

#### west virginia department of environmental protection

Office of Oil and Gas 601 57th Street, S.E. Charleston, WV 25304 (304) 926-0450 fax: (304) 926-0452

Austin Caperton, Cabinet Secretary www.dep.wv.gov

Wednesday, May 15, 2019 WELL WORK PERMIT Horizontal 6A / New Drill

TRIAD HUNTER, LLC 125 PUTNAM ST

MARIETTA, OH 45750

Permit approval for MOMENTIVE 1 Re:

47-095-02549-00-00

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0450.

James A. Martin

Chief

Operator's Well Number:

MOMENTIVE 1

Farm Name: GE SILICONES WV, LLC

Horizontal 6A New Drill

U.S. WELL NUMBER: 47-095-02549-00-00

Date Issued: 5/15/2019

Promoting a healthy environment.

API Number: 95-02549

### **PERMIT CONDITIONS**

West Virginia Code § 22-6A-8(d) allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

#### **CONDITIONS**

- 1. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.
- 2. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than one hundred (100) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
- 3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
- 4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
- 5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
- 6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
- 7. 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
- 8. During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designee immediately.
- 9. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
- 10. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.

API Number: 95-02549 05/17/2019

### **PERMIT CONDITIONS**

11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov.



#### west virginia department of environmental protection

Oil and Gas Conservation Commission 601 57th Street, SE Charleston, WV 25304 (304)926-0499, Ext 1656

Barry K. Lay, Chairman ogcc.wv.gov

December 13, 2018

Department of Environmental Protection Office of Oil and Gas Charleston, WV 25304

RE: Application for Deep Well Permit - API #47-095-02549

COMPANY: Triad Hunter, LLC

FARM: GE Silicones, LLC

Momentive 1

COUNTY:

Tyler

DISTRICT: Union

QUAD: Bens Run

The deep well review of the application for the above company is <u>Approved to drill to the Point</u> Pleasant formation and plug back to the Marcellus formation.

The applicant has complied with the provision of Chapter 22C-9, of the Code of West Virginia, nineteen hundred and thirty-one (1931), as amended, Oil and Gas Conservation Commission as follows:

- 1. Comments to Notice of Deviation filed? NA
- 2. Provided a certified copy of duly acknowledged and recorded consent and easement form from all surface owners? NA
- 3. Provided a tabulation of all deep wells within one mile of the proposed location, including the API number of all deep wells: none
- 4. Provided a plat showing that the proposed location is a distance of 400+ feet from the nearest lease line or unit boundary and showing the following wells drilled to or capable of producing from the objective formation within 3,000 feet of the proposed location.

Sincerely,

Susan Rose Administrator

API NO. 47-95	. 02549
OPERATOR \	WELL NO. 1
Mall Dad No	mon Momentine

# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS WELL WORK PERMIT APPLICATION

1) Well Operator: Triad Hunter, LLC	494494833	Tyler	Union	Bens Run
	Operator ID	County	District	Quadrangle
2) Operator's Well Number: 1	Well Pa	ad Name: Me	omentive	
3) Farm Name/Surface Owner: Crompton Corp	GE Silicones W Public Ro	ad Access:	County Road	2/4
4) Elevation, current ground: 648.22'	Elevation, proposed	l post-constru	action: 648.0	8'
5) Well Type (a) Gas × Other	Oil × Uno	derground Sto	orage	
17 - 4 1	Deep	x		OCB
6) Existing Pad: Yes or No NO				10/9/2018
7) Proposed Target Formation(s), Depth(s). Point Pleasant, 10,800' TVD, 10,800' TMD			d Pressure(s):	A
B) Proposed Total Vertical Depth: 10,800	'TVD			
	int Pleasant			
(0) Proposed Total Measured Depth: 10,	800' MD			
11) Proposed Horizontal Leg Length: 0'		No.		
12) Approximate Fresh Water Strata Depth	as: 300'			
13) Method to Determine Fresh Water Dep	ths: Examine local w	ater wells		
14) Approximate Saltwater Depths: 1st S	alt Sand - 960', 2nd Sai	nd - 1146, 3r	d Sand - 1394	I, Big Injun - 1650'
15) Approximate Coal Seam Depths: Mult	tiple seams - 274', 410	', 460', 810'		
16) Approximate Depth to Possible Void (	coal mine, karst, other):	None know	'n	
17) Does Proposed well location contain codirectly overlying or adjacent to an active r	oal seams		No x	
(a) If Yes, provide Mine Info: Name:				The state of the s
Depth:				
Seam:				
Owner:				

WW-6B (04/15)

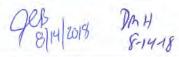
API NO. 47	0	9	巈	0	205/	17/20	)19
API NO. 47	_ 95		-	V	L 3	7 3	

OPERATOR WELL NO. 1 Well Pad Name: Momentive

18)

#### CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	26"	New	A-500	85 ppf	30'	30'	Cement to surface
Fresh Water	20"	New	J-55	94 ppf	350'	350'	Cement to Surface
Coal	13 3/8"	New	J-55	61 ppf	1,845'	1,845'	Cement to Surface
Intermediate	9 5/8"	New	HCP-110	43.5 ppf	8,845'	8,845'	3,351 Cu. Ft.
Production	5 1/2"	New	P-110	23 ppf	10,800'	10,800'	252 Cu. Ft
Tubing	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Liners	N/A	N/A	N/A	N/A	N/A	N/A	N/A



TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	26"	30"	.375"	N/A	0	Class A	1.18-1.20 cu.ft./sk
Fresh Water	20"	24"	.438"	2,110	750	Class A	1.18-1.20 cu.ft./sk
Coal	13 3/8"	17 1/2"	.480"	3,090	750	Class A	1.18-1.24 cu.ft./sk
Intermediate	9 5/8"	12 1/4"	.435"	8,700	1750	Class A	1.18-3.0 cu.ft./sk
Production	5 1/2"	8 1/2"	.415"	16,800	9000	Class A & H	1.51-2.08 cu.ft./sk
Tubing	2 3/8"	4 3/4"	.380"	7,700	3000	N/A	N/A
Liners	N/A	N/A	N/A	N/A	N/A	N/A	N/A

#### **PACKERS**

Kind:	N/A		
Sizes:	N/A		
Depths Set:	N/A		

Office of Oil and Gas

AUG 1 5 2018

SEP 07 2018

WV Department of Environmental Protection WV Department of Environmental Protection Environmental Protection

\*Note: Attach additional sheets as needed.

19) Describe proposed well work, including the drilling and	d plugging back of any pilot h	ole:
SEE ATTACHMENT: I-B		
	00.1	
	V1418	aching
	YATT	78/14/010
20) Describe fracturing/stimulating methods in detail, incl	uding anticipated max pressur	e and max rate:
SEE ATTACHMENT: II-B		
21) Total Area to be disturbed, including roads, stockpile a	rea, pits, etc., (acres): 10.47	acres
22) Area to be disturbed for well pad only, less access road		
	(deres).	
23) Describe centralizer placement for each casing string:		
SEE ATTACHMENT: III-B		
24) Describe all cement additives associated with each cem	ent type:	
SEE ATTACHMENT: IV-B		
25) Proposed borehole conditioning procedures:		
SEE ATTACHMENT: V-B		
		RECEIVED Office of Oil and Gas
	DECEN	AUG 1 5 2018
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*Note: Attach additional sheets as needed.	5 1100 OF OFF A	enconmental Protection

SEP 0 7 2018 Page 3 of 3

#### **#24 Cement Additives:**

ATTACHMENT: IV-B PAGE 1 OF 2

#### A. Surface Cement Job (20" csg.)

- 1. Surface Cement Job (20" csg.)
  - a) Average weight = 15.4 to 15.6 lbs./gal
  - b) Average yield = 1.19 to 1.24 ft<sup>3</sup>/5k
- 2. Common Additives
  - a) 1/4 lb./5k Cello Flake

(Lost circulation material)

b) 2%-3% Calcium Chloride

(Accelerator)

\*Note: Gel Sweep is usually pumped ahead of the cement.

Gel Spacer consists of 6% gel w/cello Flake.

#### B. Intermediate Cement Job (13 3/8" csg. & 9 5/8" csg.)

Due to depth, most intermediate casings are cemented in two stages.

- 1. The upper (lead) stage cement job usually consists of CLASS A CEMENT.
  - a) Average weight = 13.1 to 13.5 lbs. /gal.
  - b) Average yield = 1.54 to 1.70 ft<sup>3</sup>/5k.

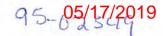
\*Note: Gel Sweep is usually pumped ahead of the cement.

Gel Spacer consists of 6% gel w/cello Flake.

- 2. The lower (tail) stage usually consists of standard CLASS A CEMENT.
  - a) Average weight = 15.4 to 15.6 lbs./gal
  - b) Average yield =  $1.18 \text{ to } 1.20 \text{ ft}^3/5\text{k}$ .

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#### **#24 Cement Additives:**

ATTACHMENT: IV-B PAGE 2 OF 2

#### C. Longstring Cement Job (5 1/2" csg.)

Depending on how far cement is brought back into the intermediate casing, the production casing is usually cemented in two stages and a heavy weighted spacer is pumped ahead of the cement to condition the well bore.

the cement to condition the	. Well boile.	
1. Weighted Spacer	Ultra Flush II	50 bbs. @ 13lbs. /gal
a) Barite	@257 lbs. /bbl	(Weighting Material)
b) US-40	2 gals. /bbl	(Surface tension reducer)
c) ss-2	13 lbs./gal	(Suractant)
2. Weighted Spacer		
a) Barite	@257 lbs. /bbl	(Weighting Material)
b) SS-2	1 lb. /gal	(Surfactant)
c) MPA-170	1 lb./bbl	(Fluid loss additive)
3. Lead Slurry	50:50 POZ/Premiun	n NE-1
a) Average Weight = 3	13.50 lbs. /gal	

a) Average Weight = 13.50 lbs. /gal

b) Average yield =  $1.44 \text{ ft}^3 / /5 \text{k}$ .

