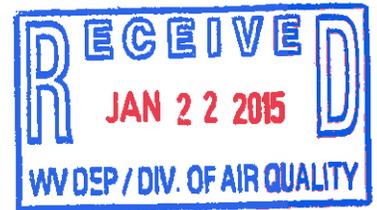


Mountaineer Keystone, LLC
6031 Wallace Road Extension
Suite 300
Wexford, PA 15090

Phone: (724) 940-1205
Fax: (800) 428-0981
E-mail: amiller@mkeystone.com
December 30, 2014



David
630-0194
001-02134

APPLICATION FOR GENERAL PERMIT REGISTRATION (G30-D) NATURAL GAS COMPRESSOR STATIONS

*Submitted To: West Virginia Department of Environmental Protection
Division of Air Quality
Bev McKeone
601 57th Street, SE
Charleston, WV 25304
(304) 926 - 0475*

Mackey Wolfe Compressor Site General Permit Construction After the Fact

Prepared by:

*William M. Monroe
President
Environmental Compression Services, Inc.
7130 Steubenville Pike
Oakdale, PA 15071
(412) 788-3945 - Office
(412) 788-4015 - Fax
(724) 272-5734 - Mobile
WWW.ENVIRCOMP.COM
envircomp@verizon.net
Environmental Laboratory Registration# 63-03526*

TABLE OF CONTENTS

Mountaineer Keystone, LLC – Mackey Wolfe Compressor Site

1. Application for General Permit Registration.
2. Attachment A – Current WV Business Certificate (PLEASE PLACE IN APPLICATION).
3. Attachment B – Process Description
4. Attachment C – Description of Fugitive Emissions
5. Attachment D - Process Flow Diagram
6. Attachment E – Plot Plan
7. Attachment F – Area Map with GPS Coordinates
8. Attachment G – Equipment Data Sheets and Registration Section Applicability Form
9. Attachment I – Emission Calculations
10. Attachment J – Legal Advertisement – Must run in a Local Newspaper for 1 Day
11. ATTACHMENT L Construction Fee **\$500.00 “DEP-Division of Air Quality”**
12. Engine Specification sheet Caterpillar G3516TALE (1265 BHP @ 1400 RPM)



WEST VIRGINIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 DIVISION OF AIR QUALITY
 601 57th Street, SE
 Charleston, WV 25304
 Phone: (304) 926-0475 • www.dep.wv.gov/daq

APPLICATION FOR GENERAL PERMIT REGISTRATION
 CONSTRUCT, MODIFY, RELOCATE OR ADMINISTRATIVELY UPDATE
 A STATIONARY SOURCE OF AIR POLLUTANTS

- CONSTRUCTION MODIFICATION RELOCATION CLASS I ADMINISTRATIVE UPDATE
 CLASS II ADMINISTRATIVE UPDATE

CHECK WHICH TYPE OF GENERAL PERMIT REGISTRATION YOU ARE APPLYING FOR:

- | | |
|--|---|
| <input type="checkbox"/> G10-D – Coal Preparation and Handling | <input type="checkbox"/> G40-C – Nonmetallic Minerals Processing |
| <input type="checkbox"/> G20-B – Hot Mix Asphalt | <input type="checkbox"/> G50-B – Concrete Batch |
| <input checked="" type="checkbox"/> G30-D – Natural Gas Compressor Stations | <input type="checkbox"/> G60-C – Class II Emergency Generator |
| <input type="checkbox"/> G33-A – Spark Ignition Internal Combustion Engines | <input type="checkbox"/> G65-C – Class I Emergency Generator |
| <input type="checkbox"/> G35-A – Natural Gas Compressor Stations (Flare/Glycol Dehydration Unit) | <input type="checkbox"/> G70-A – Class II Oil and Natural Gas Production Facility |

SECTION I. GENERAL INFORMATION

1. Name of applicant (as registered with the WV Secretary of State's Office): Mountaineer Keystone, LLC		2. Federal Employer ID No. (FEIN): 27-5343422	
3. Applicant's mailing address: 6031 Wallace Road Extension, Suite 300 Wexford, PA 15090		4. Applicant's physical address: Same as Mailing	
5. If applicant is a subsidiary corporation, please provide the name of parent corporation: NA			
6. WV BUSINESS REGISTRATION. Is the applicant a resident of the State of West Virginia? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO – IF YES, provide a copy of the Certificate of Incorporation/ Organization / Limited Partnership (one page) including any name change amendments or other Business Registration Certificate as Attachment A. – IF NO, provide a copy of the Certificate of Authority / Authority of LLC / Registration (one page) including any name change amendments or other Business Certificate as Attachment A.			

SECTION II. FACILITY INFORMATION

7. Type of plant or facility (stationary source) to be constructed, modified, relocated or administratively updated (e.g., coal preparation plant, primary crusher, etc.): N Natural Gas Compressor Site	8a. Standard Industrial Classification Classification (SIC) code: 1311	AND	8b. North American Industry System (NAICS) code: 21311
9. DAQ Plant ID No. (for existing facilities only): TBD – After the Fact Application	10. List all current 45CSR13 and other General Permit numbers associated with this process (for existing facilities only): NA		

A: PRIMARY OPERATING SITE INFORMATION

11A. Facility name of primary operating site: Mackey Wolfe Compressor Site	12A. Address of primary operating site: <table style="width:100%; border: none;"> <tr> <td style="width:50%; border: none;">Mailing:</td> <td style="width:50%; border: none;">Physical:</td> </tr> <tr> <td style="border: none;">6031 Wallace Road Ext, Suite 300 Wexford, PA 15090</td> <td style="border: none;">18934 Morgantown Pike Moatsville, WV 26405</td> </tr> </table>		Mailing:	Physical:	6031 Wallace Road Ext, Suite 300 Wexford, PA 15090	18934 Morgantown Pike Moatsville, WV 26405
Mailing:	Physical:					
6031 Wallace Road Ext, Suite 300 Wexford, PA 15090	18934 Morgantown Pike Moatsville, WV 26405					
13A. Does the applicant own, lease, have an option to buy, or otherwise have control of the proposed site? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO - IF YES, please explain: Site is leased to Mountaineer Keystone, LLC from the landowner <hr/> - IF NO, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.						
14A. - For Modifications or Administrative Updates at an existing facility, please provide directions to the present location of the facility from the nearest state road; - For Construction or Relocation permits, please provide directions to the proposed new site location from the nearest state road. Include a MAP as Attachment F. Take I-79 to Route 50E towards Grafton, take SR 92 South, follow 7.3 miles To right onto Coal Run Road, left onto CR 22 follow for 1.5 miles to lease road on left.						
15A. Nearest city or town: Moatsville	16A. County: Barbour	17A. UTM Coordinates: Northing (KM): 4341.796 Easting (KM): 594.37 Zone: 17				
18A. Briefly describe the proposed new operation or change (s) to the facility: One Natural Gas Engine (Caterpillar G3516TALE – 1265 BHP) driven Compressor that was installed by Crestwood and bought by Mountaineer Keystone, LLC		19A. Latitude & Longitude Coordinates (NAD83, Decimal Degrees to 5 digits): Latitude: 39.22032 Longitude: 79.90675				

