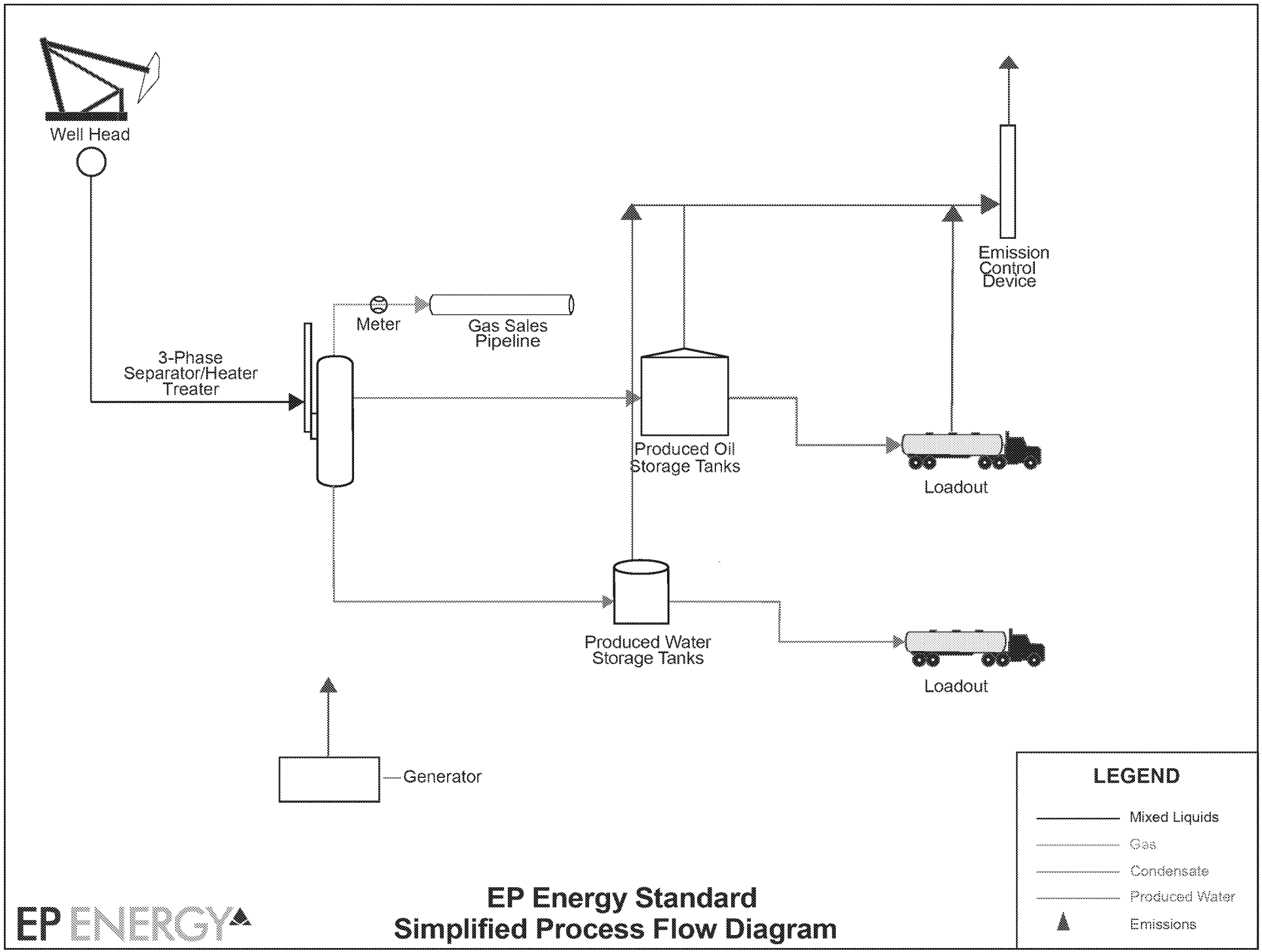
The facility does not have a TEG dehydration unit. Therefore, the facility is not subject to this subpart according to 40 CFR §63.760(b)(2).