#### Common Additives

a) BA - 90	3lbs. /5k	(Bonding Agent)
b) R - 3	.258 bwoc	(Retarder)
c) MPA - 170	1 lb. / bbl	(Fluid loss additive)

4. Tail Slurry CLASS H CEMENT

a) Average Weight = 15.2lbs. /gal

b) Average Yield = 1.64 ft<sup>3</sup>/5k

#### **Common Additives**

a) R-3	.2% bwoc	(Retarder)
b) CD-32	.75 % bwoc	(Dispersant)
c) ASA - 301	.35 % bwoc	(Free water removal)
d) BA-10A	1.25% bwoc	(Bonding Agent)
e) ASCA	30lbs. /5k	(Solubility additive)
f) Sodium Metasilicate	.58 bwoc	(Extender)

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ATTACHMENT: V-B

### #25 Borehole Conditioning Procedures:

17 ½" hole – Generally this section of the well is drilled on air with air compressors and boosters. It's imperative through this section of the well to have sufficient air volume and pressure on the borehole during drilling to ensure hole conditions remain clean and unobstructed. If a significant volume of freshwater is encountered during drilling soap is utilized to assist in lifting drill cuttings and freshwater out of the hole. "Red Rock" is a clay-dominant strata that is sensitive to freshwater in this area. Stiff foam is applied to the borehole when freshwater is encountered to prevent the clays from swelling and sloughing into the borehole.

12 1/4" hole - Generally this section of the well is drilled on air with air compressors and boosters. It's imperative through this section of the well to have sufficient air volume and pressure on the borehole during drilling to ensure hole conditions remain clean and unobstructed. If a significant volume of saltwater is encountered during drilling soap is utilized to assist in lifting drill cuttings and freshwater out of the hole.

**8 1/2" hole** – Generally, this section of the well is drilled on fluid. In an effort to keep borehole conditions in good working order several mechanisms are used to condition the borehole:

- 1. **High Viscosity Sweeps**: Sweeps are mixed and pumped after drilling every 3 joints during the drilling process. Sweeps generally run 20 cp over the active mud system viscosity for 20 bbls.
- 2. Clean-Up Cycle: "Clean-Up Cycles" are utilized every 500' in the lateral section of the well. During this routine conditioning procedure drilling is halted for the amount of time it takes to circulate 2 sweeps to surface. Also, during this process the pipe is continuously rotated and reciprocated at this spot to help circulate out any "cutting beds" lying in the wellbore.
- 3. **Short Trips:** Short trips are utilized to work out tight spots and cutting beds from the borehole which cause increased torque and drag, and pressure. Two short trips are typically run during the drilling of this section of the wellbore. The first at the half-way point of the lateral. The drill pipe is pulled out of the hole to the "kick-off" point of the well. The second short trip is utilized at total depth (TD). At this point the drill pipe is pulled out of the wellbore to the half-way point of the lateral.
- 4. **At TOTAL DEPTH:** A clean-up cycle and short trip is utilized to condition the wellbore when total depth (TD) has been reached in preparation for running production casing.

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(Date)

[Conventional Well Operator] [Address] [State]

RE: Momentive Hydraulic Fracturing Notice

To whom it may concern,

Triad Hunter has developed a Marcellus and Utica pad (Momentive pad) located in Tyler County, WV. As an owner or operator of conventional natural gas wells in this area, we are requesting your assistance in this matter.

Due to the apparent presence of unique geological conditions, the potential for communication between deep geological zones exists in this area. This potential communication, via natural gas, water, or both, may occur between hydraulically fractured wells in the Marcellus formation (approximately 6,400' TVD) and existing conventional natural gas wells in the partially-depleted, relatively high permeability, Alexander formation (approximately 5,200' TVD).

Triad Hunter anticipates conducting hydraulic fracturing at the Spencer Pad during the third quarter of 2018. We have identified conventional natural gas wells operated by your company within 1500' (lateral distance) of our new planned laterals. Plans for each well on the pad are attached.

We recommend that conventional well operators conduct the following activities before, during, and after fracturing operations:

- 1. Inspect surface equipment, prior to fracturing, to establish integrity and establish well conditions.
- 2. Observe wells closely during and after fracturing and monitor for abnormal increases in water, gas, or pressure.
- 3. Inspect or install master valves rated to 3,000 psi or other necessary equipment for wellhead integrity.
- 4. Notify the OOG and Triad Hunter if any changes in water, gas production, pressure, or other anomalies are identified.

Should you have any questions please call me at 740-760-0558.

Thank you,

Will Harless Supervisor Regulatory Operations

#### **Purpose**

The purpose of this pad-specific Hydraulic Fracturing Monitoring Plan is to identify and notify conventional well operators near Triad Hunter, LLC hydraulic fracturing in Tyler County, WV prior to hydraulic fracturing at the following Triad Hunter wells near the Momentive Pad: (47-095-00000).

Due to apparent presence of unique geological conditions, the potential for communication between deep geologic zones exists in this area. This potential communication, via natural gas, water, or both, may occur between hydraulically fractured wells in the Marcellus formation (approximately 6,400' TVD) and existing conventional natural gas wells in the partially-depleted, relatively high permeability Alexander formation (approximately 5,200' TVD).