B: 1ST ALTERNATE OPERATING SITE INFORMATION (only available for G20, G40, & G50 General Permits)

11B. Name of 1 st alternate operating site: _____ _____	12B. Address of 1 st alternate operating site: <table style="width:100%; border: none;"> <tr> <td style="width:50%; border: none;">Mailing: _____</td> <td style="width:50%; border: none;">Physical: _____</td> </tr> <tr> <td colspan="2" style="border: none;">_____</td> </tr> </table>		Mailing: _____	Physical: _____	_____	
Mailing: _____	Physical: _____					

13B. Does the applicant own, lease, have an option to buy, or otherwise have control of the proposed site? <input type="checkbox"/> YES <input type="checkbox"/> NO - IF YES, please explain: _____ <hr/> - IF NO, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.						
14B. - For Modifications or Administrative Updates at an existing facility, please provide directions to the present location of the facility from the nearest state road; - For Construction or Relocation permits, please provide directions to the proposed new site location from the nearest state road. Include a MAP as Attachment F. _____ _____ _____						

15B. Nearest city or town:	16B. County:	17B. UTM Coordinates: Northing (KM): _____ Easting (KM): _____ Zone: _____
18B. Briefly describe the proposed new operation or change (s) to the facility:		19B. Latitude & Longitude Coordinates (NAD83, Decimal Degrees to 5 digits): Latitude: _____ Longitude: _____

C: 2ND ALTERNATE OPERATING SITE INFORMATION (only available for G20, G40, & G50 General Permits):

11C. Name of 2 nd alternate operating site: _____	12C. Address of 2 nd alternate operating site: Mailing: _____ Physical: _____
---	---

13C. Does the applicant own, lease, have an option to buy, or otherwise have control of the proposed site? YES NO

- IF YES, please explain: _____

- IF NO, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.

14C. - For Modifications or Administrative Updates at an existing facility, please provide directions to the present location of the facility from the nearest state road;

- For Construction or Relocation permits, please provide directions to the proposed new site location from the nearest state road. Include a MAP as Attachment F.

15C. Nearest city or town:	16C. County:	17C. UTM Coordinates: Northing (KM): _____ Easting (KM): _____ Zone: _____
----------------------------	--------------	---

18C. Briefly describe the proposed new operation or change (s) to the facility:	19C. Latitude & Longitude Coordinates (NAD83, Decimal Degrees to 5 digits): Latitude: _____ Longitude: _____
---	--

20. Provide the date of anticipated installation or change: 12/30/2014 <input checked="" type="checkbox"/> If this is an After-The-Fact permit application, provide the date upon which the proposed change did happen: : 12/1/2014	21. Date of anticipated Start-up if registration is granted: Operational
--	---

22. Provide maximum projected Operating Schedule of activity/activities outlined in this application if other than 8760 hours/year. (Note: anything other than 24/7/52 may result in a restriction to the facility's operation).

Hours per day 24 Days per week 7 Weeks per year 52 Percentage of operation 100%

SECTION III. ATTACHMENTS AND SUPPORTING DOCUMENTS

23. Include a check payable to WVDEP – Division of Air Quality with the appropriate application fee (per 45CSR22 and 45CSR13).

24. Include a Table of Contents as the first page of your application package.

All of the required forms and additional information can be found under the Permitting Section (General Permits) of DAQ's website, or requested by phone.

25. Please check all attachments included with this permit application. Please refer to the appropriate reference document for an explanation of the attachments listed below.

- ATTACHMENT A : CURRENT BUSINESS CERTIFICATE
- ATTACHMENT B: PROCESS DESCRIPTION
- ATTACHMENT C: DESCRIPTION OF FUGITIVE EMISSIONS
- ATTACHMENT D: PROCESS FLOW DIAGRAM
- ATTACHMENT E: PLOT PLAN
- ATTACHMENT F: AREA MAP
- ATTACHMENT G: EQUIPMENT DATA SHEETS AND REGISTRATION SECTION APPLICABILITY FORM
- ATTACHMENT H: AIR POLLUTION CONTROL DEVICE SHEETS - NA
- ATTACHMENT I: EMISSIONS CALCULATIONS
- ATTACHMENT J: CLASS I LEGAL ADVERTISEMENT
- ATTACHMENT K: ELECTRONIC SUBMITTAL - NA
- ATTACHMENT L: GENERAL PERMIT REGISTRATION APPLICATION FEE
- ATTACHMENT M: SITING CRITERIA WAIVER - NA
- ATTACHMENT N: MATERIAL SAFETY DATA SHEETS (MSDS) - NA
- ATTACHMENT O: EMISSIONS SUMMARY SHEETS - IN ATTACHMENT G & I
- OTHER SUPPORTING DOCUMENTATION NOT DESCRIBED ABOVE (Equipment Drawings, Aggregation Discussion, etc.)

Please mail an original and two copies of the complete General Permit Registration Application with the signature(s) to the DAQ Permitting Section, at the address shown on the front page of this application. Please DO NOT fax permit applications. For questions regarding applications or West Virginia Air Pollution Rules and Regulations, please refer to the website shown on the front page of the application or call the phone number also provided on the front page of the application.

SECTION IV. CERTIFICATION OF INFORMATION

This General Permit Registration Application shall be signed below by a Responsible Official. A Responsible Official is a President, Vice President, Secretary, Treasurer, General Partner, General Manager, a member of a Board of Directors, or Owner, depending on business structure. A business may certify an Authorized Representative who shall have authority to bind the Corporation, Partnership, Limited Liability Company, Association, Joint Venture or Sole Proprietorship. Required records of daily throughput, hours of operation and maintenance, general correspondence, Emission Inventory, Certified Emission Statement, compliance certifications and all required notifications must be signed by a Responsible Official or an Authorized Representative. If a business wishes to certify an Authorized Representative, the official agreement below shall be checked off and the appropriate names and signatures entered. Any administratively incomplete or improperly signed or unsigned Registration Application will be returned to the applicant.