Subpart ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

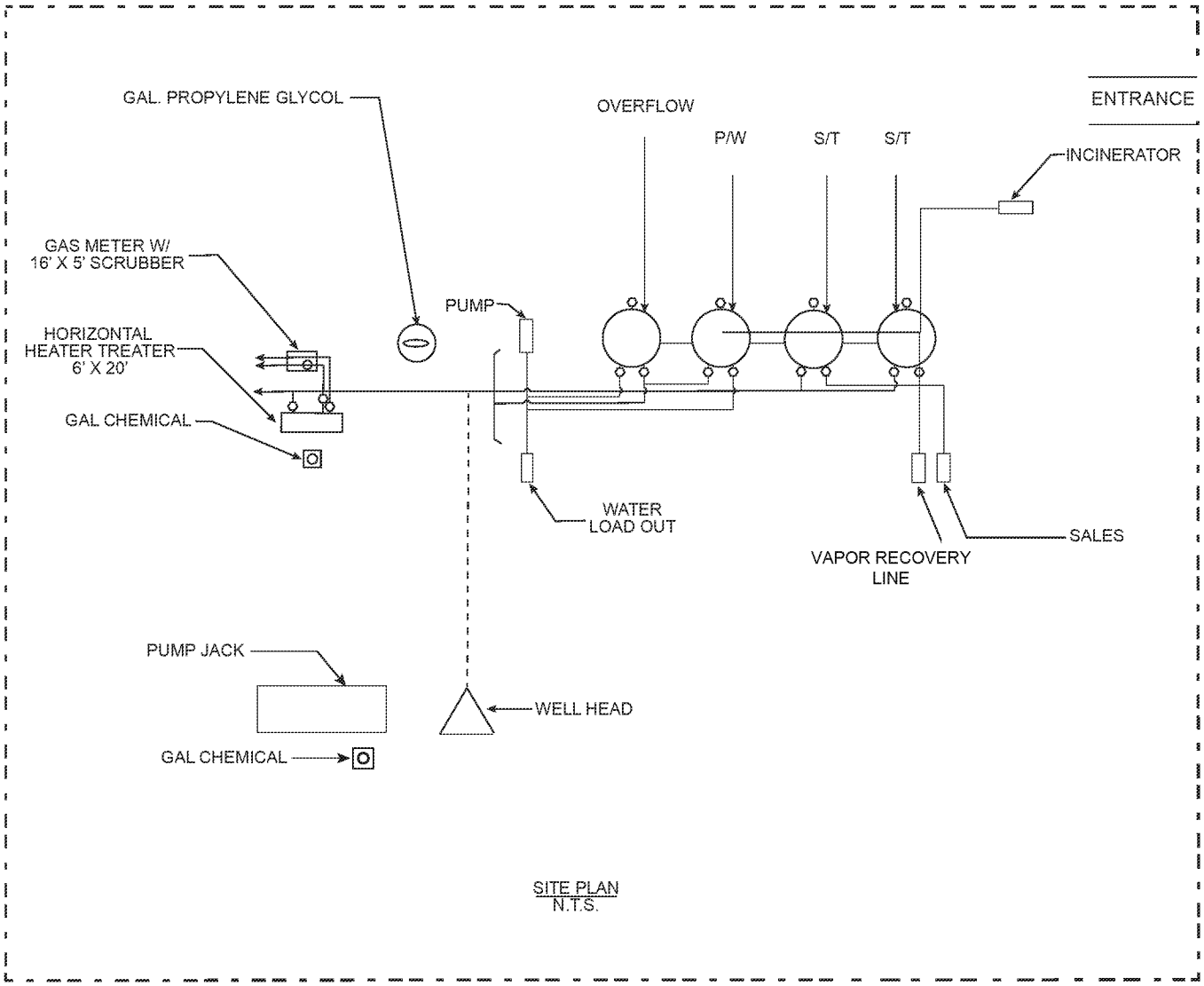
The natural-gas-fired compressor engine is a new stationary reciprocating internal combustion engine (RICE) at an area source of HAP emissions, as defined in 40 CFR §63.6590(c)(1). As specified in 40 CFR §63.6590(c)(1), the engine will meet the requirements of this subpart by meeting the requirements of 40 CFR 60, Subpart JJJJ.

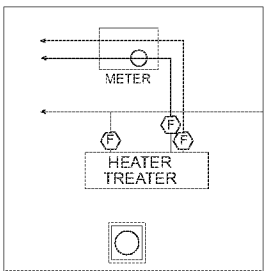
APPENDIX A

Process Flow Diagram and Site Plan

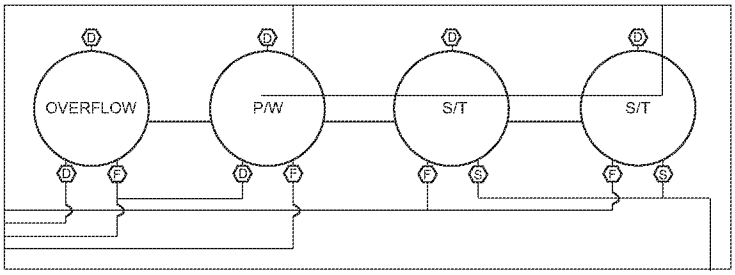


EP Energy Standard
Simplified Process Flow Diagram





VALVE DETAIL A
N.T.S.

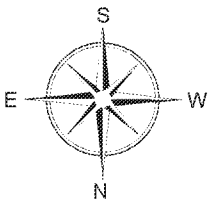


VALVE DETAIL B
N.T.S.

LEGEND:

ABOVE GROUND LINES
BURIED LINES
PROPERTY LINE

P/W PRODUCED Water
S/T = CRUDE Oil
BBL = BARRELS
GAL = GALLONS
*OVERFLOW, SCRUBBER HEATER TREATER CONTAIN CRUDE OIL AND PRODUCED WATER



0000a LDAR Site Map
UTE TRIBAL 2-26A1
NENW S26, T1S, R1W
LAT 40.37190 LONG -109.96720
UINTAH COUNTY, UT

Peakview Environmental LLC

EP ENERGY E & P COMPANY, LP | SEPT 2018

APPENDIX B

Emission Calculations

Enter Facility Information for Emissions Calculations

Company	EP Energy E&P Company L.P.		
Facility Name	Ute Tribal 2-26A1		
Throughput	150000	bbls/yr	
	411	BOPD	
	6300000	gal/year	(TANKS 4.09 input)
Flare Size	7.7		
Heater Combined	7.5	mmBTU/hr	

Oil Storage Tanks Flash Emissions - GOR Method
Routed to to Flare
EP Energy E&P Company L.P.
Ute Tribal 2-26A1

Site Information

Oil Production [1]	BOPD	411
VRU Operation **(NO VRU)**		0%
Molecular Weight of Flash Gas	lb/lb-mol	50.95
GOR[2]	scf/bbl	30.03
Flash Heat content	MMBtu/hr	2875