The plan is being implemented as an additional safety measure to be utilized in conjunction with existing best management practices and emergency action plans for the site. These additional measures include pre-notification of conventional well operators of the timing and location of the hydraulic fracturing, establishment of measures conventional well operators should implement, and assurance that the OOG is notified of the timeline, as well as any issues that may arise during fracturing.

#### 1. Communication with Conventional Well Operators

Triad Hunter, using available data (WV Geological Survey, WVDEP website, and HIS data service), has identified all known conventional wells and well operators within 1,500 feet of this pad and the lateral sections. A map showing these wells along with a list of the wells and operators is included in **Attachment A**.

Upon approval of this plan, Triad Hunter will notify these operators, via letter, of the hydraulic fracturing schedule for these wells. A copy of this letter is included in **Attachment B**.

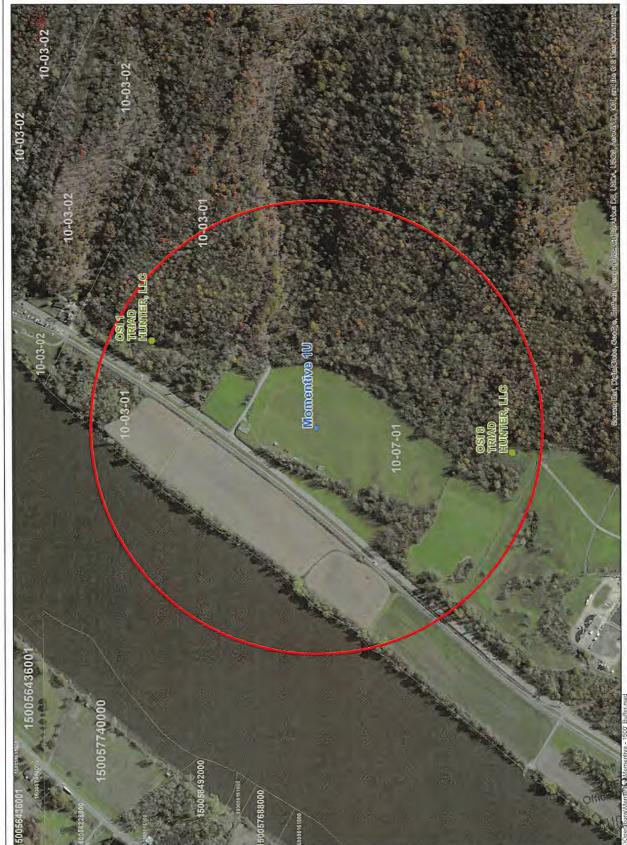
The letter provides recommendations to these conventional operators to 1) increase their monitoring of their wells during that time period, 2) ensure that their well head equipment is sound, and 3) provide immediate notification to Triad hunter and the OOG in the event of any changes in their well conditions.

Specifically, the letter recommends that conventional well operators conduct the following activities during and after fracturing operations:

- 1. Inspect their surface equipment prior to fracturing to establish integrity and establish pre-frac well conditions
- 2. Observe wells closely during and after fracturing and monitor for abnormal increases in water, gas or pressure
- 3. Inspect or install master valves rated to 3,000 psi or other necessary equipment for wellhead integrity
- 4. Notify the OOG and Triad Hunter if any changes in water, gas production, pressure, or other anomalies are identified

#### 2. Reporting

Triad Hunter will provide information relating to the hydraulic fracturing schedule, communication with conventional operators, and ongoing monitoring of the work upon request of OOG or immediately in the event of any noted abnormalities.



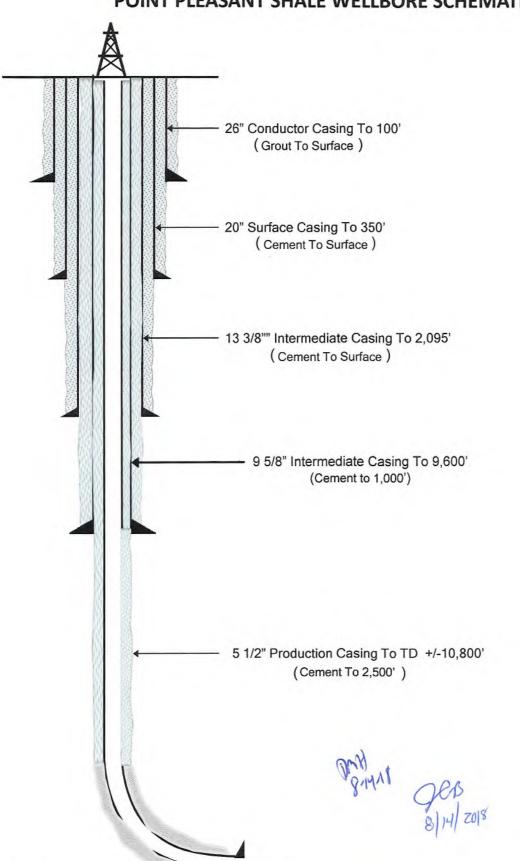
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### **Triad Hunter, LLC**