FOR A CORPORATION (domestic or foreign)

G I certify that I am a President, Vice President, Secretary, Treasurer or in charge of a principal business function of the corporation

FOR A PARTNERSHIP

G I certify that I am a General Partner

FOR A LIMITED LIABILITY COMPANY

G I certify that I am a General Partner or General Manager

FOR AN ASSOCIATION

G I certify that I am the President or a member of the Board of Directors

FOR A JOINT VENTURE

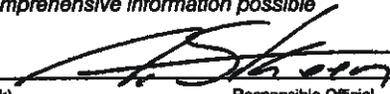
G I certify that I am the President, General Partner or General Manager

FOR A SOLE PROPRIETORSHIP

G I certify that I am the Owner and Proprietor

G I hereby certify that (please print or type) _____
is an Authorized Representative and in that capacity shall represent the interest of the business (e.g., Corporation, Partnership, Limited Liability Company, Association Joint Venture or Sole Proprietorship) and may obligate and legally bind the business. If the business changes its Authorized Representative, a Responsible Official shall notify the Director of the Office of Air Quality immediately, and/or,

I hereby certify that all information contained in this General Permit Registration Application and any supporting documents appended hereto is, to the best of my knowledge, true, accurate and complete, and that all reasonable efforts have been made to provide the most comprehensive information possible

Signature  12-30-2014
(please use blue ink) Responsible Official Date

Name & Title Nathan Skeen – Designated Agent
(please print or type)

Signature _____ 12-30-2014
(please use blue ink) Authorized Representative (if applicable) Date

Applicant's Name Mountaineer Keystone, LLC

Phone & Fax 724-940-1205 800-428-0981
Phone Fax

Email amiller@mkeystone.com

ATTACHMENT A

**Current 2014 West Virginia Business Certificate Place Here
(i.e.: Certificate of Incorporation/organization/Limited Partnership – ONE PAGE ONLY)**

**WEST VIRGINIA
STATE TAX DEPARTMENT
BUSINESS REGISTRATION
CERTIFICATE**

ISSUED TO:
**MOUNTAINEER KEYSTONE HOLDINGS LLC
6031 WALLACE ROAD EXT 300
WEXFORD, PA 15090-3430**

BUSINESS REGISTRATION ACCOUNT NUMBER: 2269-0948

This certificate is issued on: 10/17/2012

*This certificate is issued by
the West Virginia State Tax Commissioner
in accordance with Chapter 11, Article 12, of the West Virginia Code*

*The person or organization identified on this certificate is registered
to conduct business in the State of West Virginia at the location above.*

This certificate is not transferrable and must be displayed at the location for which issued.

This certificate shall be permanent until cessation of the business for which the certificate of registration was granted or until it is suspended, revoked or cancelled by the Tax Commissioner.

Change in name or change of location shall be considered a cessation of the business and a new certificate shall be required.

TRAVELING/STREET VENDORS: Must carry a copy of this certificate in every vehicle operated by them.
CONTRACTORS, DRILLING OPERATORS, TIMBER/LOGGING OPERATIONS: Must have a copy of this certificate displayed at every job site within West Virginia.

ATTACHMENT B

PROCESS DESCRIPTION

Pipeline quality natural gas (methane) is supplied to Caterpillar Model G3516TALE Internal combustion engine (1265 BHP @ 1400 RPM). The engine drives a compressor to compress the gas to a higher pressure that will enable the natural gas to be placed into a sales pipeline for market or distribution.

The engine burns natural gas from the discharge of the compressor and products of combustion are exhausted through an exhaust line and into a Hospital Grade Muffler/Silencer through a tailpipe and into the atmosphere. Calculations listed below are the PTE emissions,

(Numbers listed are from OEM Original equipment manufacturer)

PTE - O.E.M. Emission Data CE-1

NO _x =	2.00 grams/bhp-hr = 5.57 lbs/hr = 24.41 Tons/year
CO =	1.88 grams/bhp-hr = 5.24 lbs/hr = 22.94 Tons/year
VOC/NMNEHC =	0.29 grams/bhp-hr = 0.81 lbs/hr = 3.54 Tons/year

Calculations are performed as follows:

Grams/bhp-hr x bhp/454 = lbs/hr x 8760/2000 = Tons/year

The following emissions are the final result of airborne pollutants, which are over the WV, stated thresholds of 6lbs/hr and 10 tons/year, reason for the General Permit Application.

Most of the lube oils from the compressor are entrained in the gas stream, but what is caught in a coalescent filter is piped to a waste tank and hauled away by a company like Safety Clean, who disposes of it properly. The engine oil and filters that must be used to keep engine running and in good condition is also piped to either the same tank that has a containment dike around it for accidental spills, is also drained periodically by a safety company that disposes it properly.

ATTACHMENT C

DESCRIPTION OF FUGITIVE EMISSIONS

The fugitive emissions that are relative to this site are the products of combustion of Natural gas from the Engines and fugitive emissions from component leaks. (CE-1). The composition of Standard natural gas used as fuel or a heat source to power an internal combustion engine is:

Methane, Nitrogen, Ethane, Propane, Iso-Butane, N-Butane, Iso-Pentane, N-Pentane, Etc...

The products of combustion of Natural Gas consist of:

Nitrogen Oxides (NO + NO₂ = NO_x)
Carbon Monoxide (CO)
Volatile Organic Compounds (VOC) = Non Methane Non Ethane Hydrocarbons (NMNEHC)
Sulfur Oxides (SO_x)
Oxygen (O₂)
Carbon Dioxide (CO₂)
Particulate Matter (PM₁₀ & PM_{2.5})
Formaldehyde (HCHO)
Benzene - NA
Toluene-NA
Ethyl benzenes-NA
Xylene-NA
(NO BTEX or Hexanes were present in gas analysis)
Hexane-NA

NOTE: Carbon Dioxide (CO₂ & Methane CH₄) are NOT a regulated pollutants, but reported as GHG's (Green House Gases).