Hourly LP Flash Loss (scf/hr) [3]	514.21
Annual LP Flash Loss (MMscf/yr) [4]	4.50
Flash Emissions Heat Content (MMBtu/hr)	1.48
Flash Emissions Heat Content (MMBtu/yr)	12,950

Composition Data [2]					Uncontrolled Emissions	
Pollutant	LP Flash mol%	MW	Molar Wt lb/lb-mol gas	LP Flash Wt%	(lb/hr)[5]	(ton/yr)[6]
Oxygen	0.000	32.00	0.00	0.000	-	-
Carbon Dioxide	0.577	44.01	0.25	0.498	0.35	1.52
Hydrogen Sulfide	0.000	34.80	0.00	0.000	-	-
Nitrogen	2.472	28.01	0.69	1.359	0.95	4.16
Methane	15.558	16.04	2.50	4.898	3.42	14.99
Ethane	10.432	30.07	3.14	6.157	4.30	18.84
Propane	23.739	44.10	10.47	20.547	14.36	62.87
Iso-Butane	4.562	58.12	2.65	5.204	3.64	15.92
Butanes	16.622	58.12	9.66	18.961	13.25	58.02
iso-Pentane	5.218	72.15	3.76	7.389	5.16	22.61
Pentanes	10.688	72.15	7.71	15.135	10.57	46.31
n-Hexane	3.005	86.16	2.59	5.081	3.55	15.55
Other Hexanes	1.699	86.16	1.46	2.873	2.01	8.79
Heptanes +	4.672	100.20	4.68	9.189	6.42	28.12
Benzene	0.664	78.11	0.52	1.018	0.71	3.12
Toluene	0.395	92.13	0.36	0.715	0.50	2.19
Ethylbenzene	0.081	106.17	0.09	0.168	0.12	0.51
Xylenes	0.323	106.17	0.34	0.674	0.47	2.06
2,2,4-Trimethylpentane	0.060	114.23	0.07	0.134	0.09	0.41
Total Volatile Organic Compounds	71.73			87.09	**60.84**	**266.49**
Total HAPs					**5.44**	**23.84**
Totals	100.77		50.95	100.0		

Uncontrolled

GHG	GWP	Emission Factor		Emissions	
		Wt%	Source	tons/yr	CO_2e[7]
CO_2	1	0.5	[7]	2	2
CH_4	25	4.9	[7]	15	375
Total		-	-	-	**376**

[1] Daily production = 102,200 bbls/yr /365 = 280 BOPD

[2] From Precision Analysis Lab Id 16060602-01,6/22/16 Gas Evolved from Flashed Hydrocarbon From 83 psig and 155F to 80F to 14.73 psi and 60F

[3] Hourly Flash Loss (scfh) = GOR (scf/bbl) x Throughput (bbl/day) / 24 (hr/day)

[4] Yearly Flash Loss (MMscf/yr) = Hourly Flash Loss (scfh) x 8760 (hr/yr) / 10^6

[5] Uncontrolled Emissions (lb/hr) = Hourly Flash Loss (scf/hr) x Mol% x MW (lb/lb·mol) / 375 (scf/lb·mol)

[6] Uncontrolled Emissions (ton/yr) = Hourly Flash Loss (scfhr) x Mol% x MW (lb/lb-mol) / 375 (scf/gas/lb-mol) *8760 hrs/yr*1 ton/2000 lb

[7] Total GHG in CO_2e (tpy) calculated using Global Warming Potential from 40 CFR 98 Subpart A, Table A-1

Oil Storage Tanks Working and Standing Emissions
Routed to Flare
EP Energy E&P Company L.P.
Ute Tribal 2-26A1

Site Information

Oil Production [1]	bbls/year	150,000
Oil Production	gals/year	6,300,000
VRU Operation **(NO VRU)**		-
Molecular Weight of W&S gas[4]	lb/lb-mol	69.0
Reid Vapor Pressure[2]		6.14
W&S Emissions Heat Content[3]	MMBtu/scf	0.0
Total Site Annual W&S Losses[4]	lb/yr	12,072.0
Total Hourly Losses[5]	lb/hr	1.38
Total Annual Losses [6]	ton/yr	6.04

Vapor Density (lb/cu.ft)[4]	0.01
Hourly W&S loss (scf/hr)[7]	100.9
Annual W&S loss (MMscf/yr)[7]	3.8
Heat Content (MMBtu/hr)	0.2
Heat Content (MMBtu/yr)	0.0

Composition Data [3]		Uncontrolled Emissions	
Pollutant	**Stable Oil Vapor Wt%**	**(lb/hr)[8]**	**(ton/yr) [9]**
Oxygen	0.000	-	-
Carbon Dioxide	0.000	-	-
Hydrogen Sulfide	0.000	-	-
Nitrogen	0.104	0.00	0.01
Methane	5.155	0.07	0.31
Ethane	21.520	0.30	1.30
Propane	33.286	0.46	2.01
Iso-Butane	7.911	0.11	0.48
Butanes	19.887	0.27	1.20
iso-Pentane	3.683	0.05	0.22
Pentanes	3.057	0.04	0.18
n-Hexane	1.077	0.01	0.07
Other Hexanes	1.788	0.02	0.11
Heptanes +	1.921	0.03	0.12
Benzene	0.156	0.00	0.01
Toluene	0.124	0.00	0.01
Ethylbenzene	0.077	0.00	0.00
Xylenes [11]	0.119	0.00	0.01
2,2,4-Trimethylpentane	0.134	0.00	0.01
Total Volatile Organic Compounds	73.2207	**1.01**	**4.42**
Total HAPs		**0.02**	**0.10**
Totals	100.000		