# Momentive 1 POINT PLEASANT SHALE WELLBORE SCHEMATIC\*



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#### ATTACHMENT: I-B

#### #19 Proposed Well Work:

#### Drill and complete a new horizontal Utica Shale Well.

- 1. Auger a 30" conductor hole to 30 feet; run 26" casing to T.D., cement / grout to surface with Class A cement.
- 2. AIR Drill a 24" surface hole to depth of 370 feet; run 20" casing to T.D. and cement to surface with Class A Cement.
- 3. AIR/SOAP Drill a 17 1/2" intermediate hole to a depth of 1,855 feet; run 13 3/8" casing to T.D. and cement to surface with Class A cement.
- 4. Fluid drill Drill a 12 ¼" intermediate hole to a depth of 8,845 feet; run 9 5/8" casing to T.D. and cement back to 1,000 feet with Class A cement. Stop at Marcellus and long formation at 5480'. Take sidewall cores, and continue to drill to TD.
- 5. Fluid Drill an 8 1/2" production hole to the projected total measured depth @ 10,800+- feet.
- Run quad combo open hole WL logs ( Gamma-Ray, Resistivity, Density, Neutron, sonic ).
   Plug and abandon well with cement.
- 7. Run 5.5" casing to TD of 9,916' and cement same.
- 8. Pressure test casing and perforate the Point Pleasant.
- 9. Perform an injection test on the Point Pleasant.
- 10. Record pressure for up to 30 days.
- 11. Pull production casing above Point Pleasant and set a plug.
- 12. Pressure test casing and perforate the Marcellus
- 13. Performa an injection test on the Marcellus.
- 14. Record pressure for up to 30 days.
- 15. Set plugs and shut-in well

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WV Department of Environment of Office of Oil and Gastion

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ATTACHMENT: II-B

#### #20 Fracturing/Stimulation Methods:

Upon the successful cementation of the 5  $\frac{1}{2}$ " production casing, completion of the well will be performed as follows:

- 1. Run a GR/CCL/Bond log from TD to surface.
- 2. Pressure test casing and perforate the Point Pleasant.
- 3. Perform a fracture injection test with a slick water using up to 100 bbls of water. Average treating pressure is expected to range between 6,000psi and 10,000psi and average treating rates are expected to range between 3 bbls and 10 bbls per minute. Upon completion of the stage, pressure will be recorded for up to 30 days.
- 4. Production casing will then be cut and pulled above the Point Pleasant.
- 5. A plug will be set above the Point Pleasant.
- 6. Pressure test casing and perforate the Marcellus.
- 7. Perform a fracture injection test with a slick water using up to 100 bbls of water. Average treating pressure is expected to range between 6,000psi and 10,000psi and average treating rates are expected to range between 3 bbls and 10 bbls per minute. Upon completion of the stage, pressure will be recorded for up to 30 days.
- 8. Upon completion, solid bridge plugs are set in the casing, above the Marcellus and just below the well head for safety purposes.
- 9. Well is shut-in.

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ATTACHMENT: III-B

#### **#23 Centralizer Placement:**

- (26") Conductor Casing No centralizers used.
- (20") Surface Casing Between two and four run based on setting depth of casing.
  - Estimate centralizer every 2 joints (estimate 4 centralizers to be ran)
- (13 3/8") 1st Intermediate Casing- Between six and ten run based on setting depth of casing.
  - Estimate centralizer every 5 joints (estimate 10 centralizers to be ran)
- (95/8") 2<sup>nd</sup> Intermediate Casing Between ten and twenty run based on setting depth of casing. Run Bow spring centralizers every other joint beginning on first joint for first 1,000', then every second joint to top of cement; then every third joint from there to surface.
  - Estimate (centralizer 1 per 1 for 1<sup>st</sup> 1000', then 1 per 2 to surface)
- (5 ½") Production Casing:
  - Beginning on joint #5 run one Solid Body Composite Spiral centralizer every third joint throughout lateral up to KOP (Top of Curve). Roughly 50-60 spiral centralizers run.

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# TRIAD HUNTER LLC. Subsidiary Of Blue Ridge Mountain Resources

125 Putnam Street Marietta, Ohio 45750

#### SITE & SAFETY PLAN

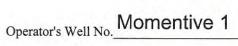
Momentive Tyler County West Virginia

Approved:			
West Virginia DEP	g Crop Bles	Date:	8-14-18
Triad Hunter LLC	Milyan	Date:	
		WWW.	-

# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

#### FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name_ Triad Hunter,	LLC	OP Code 494494833	
Watershed (HUC 10)_Little N	Musringum - Middle Island Creek	Quadrangle Bens Run	
Elevation 648'	County_Tyler	District_ Union	/
Will a pit be used? Yes	e than 5,000 bbls of water to complete the	ne proposed well work? Yes	No Dou
If so, please describe	e anticipated pit waste:		Faure
Will a synthetic line	r be used in the pit? Yes No	✓ If so, what ml.?	0 1941
Proposed Disposal N	Method For Treated Pit Wastes:		MAR
Ur Re Of	and Application Inderground Injection (UIC Permit Number Straight		8/14/2018
Will closed loop system be us	sed? If so, describe: Yes, cuttings fluids+gases are set	perated through a series of vessels. Cuttings are then solidified in debris	boxes and hauled to landfill.
		Air, freshwater, oil based, etc. Top Hole-Air [	
-If oil based, what ty	pe? Synthetic, petroleum, etc.Synthetic		
	ng medium? See Attachement I-A: Drilling A	dditives List	
	d? Leave in pit, landfill, removed offsit		
	n to solidify what medium will be used		
-Landfill or offsite n	ame/permit number?Wetzel County Landfi	II, 3WFU ID 12-10-43	
on August 1, 2005, by the Of provisions of the permit are law or regulation can lead to  I certify under pena application form and all att obtaining the information, I penalties for submitting false  Company Official Signature_ Company Official (Typed N.	fice of Oil and Gas of the West Virginizen enforceable by law. Violations of any enforcement action. Alty of law that I have personally example example the companion of the com	STATE ADA 2809 D Parke	on. I understand that the and/or other applicable ation submitted on this ediately responsible for
7			AUG 1 5 2018
Subscribed and sworn before	me this 10 day of Augu	, 20 18	
adam I	houn	Notary Public	WV Department of Environmental Protection
My commission expires /	Tay 28, 2022		