NO_x, CO and NMNEHC/VOC's from (CE-1)

The pollutants (NO_x & CO) can be measured with an Electro-Chemical Cell Type analyzer and NMNEHC (VOC's) can be measured by means of an FID (Flame Ionizing Detector) for the Gas Chromatography. All other emissions are calculated using EPA AP-42 Table 3.2-2 Uncontrolled Emissions Factors for 4 Stroke Lean Burn Sources and are displayed in grams/bhp-hr, lbs/hr and Tons/Year for the Engine. AP-42 values were used for HCHO, SO_x & PM₁₀ based on heat input (fuel) to the engine.

Fugitive Emissions from Component Leaks

Using a recently installed facility in WV that has similar amounts of: flanges, valves, fittings, open ended lines, connections and pumps seals equate to VOC's & HAP's below by using (EPA453-R-95-017):

Equipment Type	Count	Hours	Factor	%NMNEVOC VOC%/HAP%	VOC lbs/year	VOC Tons/Year	HAP's Tons/Year
Connectors	350	8760	0.00044	3.5%/0.035%	47.2	0.023	NA
Flanges	95	8760	0.00086	3.5%/0.035%	25	0.013	NA
Open-Ended Lines	35	8760	0.0044	3.5%/0.035%	48	0.024	NA
Pump Seals	0	8760	0.0053	3.5%/0.035%	0	0	NA
Valves	90	8760	0.00992	3.5%/0.035%	274	0.137	NA
Other -Gas	60	8760	0.0194	3.5%/0.035%	357	0.18	NA

Estimated Fugitive Emissions from Component Leaks

751.2 lbs/year = 0.09 lbs/hr = **VOC Total = 0.38 Tons/Year**

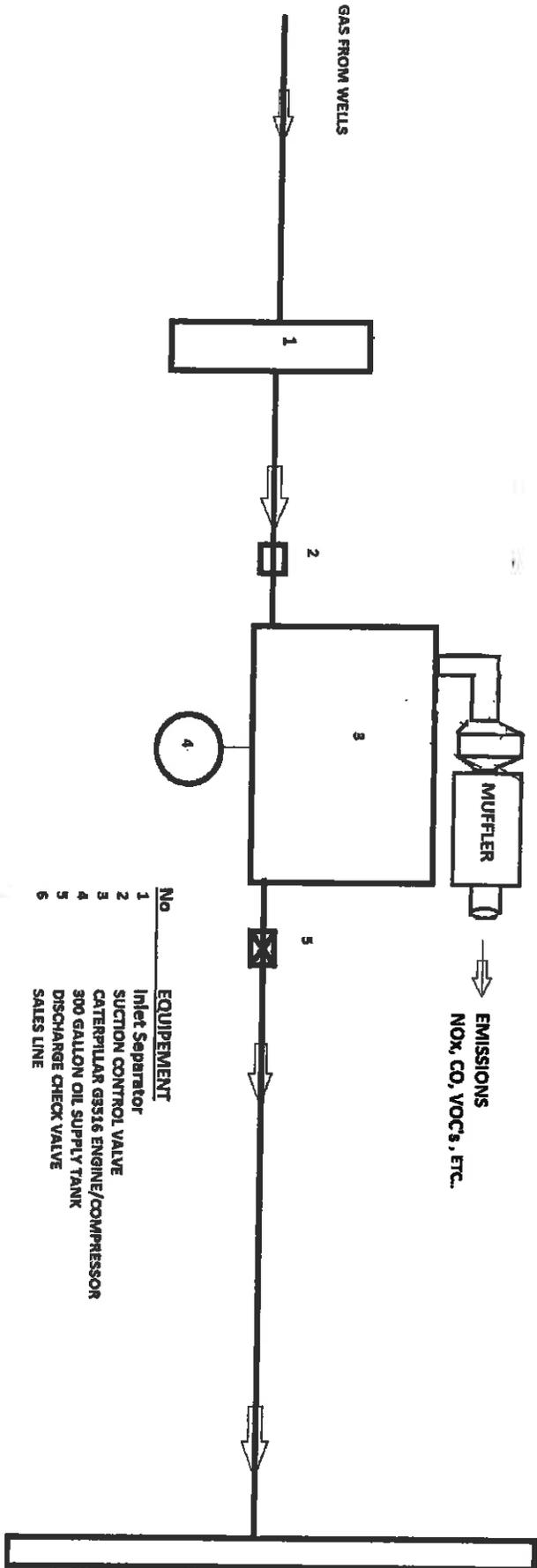
NMNEHC (VOC) WT% was calculated from a Standard Gas Analysis by using average molecular weights and results were:

VOC's (NMNEHC) = 100% (Wt% total) - [Methane (91.5%) + Ethane (5.5%)] = 3.5% or 0.035

No HAP's displayed in Gas Analysis

ATTACHMENT D

ATTACHMENT D PROCESS FLOW DIAGRAM
 MOUNTAINEER KEYSTONE - MACKAY WOLFE COMPRESSOR SITE



- | No | EQUIPMENT |
|----|-----------------------------------|
| 1 | Inlet Separator |
| 2 | SUCTION CONTROL VALVE |
| 3 | CATERPILLAR GAS ENGINE/COMPRESSOR |
| 4 | 300 GALLON OIL SUPPLY TANK |
| 5 | DISCHARGE CHECK VALVE |
| 6 | SALES LINE |