Uncontrolled

GHG	GWP	Emission Factor		Emissions	
		Wt%	Source	tons/yr	CO_2e[11]
CO_2	1	0.0	[10]	0	0
CH_4	25	5.2	[10]	0	8
Total		-	-	-	**8**

[1] Annual production = bbls yr /# tanks
[2] From Precision Analysis Lab Id 16060602-1 6/22/16 Gas Evolved from Flashed Hydrocarbon
[3] From Promax stock tank emissions composition
[4] From TANKS v.4.09d Output Report
[5] Total Hourly Losses = Total Annual Losses (lb/yr)/8760 hrs/yr
[6] Total Annual Losses (ton/yr) = Total annual losses (lb/yr)/2000 lb/ton
[7] Tank emission volumetric flow rates are obtained by dividing total emissions by the vapor density
[8] lb/hr emissions = Total working and standing losses (lb/hr)* stable oil vapor wt%/100
[9] ton/yr emissions = Total working and standing losses (ton/yr)* stable oil vapor wt%/100
[10] Stable oil vapor wt%
[11] Total GHG in CO2e (tpy) calculated using Global Warming Potential from 40 CFR 98 Subpart A, Table A-1

Heater Emissions
EP Energy E&P Company L.P.
Ute Tribal 2-26A1

Site Information

Heater Rating[1]	MMBtu/hr	7.5
Annual Hours of Operation	hr/yr	8,760
Fuel Heating Value[2]	Btu/scf	1,200
Fuel Sulfur Content[3]	grain/scf	5,788

Pollutant	Emission Factor		Emissions[5]	
	EF (lb/10^6SCF)	AP-42 Source[4]	lb/hr	tons/yr
NOx	100	Table 1.4-1	0.63	2.74
CO	84	Table 1.4-1	0.53	2.30
SO_2	0.17	Table 1.4-2	1.1E-03	4.7E-03
PM_{10}	7.6	Table 1.4-2	0.05	0.21
VOC	5.5	Table 1.4-2	0.03	0.15
Benzene	2.10E-03	Table 1.4-3	1.31E-05	5.75E-05
Hexane	1.8	Table 1.4-3	1.13E-02	4.93E-02
Formaldehyde	7.5E-02	Table 1.4-3	4.69E-04	2.05E-03
Toluene	3.4E-03	Table 1.4-3	2.13E-05	9.31E-05
Total HAPs			1.18E-02	5.15E-02

GHG	GWP	Emission Factor		Emissions	
		EF (lb/10^6 scf)	Source	tons/yr	CO_2e[6]
CO_2	1	1.20E+05	Table 1.4-2	3,285	3,285
CH_4	25	2.3	Table 1.4-2	0.1	2
N_2O	298	2.2	Table 1.4-2	0.1	18
Total		-	-	-	**3,305**

[1] Aggregate of all natural-gas fired heaters at the site

[2] Fuel heat content based on AP-42 pipeline spec

[3] AP-42 assumes a fuel sulfur content of 2000 grans/10^6; emission factor scaled by ration of actual sulfur content to 2,000 grains/10^6 scf. Fuel does not contain sulfur so assume MDL.

[4] Emission factors (EF) are from AP-42 Section 1.4

[5] Emissions; lb/hr = EF*heater rating (mmBTU/hr)/heat content of fuel(Btu/scf); tons/yr= emissions (lb/hr) * 8760 hrs/yr*1 ton/2000 lbs

[6] Total GHG in CO2e (tpy) calculated using Global Warming Potential from 40 CFR 98 Subpart A, Table A-1

IC Engine Emissions
EP Energy E&P Company L.P.
Max's Place LLC 2-24B1

Engine Data

Manufacturer	Portable Power
Model	NG200-01P
Serial Number	
Manufacture Date	After 2011
Application	electric gen
Ignition/injection timing	Variable
Horsepower	300
Site Rated Horsepower	300
Fuel Consumption (Btu/hp-hr)	7,404
Hours of operation per year	8760
Engine Type	4 Stroke Lean-

Fuel Data

Fuel Heat Content [2] (Btu/scf)	1,200
Fuel Sulfur Content[3] (grain/scf)	5788.0
Annual Consumption (MMScf/yr)	16.2
Hourly Consumption (MMscf/hr)	0.0019
Hourly Consumption (MMBtu/hr)	2.22

Method of Emission Control

NSCR Catalyst	No
SCR Catalyst	No
JLCC Catalyst	No
Parameter Adjustment	No
Stratified Charge	No
Other(Specify)	AFRC
Lean Burn	Yes

Exhaust Parameters

Stack Height (ft)	15
Stack Diameter (ft)	0.5
Exit Velocity (fps)	105.8
Stack Temperature (°F)	1350
scf/hr	74820