95-05/17/2019

	FF		0.7
Proposed Revegetation Treatment: Acres	Disturbed 5.5	Prevegetation p	ьн 6-7
Lime 2-5 Tons/a	cre or to correct to pH	6.0-7.0	
Fertilizer type			
Fertilizer amount 500	lbs	/acre	
Mulch 2	Tons/ac	ere	
	Seed	<u>Mixtures</u>	
Temporary			anent
Seed Type lbs/ac	ere	Seed Type	lbs/acre
Common Orchard Grass	30%	Same as temporar	У
Perennial Rye	35%		
Medium Red Clover	25%		
Common Timothy	10%		
Photocopied section of involved 7.5' topo	grapnic sneet.	1.	
Comments:			RECEIVED Office of Oil and G
Title: Oild Gas Inspector		Date: 8 14 7018	RECEIVED Office of Oil and G

#### INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE Chapter 22, Article 6A, Section 5(a)(5) IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that -

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or Number

Grantor, Lessor, etc.

Grantee, Lessee, etc.

Royalty

Book/Page

Please see attached sheets

#### Acknowledgement of Possible Permitting/Approval In Addition to the Office of Oil and Gas

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator: Triad Hunter, LLC

By:

Mike Horan

Its:

Manager Operations Conventional/Infrastructure

RECEIVED Office of Oil and Gas

Page 1 of

AUG 15 2018

Lease Number

359\_HBP

GE Silicones WV LLC(Current

Triad Energy

OH 43215

334/867

12.5%

10-7-1, 10-3-1

12/21/2001

Royalty

Parcel(s) in Unit

Lease Date

Number of

Owner)

# **Crompton Corporation** Lessor Form WW6A1 - List of Lessors Lessee Momentive 1UH BROAD ST , Lessor's Address 180 E **Lease Recording** Data

Tax Magnetice of Oil and Gas

	95-62549	
Return To:  When the second of	05/17/20 TYLER COUNTY COMMISSION	119
RO. Box 430 Reno. Onio 45773	LEASE Clark 04 Date : 01/10/2002 Time : 12:31	
THIS LEASE, made and entered into this 2151 day of DECEMBER, 20 01 by and between:	Inst # : 12846 Book : 334- Page : 867-	
Crompton Corporation	Received: 9.00	
3500 South State Route 2, Friendly, West Virginia 26146	Tax ; (4)	
called the Lessor, and TRIAD ENERGY CORP. OF WVA, INC., P.O. Box 430, Reno, Ohio 45773-0430 hereinafter called the Lessee, W	WITNESSETH:	

1. That the Lessor, for and in consideration of One Doilar (\$1.00) and other valuable consideration in hand paid by Lessee, the receipt of which is hereby acknowledged, and the covenants and agreements hereinafter contained, does hereby lease and let exclusively unto the Lessee, for the purpose of exploring by geophysical and other methods, drilling, reworking, operating for, producing and removing oil and gas and all the constituents thereof, and of injecting air, gas, and other substances from any source and into any subsurface strata, other than potable water strata and workable coal strata, (including but not limited to the ray wells on the leasabled property and to otherwise conduct all such secondary or tertiary operations as may be required in the opinion of the Lessee), and removing gas of any kind, including gas lying thereunder, by pumping through wells or other means, into and from any sands, strata or formations lying thereunder, regardless of the source of such oil and gas or the location of the wells or other means of so doing, and of placing tanks, equipment, lease roads and structures thereon to procure and operate for the said products, and of laying pipelines thereon to transport the same from the leased premises on, over and across the leased premises and for the right to enter into and upon the premises for the aforesaid purposes.