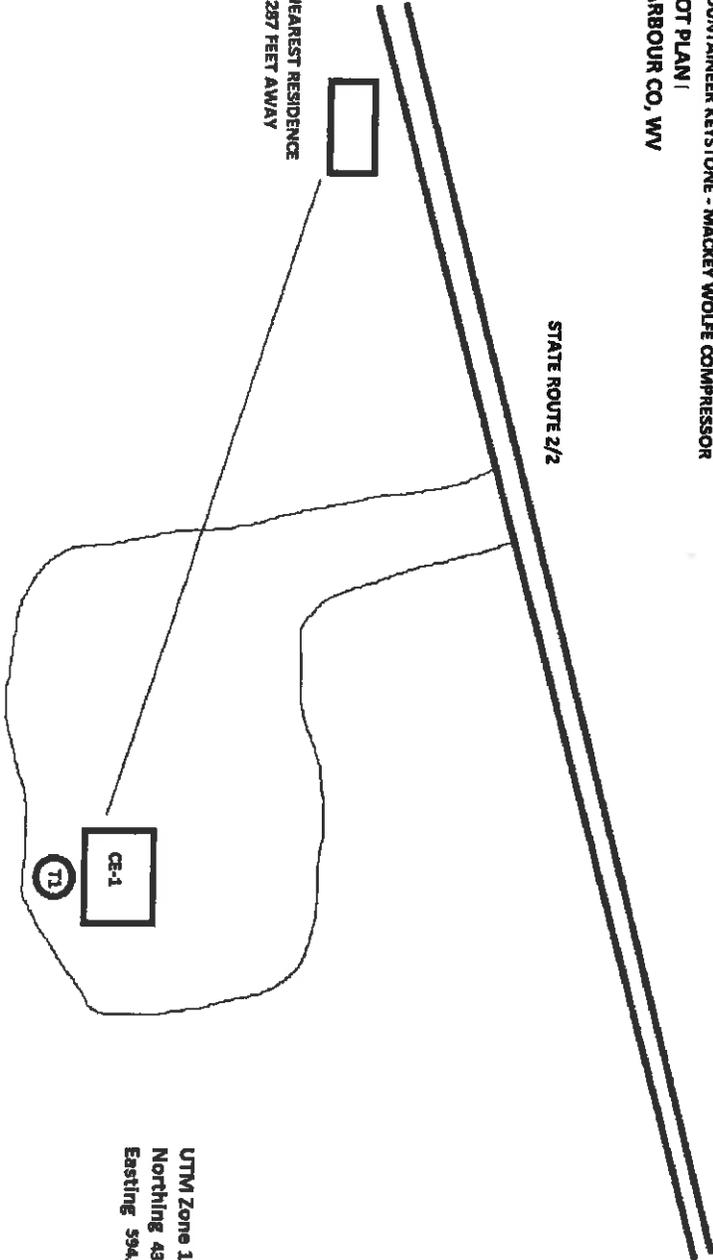
ATTACHMENT E

ATTACHMENT E
MOUNTAINEER KEYSTONE - MACKAY WOLFE COMPRESSOR
PLOT PLAN I
BARBOUR CO, WV

MOATSVILLE

STATE ROUTE 2/2

NEAREST RESIDENCE
1287 FEET AWAY



UTM Zone 17
Northing 4941.796
Easting 594.57

ATTACHMENT F

14 11 31

Longitude: d m s

Latitude: d m s

DD: d s

Datum: NAD27 NAD83

UTM

Coordinate: E N

Datum: NAD27 NAD83 Zone: V

UTM

Coordinates: E N

Datum: NAD27 NAD83 Zone: V

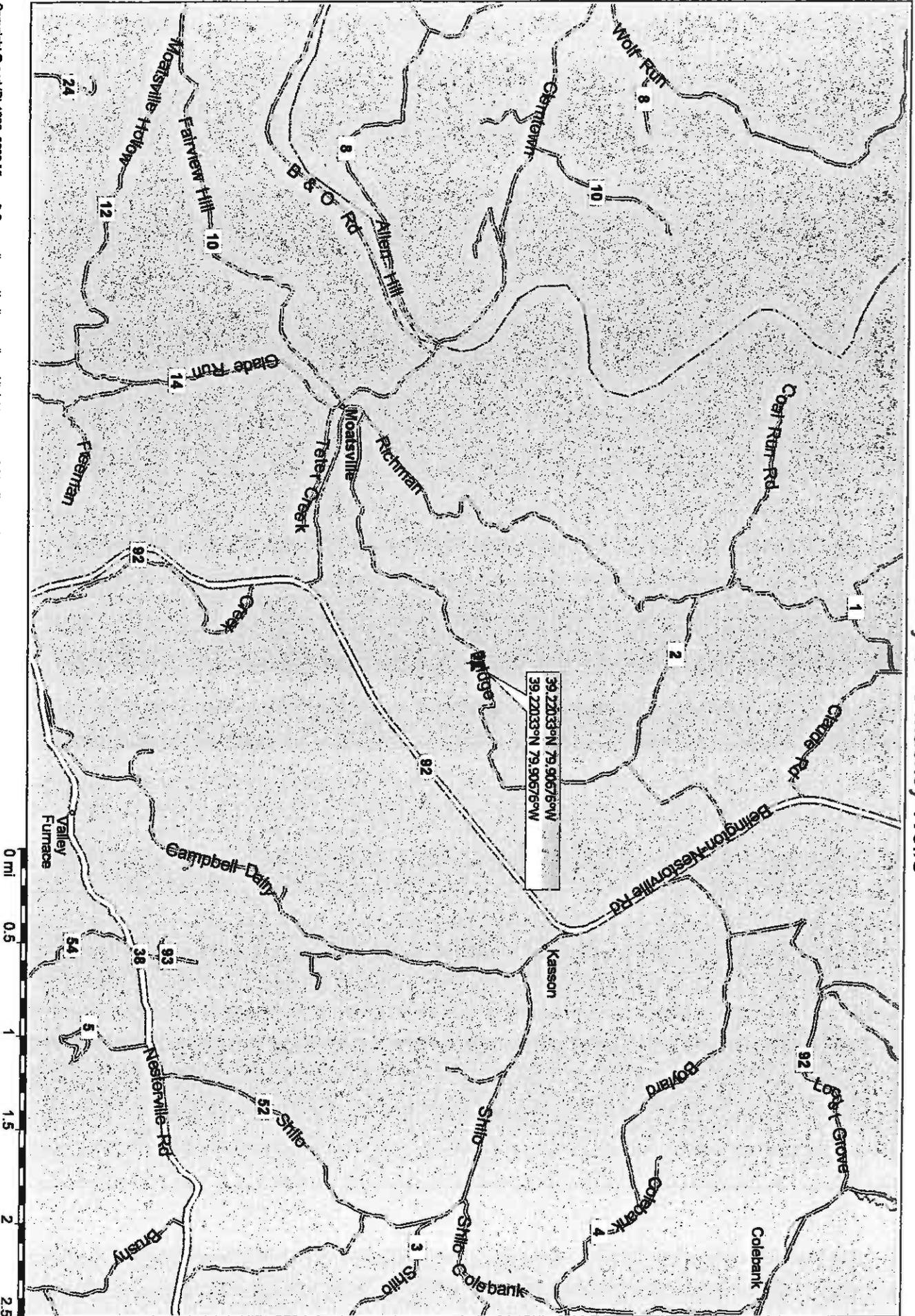
177 S 40 P (48.4)