Federal Standards

NSPS Subpart JJJJ	Yes
MACT Subpart ZZZZ	Yes

		EF AP-42			Uncontrolled Emissions[3]		Controls		Controlled Emissions[5]		Form 11 Engine Information			
Contaminant	Test results or manufac-turer's EF before control (g/hp-hr)	Table 3.2-2 4 stroke, lean-burn engine emission factors (lb/mmBtu)	Emission Factor Used	Units	Emissions (lb/hr)	Emissions (tpy)	Efficiency of Control Device (%)	Control Emission factor[4] (g/hp-hr)	Emissions (lb/hr)	Emissions (tpy)	MW[11]	ppmv[8] (20%)	ppmv[9] (15%)	Conc[10] (vol %)
VOC	0.70	0.118	0.70	g/hp-hr	**0.46**	**2.03**			**0.46**	**2.03**	44.10	53.97	353.82	0.04
NOx	1.0	4.08	1.0	g/hp-hr	**0.66**	**2.89**			**0.66**	**2.89**	33.2	102.42	671.40	0.07
CO	2.0	0.317	2.0	g/hp-hr	**1.32**	**5.79**			**1.32**	**5.79**	28.00	242.87	1592.17	0.16
PM10 [1]		0.0099871	0.0100	lb/mmBtu	**0.02**	**0.10**			**0.02**	**0.10**				
PM2.5[1]		0.0099871	0.0100	lb/mmBtu	**0.02**	**0.10**			**0.02**	**0.10**				
SO2		0.000588	0.0006	lb/mmBtu	**0.00**	**0.01**			**0.00**	**0.01**	64.00	0.11	0.69	0.00
Formaldehyde		0.0528	0.0528	lb/mmBtu	**0.12**	**0.51**			**0.12**	**0.51**	30.03	20.10	131.74	0.01
Benzene		0.000404	0.0004	lb/mmBtu	**0.00**	**0.00**			**0.00**	**0.00**	78.11	0.06	0.39	0.00
Acetaldehyde		0.00836	0.0084	lb/mmBtu	**0.02**	**0.08**			**0.02**	**0.08**	44.05	2.17	14.22	0.00
Acrolein		0.00514	0.0051	lb/mmBtu	**0.01**	**0.05**			**0.01**	**0.05**	56.06	1.05	6.87	0.00
Methanol		0.0025	0.0025	lb/mmBtu	**0.01**	**0.02**			**0.01**	**0.02**	32.04	0.89	5.85	0.00
Total HAPS					**0.15**	**0.67**			**0.15**	**0.67**				

[1] PM_{10} EF = PM_{10} (filterable) + PM (Condensable); $PM_{2.5}$ EF = $PM_{2.5}$ (filterable) + PM (Condensable)

[2] AP-42 Pipeline quality gas spec

[3] Emissions (lb/hr)= EF(g/hp-hr)/454 g/lb*hp; or EF(g/mmBTU)*fuel consumption (Btu/hp-hr)*hp/1.0*10^6
Emissions (tpy) = emissions (lb/hr)*8760 hr/yr/2000 lb/ton

[4] Provided by manufacturer or field adjustment

[5] Controlled emissions are calculated using efficiency of control device(%) or controlled emission factor

GHG	GWP	Emission Factor[6]		CO2e Emissions	
		kg/mmBTU	g/hp-hr	tpy	CO_2e[7]
CO_2	1	53.06	393	1,136	1,136
CH_4	25	0.0010	0.010	0.02	1
N_2O	298	0.0001	0	0.00	1
Total		-	-	-	**1,137**

[6] Emission factors from 40 CFR 98, Subpart C, Table C-1 and C-2

[7] Total GHG in CO2e (tpy) calculated using Global Warming Potential from 40 CFR 98 Subpart A, Table A-1

[8] ppmv (20%) = lb/hr*1x10^6 *385 ft3/mw/vol flow rate (ft^3/hr)

[9] ppmV (15%) = ppmv(20%) *(20.9-15/20.9-20)

[10] 1% vol = 10,000 ppmv

[11] Assume mw of VOC = mw propane

Loading Emissions- Routed to Flre
EP Energy E&P Company L.P.
Ute Tribal 2-26A1

Site Information

Loading Rate	BOPD	411
	gal/day	17260
	gal/hr	719
True VP of Liquid Loaded (P)[1]	psia	5
MW of Vapor (M)[2]	lb/lb-mol	41.94
Temperature of liquid (T)[3]	°R	619.67
Saturation Factor (S)[4]	constant	0.6
Loading Losses[5] (L)	lb/1000 gal	2.53
Control Capture Efficiency	%	70%
Control Efficiency	%`	98%

Composition Data[2]		Uncontrolled Emissions[6]		Uncaptured Emissions[8]		Controlled Emissions[9]		Total Emissions[10]	
Pollutant	Stable Oil Vapor Wt%	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
Oxygen	0.000	-	-	-	-	-	-	-	-
Carbon Dioxide	0.000	-	-	-	-	-	-	-	-
Hydrogen Sulfide	0.000	-	-	-	-	-	-	-	-
Nitrogen	0.104	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Methane	5.155	0.09	0.41	0.03	0.12	0.00	0.00	0.03	0.13
Ethane	21.520	0.39	1.71	0.12	0.51	0.00	0.01	0.12	0.52
Propane	33.286	0.61	2.65	0.18	0.80	0.00	0.02	0.19	0.81
Iso-Butane	7.911	0.14	0.63	0.04	0.19	0.00	0.00	0.04	0.19
Butanes	19.887	0.36	1.58	0.11	0.48	0.00	0.01	0.11	0.48
iso-Pentane	3.683	0.07	0.29	0.02	0.09	0.00	0.00	0.02	0.09
Pentanes	3.057	0.06	0.24	0.02	0.07	0.00	0.00	0.02	0.07
n-Hexane	1.077	0.02	0.09	0.01	0.03	0.00	0.00	0.01	0.03
Other Hexanes	1.788	0.03	0.14	0.01	0.04	0.00	0.00	0.01	0.04
Heptanes +	1.921	0.03	0.15	0.01	0.05	0.00	0.00	0.01	0.05
Benzene	0.156	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.004
Toluene	0.124	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.003
Ethylbenzene	0.077	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.002
Xylenes	0.119	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.003
2,2,4-Trimethylpentane	0.134	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.003
Total VOCs	73.22	1.33	5.84	0.40	1.75	0.01	0.04	0.41	1.79
Total HAPs		0.03	0.13	0.01	0.04	0.00	0.00	0.01	0.04
Totals	100.000								