<ol> <li>This lease in the District of the interest own.</li> </ol>	covers the premises situated in Map(s) 7&3 , Parcel(s) .see.below on the waters of Sugarcamp Run  [Union , County of Tyler , State of West Virginia, containing 1160 acres, more or less, being all ed by Lessor in said parcel(s) or adjoining said parcel(s), bounded substantially as follows:
NORTH	
EAST	See Exhibit "B" attached hereto and made a part hereof, being all or
SOUTH WEST	parts of Map/Parcels: 7-1, 7-1.1, 7-1.2, 7-4, and 3-1.
This lease	shall continue in force and the rights counted becoming to avoid the state of the s

- 3. This lease shall continue in force and the rights granted hereunder be quietly enjoyed by the Lessec for a term of three years and so much longer thereafter as oil or gas or their constituents are produced on the premises in paying quantities, in the judgment of the Lessec or as the premises shall be operated by the Lessec in the search for oil and gas, or as long as gas is being injected, stored, or held in storage in and under the premises and other lands in the vicinity thereof or withdrawn therefrom, or the premises is used for the protection of stored gas in subsurface strata, alone or in conjunction with other lands.
- 4. In consideration of the premises the Lessee covenants and agrees: (A) To deliver to the credit of the Lessor in tanks or pipelines, as royalty, free of cost, one-eighth (1/8) part of all oil produced and saved from the premises, or at Lessee's option to pay to Lessor the market price for such one-eighth (1/8) royalty oil at the published rate for oil of like grade and gravity prevailing on the date such oil is run into tanks or pipelines. In either case the Lessor to pay his royalty share of any expense, if any, for treating the oil from any well to make it marketable as crude; (B) To pay to the Lessor, as royalty, for the gas, including casinghead gas and other gaseous substances produced from each well drilled thereon, and marketed and used off the premises, one-eighth (1/8) of the price paid to Lessee at the well of such gas, less Lessor's proportionate share of any charges for gathering, transportation, compression or line less. Payment of royalty for gas marketed during any calendar month to be on or about the 30th day after

receipt of such funds by Lessee. (C) Lessee to pay \$ N/A to Lessor each three (3) months, in advance, for each and every well used or classified as a gas storage well or observation well for storage purposes by the Lessee, payable within thirty (30) days after commencing to use the well and thereafter until Lessee shall cease using it for such purpose. Lessee to deduct from payments in (A), (B) and (C) above, Lessor's prorated share of severance tax imposed by the government so taxing.

- 5. If operations for a well are not commenced on the premises within six months from the date of this lease, this lease shall terminate as to both parties unless
- 6. The Lessor may, at Lessor's sole risk and cost, subject to Lessee's rules and regulations, lay a pipeline to any one gas well on the premises, and take gas produced from said well for use on the leased premises, at Lessor's own risk, subject to the use and the right of abandonment of the well by Lessoe, and subject to any curtailments or shut-in by any purchaser of the gas. The first one hundred fifty thousand oubic feet taken in each year shall be paid for at theprice based upon the purchase contract between Lessor and Lessee. Lessor to lay and maintain the pipeline to any one gas well on the leased premises and furnish regulators and other necessary equipment at Lessor's expense. This privilege is upon the condition precedent that the Lessor shall subscribe to and be bound by the reasonable rules and regulations of the Lessee relating to the use of free gas, and Lessor shall maintain the said pipeline, regulators and equipment in good repair and free of all gas leaks and operate the same so as not to cause waste or unnecessary leaks of gas. If the Lessor shall take excess gas as aforesaid in any year and fail to pay for the same, the Lessee may deduct payment for such excess gas from any rentals or royalties accruing to the Lessor hereunder. Lessor acknowledges that he has been advised as to the risks inherent in the taking of gas in this manner, and Lessor agrees to assume all such risks and to hold Lessee and the well operator and all parties in interest in any well on the leaschold premises harmless from any claims of any nature whatsoever which may rise by the usage of gas from any such well by Lessor. Lessor further agrees that upon the sale or transfer of the leaschold premises wherein someone other than the Lessor is entitled to take the gas in the same form, the gas must be taken as stated in the within agreement. In the absence of such an agreement, free gas under this provision shall terminate. The within right of free gas is not assignable without the consent of the Lessee, which consent shall n
- 7. If said Lesser owns a less interest in the oil and gas in and under the above described premises than the undivided fee simple estate therein, then the royalties and rentals herein provided shall be paid the Lessor only in the proportion which his interest bears to the whole and undivided fee, and further provided that this Agreement shall remain in force for a primary term during which operations may be delayed by the payment of delay rentals pursuant to paragraph 5 hereof, beginning on the date of execution hereof and ending at the end of a period which begins on the date upon which the Lessee has, by the execution of appropriate instruments, perfected merchantable title to the entire interest for oil and gas. Notwithstanding the foregoing, the total duration of the primary term during which operations may be delayed by the payment of delay centals pursuant to paragraph 5 hereof shall not exceed three years.
- 8. Lessee is hereby granted the right at any time to pool/unitize the leased premises or any portion thereof, as to any or all strata or stratum, with any other lands for the production of oil and or gas and or the constituents of either. No such unit shall embrace more than 160 acres; provided that if any governmental regulations shall prescribe a spacing pattern for the development of the field, then any such unit may embrace as as much additional acreage as may be so prescribed. Operations upon and production from the unit shall be treated as if such operations were upon or such production were from the leased premises whether or not the well or wells are located thereon, provided, however, that the Lessee shall pay Lessor, in lieu of other royalties thereon, only such proportion of the royalties stipulated in paragraph 4 as the amount of his acreage placed in the unit, or his royalty interest therein on an acreage basis, bears to the total acreage in the unit, and provided further that Lessor may take free gas as provided in paragraph 6 hereof from the unit well only if said well is located on lands actually owned by Lessor. The Lessee shall effect such consolidation by a declaration of consolidation with the same formality as this oil and gas lease setting forth the leases or portions thereof consolidated, the royalty distribution and recording the same in the Recorder's office at the courthouse in the county in which the leased premises are located and by mailing a copy thereof to the Lessor at the address hereinabove set forth unless the Lessee is furnished with another address. If the well on said development unit shall thereafter be shut in, the well rental for shut-in royalty hereinbefore provided for such use shall be payable to the owners of the parcels of land comprising said unit in the proportion that the acreage consolidated. Lessee shall have the right to amend, alter or correct any such consolidation at any time in the same manner as herein provided, following Lessor's consent, which shall not
- 9. Notwithstanding any other actual or constructive knowledge of the record owner of this lease, no change in the ownership of land or assignment of royalties or other moneys, or any part thereof, shall be binding on the then record owner of this lease until 45 days after the record owner has received, by certified mail, written notice of such change, and the originals or certified copies of those instruments that have been properly filed for record and that shall be necessary in the opinion of record owner to establish the validity of such change of ownership of said land, royalties or other moneys, or any part thereof, bowever accomplished, shall increase the obligations or diminish the rights of Lessee, including, but not limited to, rights and obligations relating to the location and drilling of wells and the measurement of production. Upon assignment by lessee, its successors or assigns, the assignor shall be released from, and the assignce shall assume, the responsibility to fulfill the conditions and to perform the covenants of this lease, expressed or implied, with regard to the interest assigned. Breach of any overnant or failure to fulfill any coordition by an owner of any part of the leasehold interest created by this lease shall not defeat or affect the rights of the owner(s) of any other part.
- 10. Lessor hereby warrants and agrees to defend the title to the land herein described and agrees that Lessee, at its option, may pay and discharge any taxes, mortgages, or other liens existing, levied, or assessed on or against the said lands and production and, in the event it exercises such option, it shall be subrogated to the rights of any holder or holders thereof and may reimburse itself from any payments due hereunder.
- 11. Subject to paragraph 14 of Exhibit "A", Lessee shall have the right to use free of cost, gas, cil and water found on said lands for its operations thereon, except water from the wells of Lessor. When requested by Lessor, Lessee shall bury pipelines used in its operations below plow depth and clearly mark such pipelines' location, and shall pay damages caused by its operations to growing crops and to fences on said land. Any damages if not mutually agreed upon, to be ascertained and determined by three disinterested persons, one thereof to be appointed by Lessor, one appointed by Lessoe and the third by the two so appointed, and the award of such three persons shall be final and conclusive and binding on all parties. Each party shall pay the cost of their appraiser and shall share the cost of the third appraiser. Arhitration shall be mandatory. No well shall be drilled nearer than 200 feet to the house(s) or barn(s) now on said premises without the written consent of Lessor. Lessee shall have the right at any time during or after the expiration of this lease to remove all machinery, fixtures, and any structures or improvements on said land by Lessee, including the right to draw and remove all casing. The Lessee shall, upon removal of all debris, return the land as near to its original state as possible.