-79.906759, 39.230326

County: Boone
 State: West Virginia (United States)
 ZIP: 26045 (MARTINSVILLE)
 Quad: 185320.10 E 20923.55 N
 UTM: 17V
 UTM Zone: 17V
 UTM Datum: NAD83
 UTM Spheroid: 1850.06 (48.179 m)

Map controls: street map image topo

Mountaineer Keystone Mackey Wolfe



Copyright © and (P) 1988-2009 Microsoft Corporation and/or its suppliers. All rights reserved. <http://www.microsoft.com/strat/>
 Certain mapping and direction data © 2009 NAVTEQ. All rights reserved. The Data for areas of Canada includes information taken with permission from Canadian authorities, including © Her Majesty the Queen in Right of Canada, © Queen's Printer for Ontario, NAVTEQ and NAVTEQ ON BOARD are trademarks of NAVTEQ. © 2009 Tele Atlas North America, Inc. All rights reserved. Tele Atlas and Tele Atlas North America are trademarks of Tele Atlas, Inc. © 2009 by Applied Geographic Systems, All rights reserved.

G30-D REGISTRATION APPLICATION FORMS

NATURAL GAS COMPRESSOR/GENERATOR ENGINE DATA SHEET

Source Identification Number ¹		CE-1					
Engine Manufacturer and Model		Caterpillar G3516TALE					
Manufacturer's Rated bhp/rpm		1265 @ 1400					
Source Status ²		ES					
Date Installed/Modified/Removed ³		12/1/2014					
Engine Manufactured/Reconstruction Date ⁴		12/10/1996					
Is this a Certified Stationary Spark Ignition Engine according to 40CFR60 Subpart JJJJ? (Yes or No) ⁵		NO					
Engine, Fuel and Combustion Data	Engine Type ⁶	RB4S					
	APCD Type ⁷	None					
	Fuel Type ⁸	PQ					
	H ₂ S (gr/100 scf)	NA					
	Operating bhp/rpm	1265/1400					
	BSFC (Btu/bhp-hr)	7551					
	Fuel throughput (ft ³ /hr)	9542					
	Fuel throughput (MMft ³ /yr)	9.55					
	Operation (hrs/yr)	8760					
Reference ⁹	Potential Emissions ¹⁰	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
MD	NO _x	5.57	24.41				
MD	CO	5.24	22.94				
MD	VOC	0.81	3.54				
AP	SO ₂	0.006	0.025				
AP	PM ₁₀	0.0007	0.003				
	Formaldehyde	0.70	3.05				

1. Enter the appropriate Source Identification Number for each natural gas-fueled reciprocating internal combustion compressor/generator engine located at the compressor station. Multiple compressor engines should be designated CE-1, CE-2, CE-3 etc. Generator engines should be designated GE-1, GE-2, GE-3 etc. If more than three (3) engines exist, please use additional sheets.

2. Enter the Source Status using the following codes:

NS	Construction of New Source (installation)	ES	Existing Source
MS	Modification of Existing Source	RS	Removal of Source

NATURAL GAS FIRED BOILER/LINE HEATER DATA SHEET

Source ID # ¹	Status ²	Design Heat Input (mmBtu/hr) ³	Hours of Operation (hrs/yr) ⁴	Fuel Heating Value (Btu/scf) ⁵	
NA	NA	NA	NA	NA	

1. Enter the appropriate Source Identification Numbers (Source ID #) for each boiler or line heater located at the compressor station. Boilers should be designated BLR-1, BLR-2, BLR-3, etc. Heaters or Line Heaters should be designated HTR-1, HTR-2, HTR-3, etc. Enter glycol dehydration unit Reboiler Vent data on the *Glycol Dehydration Unit Data Sheet*.
2. Enter the Status for each boiler or line heater using the following:
 EXIST Existing Equipment
 REM Equipment Removed
 NEW Installation of New Equipment
3. Enter boiler or line heater design heat input in mmBtu/hr.
4. Enter the annual hours of operation in hours/year for each boiler or line heater.
5. Enter the fuel heating value in Btu/standard cubic foot.

STORAGE TANK DATA SHEET

Source ID # ¹	Status ²	Content ³	Volume ⁴	Dia ⁵	Throughput ⁶	Orientation ⁷	Liquid Height ⁸
T01	EXIST	LUBE OIL	2100	5	1800	VERT	2

1. Enter the appropriate Source Identification Numbers (Source ID #) for each storage tank located at the compressor station. Tanks should be designated T01, T02, T03, etc.
2. Enter storage tank Status using the following:
 EXIST Existing Equipment
 REM Equipment Removed
 NEW Installation of New Equipment
3. Enter storage tank content such as condensate, pipeline liquids, glycol (DEG or TEG), lube oil, etc.
4. Enter storage tank volume in gallons.
5. Enter storage tank diameter in feet.
6. Enter storage tank throughput in gallons per year.
7. Enter storage tank orientation using the following:
 VERT Vertical Tank
 HORZ Horizontal Tank
8. Enter storage tank average liquid height in feet.

ATTACHMENT I – EMISSION CALCULATIONS

Date: December 30, 2014

Owner of Source: Mountaineer Keystone, LLC Site: Mackey Wolfe Compressor

County: Barbour

Latitude/Longitude: 39.22032 N / 79.90675 W

Mass Emission Calculations for a Natural Gas Engine Stationary Source (CE-1)

Make Caterpillar Model G3516TALE BHP 1265 RPM 1400

Engine Build Date (EBD) December 10, 1996 SN# 4EK02257

Emission Controls:

Catalyst (Y/N) N Make NA Model NA

Cycle and Burn (4SLB, 4SRB, 2SLB, 2SRB) 4SLB

Fuel /Heat Input (BTU/bhp-hr) 7551 BTU/scf 1001 SCF/hr 9,542

Heat Input (MMBTU/hr) 9.55

EPA AP-42 Uncontrolled Emission Factors for 4SLB from Table 3.2-2

Pollutant	grams/bhp-hr (lb/MMBTU)	lb/hr g *BHP/453.5924	Ton/Year lb/hr*8760/2000	Method OEM/AP-42
NOx	2.00	5.57	24.41	OEM
CO	1.88	5.24	22.94	OEM
VOC	0.29	0.81	3.54	OEM
HCHO	0.25	0.70	3.05	OEM
PM(10)	0.0002 (7.71E-05)	0.0007	0.003	AP-42
SOx	0.002 (5.88E-04)	0.006	0.025	AP-42
CO2(e) GHG	NA	NA	5,970 Metric Tons 5,415 Short Tons	EPA Website

An example Class I legal advertisement is included below:

**ATTACHMENT J
LEGAL ADVERTISEMENT**

**AIR QUALITY PERMIT NOTICE
Notice of Application**

Notice is given that Mountaineer Keystone, LLC has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a (**General Permit Registration, Class II Construction**) for a (**Natural Gas Compressor Site**) located on (**18934 Morgantown Pike Moatsville, WV 26405**), (in/near Moatsville, in (**Barbour**) County, West Virginia.