				Uncontrolled		Controlled	
		Emission Factor		Emissions			
GHG	GWP	Wt%	Source	tons/yr	CO_2e[7]	tons/yr	CO_2e[7]
CO_2	1	0	NA	0	0	0	0
CH_4	25	5.2	NA	0.4	10	0.1	3
Total		-	-	-	**10**	**0**	**3**

[1] From AP-42, Figure 7.1-13
[2] MW and composition based on Promax output
[3] Temperature of liquids loaded = 160° F
[4] From AP-42, Table 5.2-1, submerged loading
[5] From AP-42, Section 5.2, equation 1; L=12.46*SPM/T
[6] Emissions lb/hr = L (lb/1000 gal)*Loading rate (gal/hr)/1000 gal*wt%/100
Emissions ton/yr = emissions (lb/hr)*8760/2000
[7] CO_2e based on Global Warming Potentials from Table A-1 of 40 CFR Part 98
[8] Uncaptured emissions = uncontrolled emissions * (1-capture efficiency)
[9] Controlled Emissions = uncontrolled loading * capture efficiency*(1-control efficiency)
[10] Total emissions = uncaptured emissions + controlled emissions

Pneumatic Controller Emissions
EP Energy E&P Company L.P.
Ute Tribal 2-26A1

Site Information

Type of Controllers	Intermittent
Actuation Gas	Natural Gas
# of Controllers	4
Average Hours per Controller	196
EF[1] (VOC tons/hr)	7.97E-05

[1] From UDAQ 2014 UBEI Workbook, Pneumatic Controller Tab, Intermittent Controller VOC Emission Factor

Equation

VOC Emissions (tpy) = # controllers*avg operating hour per controller * EF

= **0.06**

Fugitive Emissions
EP Energy E&P Company L.P.
Ute Tribal 2-26A1

Equations[1]

$E_{gas} = \Sigma\, i\, \Sigma j\, Q_{fug,i,j} \times n_i \times t_{annual}$

$E_c = f_c \times E_{gas}$

Site Information

Qfug,i,j=Measured/estimated futgitive emissions rate of gas from component (i) in servuce (j))(lb gas/ component-hr)

Service Type =	Flash Gas[2]		
Conversion factor (scf/lb-mol) =	379.48	f_{nH} = mass fraction of n-hexane =	5.08
MW=molecular weight (lb/lb-mol) =	50.95	f_{Bz} = mass fraction of benzene =	1.02
f_{voc}=VOC mass fraction =	87.09	f_{Tl} = mass fraction of toluene =	0.72
f_{co2}= mass fraction CO2	0.5	f_{Eb} = mass fraction of ethylbenzene =	0.17
f_{CH4}= ass fraction CH4	4.9	f_{Xy} = mass fraction of xylene =	0.67
t_{annual} = annual usage for component	8760	f_{tmp} = mass fraction of 2,2,4-TMP =	0.13

Component Count - Light Oil Service[3]

Equipment	Number	Valves	Flanges	Connectors	OE Lines	Pump Seals	Other
Wells	1	5	10	4	0	0	1
Separator	0	0	0	0	0	0	0
Heater Treater	1	8	12	20	0	0	0
Header	1	5	10	4	0	0	0
Total Components		18	32	28	0	0	1

Light Oil (>20o) Fugitive Emissions

	Valves	Flanges	Connectors	OE Lines	Pump Seals	Other	Total Emissions	
							tons/yr	lbs/yr
Total Emissions (ton/yr)								
EF= scf/component-hr[1]	0.05	0.003	0.007	0.05	0.01	0.30		
lb/component-hr	6.71E-03	4.03E-04	9.40E-04	6.71E-03	1.34E-03	4.03E-02		
Total Emissions (ton/yr)6	5.29E-01	5.65E-02	1.15E-01	0.00E+00	0.00E+00	1.76E-01	**0.88**	
GHG Emissions								
CO_2 (ton/yr)	2.65E-03	2.82E-04	5.76E-04	0.00E+00	0.00E+00	8.82E-04	4.39E-03	8.77
CH_4 (ton/yr)	2.59E-02	2.77E-03	5.65E-03	0.00E+00	0.00E+00	8.64E-03	4.30E-02	85.99
GHG CO_2e							**9.98E-02**	**219.37**
VOC Emissions								
VOC (ton/yr)	4.61E-01	4.92E-02	1.00E-01	0.00E+00	0.00E+00	1.54E-01	**0.76**	**1528.26**
HAP Emissions								
n-hexane (ton/yr)	2.69E-02	2.87E-03	5.86E-03	0.00E+00	0.00E+00	8.96E-03	4.46E-02	89.14
benzene (ton/yr)	5.40E-03	5.76E-04	1.18E-03	0.00E+00	0.00E+00	1.80E-03	8.95E-03	17.90
toluene (ton/yr)	3.81E-03	4.06E-04	8.30E-04	0.00E+00	0.00E+00	1.27E-03	6.32E-03	12.63
ethylbenzene (ton/yr)	8.89E-04	9.48E-05	1.94E-04	0.00E+00	0.00E+00	2.96E-04	1.47E-03	2.95
xylene (ton/yr)	3.55E-03	3.78E-04	7.72E-04	0.00E+00	0.00E+00	1.18E-03	5.88E-03	11.76
2,24-TMP (ton/yr)	7.09E-04	7.56E-05	1.54E-04	0.00E+00	0.00E+00	2.36E-04	1.18E-03	2.35
Total HAPs							**0.07**	**136.73**