The applicant estimates the potential to discharge the following Regulated Air Pollutants will be:

NO_x = 24.41 TPY
CO = 22.94 TPY
VOC = 3.92 TPY
PM₁₀ = 0.0007 TPY
SO₂ = 0.025 TPY
HCHO = 3.05 TPY

Latitude 39.220326N Longitude -79.906759W

Startup of operation is planned to begin on or about the 1st day of December, 2014. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1227, during normal business hours.

Dated this the 30th day of December, 2014.

By: **Mountaineer Keystone, LLC**
Nathan Skeen
Designated Agent
6031 Wallace Road Extension
Suite 300
Wexford, PA 15090

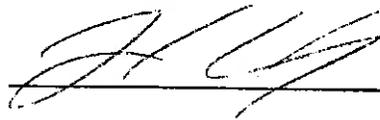
OFFICE OF THE BARBOUR DEMOCRAT

I, **John Eric Cutright**, Publisher of **The BARBOUR DEMOCRAT**, a weekly newspaper published in the City of Philippi, County of Barbour, and State of West Virginia, do certify that the annexed:

LEGAL NOTICE

was duly printed in said paper one week commencing on Wednesday, the **21st** day of **January, 2015**.

Given under my hand at Philippi, West Virginia, this **21st** day of **January, 2015**.

 _____, Publisher _____

Printer's Fee.....\$67.52

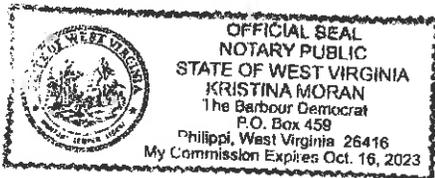
STATE OF WEST VIRGINIA
COUNTY OF BARBOUR; to wit

Sworn to and subscribed before me this **21st** day of **January, 2015**.



NOTARY PUBLIC

My Commission Expires October 16, 2023.



OFFICE OF THE BARBOUR DEMOCRAT

I, John Eric Cutright, Publisher of The BARBOUR DEMOCRAT published in the City of Philippi, County of Barbour, certify that the annexed:

LEGAL NOTICE

was duly printed in said paper one week commencing Wednesday, the 21st day of January, 2015.

Given under my hand at Philippi, West Virginia, this

[Signature], Publisher

Printer's Fee.....\$67.52

AIR QUALITY PERMIT NOTICE
Notice of Application

Notice is given that Mountaineer Keystone, LLC has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a General Permit Regulating a Small Combustion for a Natural Gas Compressor Site located on 18834 Morgantown Pike Moatsville, WV 26405, in near Moatsville, in Barbour County, West Virginia. The latitude and longitude coordinates are:

Latitude: 39.2203026N
Longitude: -79.906759W

The applicant estimates the potential to discharge the following Regulated Air Pollutants will be:
NOx = 24.41 TPY
CO = 22.94 TPY
VOC = 3.92 TPY
PM10 = 0.0007 TPY
SO2 = 0.025 TPY
HCHO = 3.05 TPY

Startup or operation is planned to begin on or about the 23rd day of February, 2015. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499 extension 1227, during normal business hours. Dated this the 12th day of January, 2015.

By: Mountaineer Keystone, LLC
Nathan Skeen
Designated Agent
6031 Wallace Road Extension
Suite 300
Wexford, PA 15090

2-21

STATE OF WEST VIRGINIA
COUNTY OF BARBOUR; to wit

Sworn to and subscribed before me this 21st day of January, 2015.

[Signature]
NOTARY PUBLIC

My Commission Expires October 16, 2023.



ATTACHMENT L

Place Check for Class II Natural Gas Compressor Construction Fee of:

\$500 Payable to “WVDEP – Division of Air Quality” FEE Here

G3516

NON-CURRENT
GAS COMPRESSION APPLICATION

GAS ENGINE SITE SPECIFIC TECHNICAL DATA

CATERPILLAR®

ENGINE SPEED (rpm): 1400
 COMPRESSION RATIO: 8:1
 AFTERCOOLER TYPE: SCAC
 AFTERCOOLER WATER INLET (°F): 130
 JACKET WATER OUTLET (°F): 210
 ASPIRATION: TA
 COOLING SYSTEM: JW+OC, AC
 CONTROL SYSTEM: EIS
 EXHAUST MANIFOLD: ASWC
 COMBUSTION: Low Emission
 NOx EMISSION LEVEL (g/bhp-hr NOx): 2.0
 SET POINT TIMING: 33

RATING STRATEGY:
 FUEL SYSTEM:
 SITE CONDITIONS:
 FUEL:
 FUEL PRESSURE RANGE(psig):
 FUEL METHANE NUMBER:
 FUEL LHV (Btu/scf):
 ALTITUDE(ft):
 MAXIMUM INLET AIR TEMPERATURE(°F):
 STANDARD RATED POWER:

STANDARD
HPG IMPCO

Gas Analysis
 35.0-40.0
 93.1
 917
 1350
 100
 1265 bhp@1400rpm

RATING	NOTES	LOAD	MAXIMUM RATING	SITE RATING AT MAXIMUM INLET AIR TEMPERATURE			
			100%	100%	75%	50%	
ENGINE POWER (WITHOUT FAN)	(1)	bhp	1285	1285	948	632	
INLET AIR TEMPERATURE		°F	100	100	100	100	
ENGINE DATA							
FUEL CONSUMPTION (LHV)	(2)	Btu/bhp-hr	7551	7551	7711	8264	
FUEL CONSUMPTION (HHV)	(2)	Btu/bhp-hr	8378	8378	8566	9159	
AIR FLOW (@inlet air temp, 14.7 psia)	(3)(4) (WET)	ft ³ /min	2781	2779	2011	1345	
AIR FLOW	(3)(4) (WET)	lb/hr	11814	11814	8552	5720	
FUEL FLOW (60°F, 14.7 psia)		scfm	174	174	133	95	
INLET MANIFOLD PRESSURE	(5)	in Hg(abs)	84.8	84.8	48.0	32.9	
EXHAUST TEMPERATURE - ENGINE OUTLET	(6)	°F	868	868	862	866	
EXHAUST GAS FLOW (@engine outlet temp, 14.5 psia)	(7)(4) (WET)	ft ³ /min	7135	7135	5180	3477	
EXHAUST GAS MASS FLOW	(7)(4) (WET)	lb/hr	12267	12267	8898	5967	
EMISSIONS DATA - ENGINE OUT							
NOx (as NO2)	(8)(9)	g/bhp-hr	2.00	2.00	4.60	8.19	
CO	(8)(9)	g/bhp-hr	1.88	1.88	2.17	2.42	
THC (mol. wt. of 15.84)	(8)(9)	g/bhp-hr	2.85	2.85	2.36	2.42	
NMHC (mol. wt. of 15.84)	(8)(9)	g/bhp-hr	0.43	0.43	0.35	0.38	
NMNEHC (VOCs) (mol. wt. of 15.84)	(8)(9)(10)	g/bhp-hr	0.29	0.29	0.24	0.24	
HCHO (Formaldehyde)	(8)(9)	g/bhp-hr	0.25	0.25	0.27	0.30	
CO2	(8)(9)	g/bhp-hr	489	489	499	534	
EXHAUST OXYGEN	(8)(11)	% DRY	8.3	8.3	7.5	6.4	
HEAT REJECTION							
HEAT REJ. TO JACKET WATER (JW)	(12)	Btu/min	40361	40361	34289	28379	
HEAT REJ. TO ATMOSPHERE	(12)	Btu/min	5313	5313	4428	3544	
HEAT REJ. TO LUBE OIL (OC)	(12)	Btu/min	6382	6382	5422	4487	
HEAT REJ. TO AFTERCOOLER (AC)	(12)(13)	Btu/min	10279	10279	6350	2264	
COOLING SYSTEM SIZING CRITERIA							
TOTAL JACKET WATER CIRCUIT (JW+OC)	(13)	Btu/min	52055				
TOTAL AFTERCOOLER CIRCUIT (AC)	(13)(14)	Btu/min	10793				
A cooling system safety factor of 0% has been added to the cooling system sizing criteria.							

CONDITIONS AND DEFINITIONS

Engine rating obtained and presented in accordance with ISO 3046/1, adjusted for fuel, site altitude and site inlet air temperature. 100% rating at maximum inlet air temperature is the maximum engine capability for the specified fuel at site altitude and maximum site inlet air temperature. Max. rating is the maximum capability for the specified fuel at site altitude and reduced inlet air temperature. Lowest load point is the lowest continuous duty operating load allowed. No overload permitted at rating shown.

For notes information consult page three.



Sep 13, 2013

Dennis Matto
Exterran
4477 Gleason Road
Lakewood, NY 14750

Exterran
QHSE and Operations Services
16666 Northchase Drive
Houston, Texas 77060 U.S.A.

Main 281.836.7000
Fax 281.836.8161
www.exterran.com

Re: Engine Pedigree for Exterran Compressor Unit 311136, Engine Serial Number 4EK02257

In order to better assist your company with any of its state and federal permitting needs, Exterran submits the following information in regards to the engine of the above-referenced compressor unit, which Exterran is currently utilizing to provide your company contract compression services. This letter should provide information necessary to answer questions pertaining to, but not limited to, the New Source Performance Standards (NSPS) for Stationary Spark Ignition Internal Combustion Engines, Subpart JJJJ. This information is current as of Sep 13, 2013.

Engine Make:	CATERPILLAR
Engine Model:	G3516TALE
Engine Serial Number:	4EK02257
Engine Type:	4 Stroke LB
Engine Category:	Existing
Engine Subcategory:	Non Certified
Engine NSPS Status*:	Exempt
Exemption Justification*:	Overhauls since 6/12/08 have not triggered recon./modif.
Engine Speed:	1400.00
OEM Rated HP:	1265.00
Engine Manufacture Date:	Dec 10, 1996
Customer:	N/A
Business Unit:	Mid-Con
Exterran Unit Number:	311136
Customer Lease Name:	N/A

Please contact Kyle Poycker with any questions at or kyle.poycker@exterran.com.

* The "Engine NSPS Status" and "Exemption Justification" entries herein are based on Exterran's present knowledge of the engine in question and its reading of U.S. EPA's regulations and guidance pursuant to 40 C.F.R. Part 60, Subpart JJJJ. Any change in law or in the federal, state, or local interpretation of existing law could result in this engine being subject to additional or different legal requirements. These conclusions are Exterran's and are not offered as legal opinions or advice to your company. Additionally, any reconstruction or modification respecting this engine (as those terms are defined in the applicable regulations) could result in the applicability of Subpart JJJJ or other legal requirements to this engine and create legal compliance responsibilities for your company.



FESCO, Ltd.
Route 2, Box 849 A1 Shinnston, WV 26431

November 26, 2014

For: Crestwood Marcellus Midstream LLC
801 Cherry Street, Suite 3800, Unit 20
Fort Worth, Texas 76102

Sample: Mackey Wolfe
Spot Gas Sample @ 96 psig & 59 °F

Field: Tygart Valley

Station: TV10001
Date Sampled: 11/17/2014 at 10:00 hours

CHROMATOGRAPH ANALYSIS - GPA 2261

COMPONENT	MOL%	GPM
Nitrogen	0.253	
Carbon Dioxide	0.590	
Methane	97.481	
Ethane	1.629	0.437
Propane	0.045	0.012
Isobutane	0.001	0.000
n-Butane	0.001	0.000
Isopentane	0.000	0.000
n-Pentane	0.000	0.000
Hexanes Plus	0.000	0.000
Totals:	100.000	0.449

Computed Real Properties:

Specific Gravity	0.570 (Air=1.000)
Compressibility(Z)	0.9979
Gross Heating Value at 14.730 psia and 60 °F	
Dry Basis	1019 BTU/CF
Saturated Basis	1001 BTU/CF

Base Conditions: 14.730 psia and 60 °F

Certified: FESCO, Ltd. - Shinnston, WV

Jack Cooper 304-592-3366

Job Number: 01665.001
Analyst ID: JW

Cyl Number: T-3209