[1] Equations and emission factors based on 40 CFR Part 98 Subpart W

[2] Composition based on hydrocarbon analysis of site-specific oil and gas samples

[3] Componenet counts based on default values from 40 CFR Part 98 Subpart W; Table W-1C

[4] CO_2e based on Global Warming Potentials from Table A-1 of 40 CFR Part 98

[5] Total GHG in CO_2e (tpy) calculated using Global Warming Potential from 40 CFR 98 Subpart A, Table A-1

Flare Emissions
EP Energy E&P Company L.P.
Ute Tribal 2-26A1

Site Information

Heat Rating[1]	mmBtu/hr	7.7
Annual Hours of Operation	hr/yr	8,760
Fuel Heating Content[2]	Btu/scf	2,875
Fuel Sulfur Content[2]	grain/scf	0.0
Destruction Efficiency	%	98.0

Pollutant	Emission Factor		Emissions[5]	
	EF (lb/MMBtu)	Source	lb/hr	tons/yr
NO_2	0.068	AP-42 Table 13.5-1	0.52	2.29
CO	0.310	AP-42 Table 13.5-2	2.39	10.46
SO_2	2.89E-04	[3]	2.23E-03	0.01
PM_{10}	0.000	AP-42 Table 13.5-1	0.00	0.00
VOC	98% destruction[6]	NA	1.24	5.42
CH_4	98% destruction[6]	NA	0.07	0.31
n-Hexane	98% destruction[6]	NA	0.07	0.31
Benzene	98% destruction[6]	NA	0.01	0.06
Toluene	98% destruction[6]	NA	0.00	0.04
Xylenes	98% destruction[6]	NA	0.01	0.04
Ethylbenzene	98% destruction[6]	NA	0.00	0.01
2,2,4-Trimethylpentane	98% destruction[6]	NA	0.00	0.01
Total HAP	98% destruction[6]	NA	0.11	0.48

GHG	GWP	Emission Factor		Emissions	
		EF (kg/MMBtu)	Source	tons/yr	CO_2e[6]
CO_2	1	53.020	40 CFR 98-C	3,934	3,934
CH_4	25	[4]	[4]	0.31	8
N_2O	298	0.0001	40 CFR 98-C	0.007	2
Total		-	-	-	**3,944**

[1] Maximum rating of flare ; equipment specifications
[2] From Precision Analysis Lab Id 16060602--01,6/22/16 Gas Evolved from Flashed Hydrocarbon From 83 psig and
[3] MDL for H_2S; assumed to be 100% conversion from H_2S to SO_2
[4] Actual wt% in fuel stream *(1-.98)
[5] Emissions (lb/hr) = EF*7.7 mmBTU/hr; Emissions (tons/yr)= emissions (lb/hr) * 8760 hrs/yr*1 ton/2000 lbs
[6] Total GHG in CO2e (tpy) calculated using Global Warming Potential from 40 CFR 98 Subpart A, Table A-1

Values for Form 4 - Flare Systems

Form 4	Value Used	Reference
Min flowrate Expected (scfm)	4.69	Tank losses (scfm) @ 50% of max production rate
Ave flowrate Expected (scfm)	8.15	Tank losses (scfm) @ 75% of max production rate
Min Expected (MMBtu/hr)	0.97	Tank losses (mmBtu/hr) @ 50% of max production rate
Design Max (MMBtu/hr	7.7	From manufacturer
Heat Content	2875	Heat content of flash losses
Pressure	0.03	From manufacturer

Criteria Pollutants Emissions Summary
EP Energy E&P Company L.P.
Ute Tribal 2-26A1

Uncontrolled PTE

Pollutant (TPY)	VOC	CO	NO_X	SO_2	PM	PM_{10}	$PM_{2.5}$
Oil Storage Tanks	270.91	-	-	-	-	-	-
Truck Loading	5.84	-	-	-	-	-	-
Methanol Storage Tank	-	-	-	-	-	-	-
Heaters (≤7.5 MMBtu/hr total)	0.15	2.30	2.74	0.00	0.42	0.21	0.21
Natural Gas Fired Gen Engine	2.03	5.79	2.89	0.01	0.19	0.10	0.10
Pneumatic Controllers	0.06	-	-	-	-	-	-
Fugitives	0.76	-	-	-	-	-	-
Total	**279.75**	**8.09**	**5.63**	**0.01**	**0.61**	**0.31**	**0.31**

Controlled PTE

Pollutant (TPY)	VOC	CO	NO_X	SO_2	PM	PM_{10}	$PM_{2.5}$
Oil Storage Tanks	*Routed to Flare*						
Truck Loading	1.79	-	-	-		-	-
Methanol Storage Tank	-	-	-	-		-	-
Heaters (≤7.5 MMBtu/hr total)	0.15	2.30	2.74	0.00	0.42	0.21	0.21
Natural Gas Fired Gen Engine	2.03	5.79	2.89	0.01	0.19	0.10	0.10
Pneumatic Controllers	0.06	-	-	-	-	-	-
Fugitives	0.76	-	-	-	-	-	-
Flare	5.42	10.46	2.29	0.01	0.00	0.00	0.00
Total	**10.21**	**18.54**	**7.93**	**0.02**	**0.61**	**0.31**	**0.31**

CO_2e Emissions Summary
EP Energy E&P Company L.P.
Ute Tribal 2-26A1

CO_2e Uncontrolled PTE

GHG (TPY)	CO_2	CH_4	N_2O	Total
Global Warming Potential	*1*	*25*	*298*	-
Oil Storage Tanks	1.52	15.30	0.00	16.82
Truck Loading	0.00	0.41	0.00	0.41
Methanol Storage Tank	-	-	-	-
Heaters (≤7.5 MMBtu/hr total)	3285	0.06	0.06	3285
Natural Gas Fired Gen Engine	1136	0.02	0.00	1136
Pneumatic Controllers	-	-	-	-
Fugitives	0.00	0.04	-	0.05
Total Mass (TPY)	4,422	16	0.1	4,438
CO_2e (tpy)	**4,422**	**396**	**19**	**4,837**

CO_2e Controlled PTE

GHG (TPY)	CO_2	CH_4	N_2O	Total
Global Warming Potential	*1*	*25*	*298*	-
Oil Storage Tanks	*Routed to Flare*			
Truck Loading	0.00	0.13	0.00	0.13
Methanol Storage Tank	-	-	-	-
Heaters (≤7.5 MMBtu/hr total)	3285	0.06	0.06	3285
Natural Gas Fired Gen Engine	1136	0.02	0.00	1136
Pneumatic Controllers	-	-	-	-
Fugitives	0.00	0.04	-	
Flare	3934	0.31	0.01	3934
Total Mass (TPY)	8,355	0.6	0.1	8,355

HAPs Emissions Summary
EP Energy E&P Company L.P.
Ute Tribal 2-26A1

Uncontrolled PTE (TPY)

Pollutant (TPY)	n-Hexane	Benzene	Toluene	e-benzene	Xylenes	2,2,4-TMP	Formaldehyde	Acetaldehyde	Acrolein	Methanol	Total HAPs
Oil Storage Tanks	15.61	3.12	2.20	0.52	2.07	0.42	-	-	-	-	23.94
Truck Loading	0.09	0.01	0.01	0.01	0.01	0.01	-	-	-	-	0.13
Methanol Storage Tank[1]	-	-	-	-	-	-	-	-	-	0.03	0.03
Heaters (≤7.5 MMBtu/hr total)	0.05	0.00	0.00	-	-	-	-	-	-	-	0.05
Natural Gas Fired Gen Engine		0.00	-	-	-	-	0.51	0.08	0.05	0.02	0.67
Pneumatic Controllers	-	-	-	-	-	-	-	-	-	-	-
Fugitives	0.04	0.01	0.01	0.00	0.01	0.00	-	-	-	-	0.07
Total	**15.79**	**3.15**	**2.21**	**0.53**	**2.09**	**0.43**	**0.51**	**0.08**	**0.05**	**0.05**	**24.9**

Controlled PTE (TPY)

Pollutant (TPY)	n-Hexane	Benzene	Toluene	e-benzene	Xylenes	2,2,4-TMP	Formaldehyde	Acetaldehyde	Acrolein	Methanol	Total HAPs
Oil Storage Tanks	*Routed to Flare*										
Truck Loading	0.03	0.00	0.00	0.00	0.00	0.00	-	-	-	-	0.04
Methanol Storage Tank	-	-	-	-		-	-	-	-	0.03	0.03
Heaters (≤7.5 MMBtu/hr total)	0.05	0.00	0.00	-	-	-	-	-	-	-	0.05
Natural Gas Fired Gen Engine	-	0.00	-	-	-	-	0.51	0.08	0.05	0.02	0.67
Pneumatic Controllers	-	-	-	-	-	-	-	-	-	-	-
Fugitives	0.04	0.01	0.01	0.00	0.01	0.00	-	-	-	-	0.07
Flare	0.31	0.06	0.04	0.01	0.04	0.01	-	-	-	-	0.48
Total	**0.43**	**0.08**	**0.05**	**0.01**	**0.05**	**0.01**	**0.51**	**0.08**	**0.05**	**0.05**	**1.34**

HAPs Hourly Maximum Emission Rate

Pollutant (lb/hr)	n-hexane	Benzene	Toluene	e-benzene	Xylenes	2,2,4-TMP	Formaldehyde	Acetaldehyde	Acrolein	Methanol	Total HAPs
Oil Storage Tanks	*Routed to Flare*										
Truck Loading	0.02	0.00	0.00	0.00	0.00	0.00	-	-	-	-	0.04
Heaters (≤7.5 MMBtu/hr total)	0.01	0.00	0.00	-	-	-	-	-	-	-	0.01
Natural Gas Fired Gen Engine	-	0.00	-	-	-	-	0.12	0.02	0.01	0.01	0.15
Fugitives	0.04	0.01	0.01	0.00	0.01	0.00	-	-	-	-	0.07
Fugitives	0.00	0.00	0.00	0.00	0.00	0.02	-	-	-	-	0.02
Flare	0.07	0.01	0.00	0.00	0.01	0.00	-	-	-	-	0.10