- 12. If during the last ninety days of the primary term hereof, or at any time after the expiration of the primary term, production of oil and gas and other hydrocarbons from the premises, or lands pooled therewith, should permanently cease for any reason, or if during or after such ninety day period and prior to discovery of oil or gas on the premises, or lands pooled therewith, Lessee should complete a dry hole thereon, this lease shall not terminate if Lessee commences or resumes additional operations on the premises or lands pooled therewith, within ninety days after production ceased or the well was completed as a dry hole, whichever is applicable. If, at the expiration of the primary term, oil or gas or other hydrocarbons are not being produced from the premises, or lands pooled therewith, but Lessee is then engaged days, and if they result in production, so long thereafter as oil or gas or other hydrocarbons are prosecuted (whether on the same or different wells) with no cessation of more than ninety "operations" as used in this lease shall include, but not be limited to, seismic or other hydrocarbons are production activities, permitting, staking, scraping, drilling, testing, completing, plugging back or repairing of a well (and all work preparatory, incident to any such operation) in search for or in an endeavor to obtain, restore, maintain, or to increase production of oil, gas or other hydrocarbons, or any of them. Notwithstanding the above provisions, Lessor and Lessee recognize that production of oil, gas or other hydrocarbons may be interrupted periodically due to marketing patterns, operation considerations, well maintenance, regulatory compliance, reworking and other activities. This temporary cessation will not terminate this lease so long as Lessee, within a reasonable period of time, takes the appropriate action under the circumstances to resume such production.
- 13. Lessee may at any time surrender all or any part of this lease by delivery or mailing a release thereof to Lessor, or by placing a release of record in the proper county. After a partial surrender, the rental and shut in payments specified herein shall be proportionately reduced on an acreage basis.
- 14. If Lessee is prevented from, or delayed in commencing, continuing, or resuming operations, or eomplying with its express or implied obligations hereunder, by circumstances not reasonably within Lessee's control, this lease shall not terminate and Lessee shall not be liable in damages so long as said circumstances continue (the "period of suspension"). These circumstances include, but are not limited to the following: Conflict with federal, state or local laws, rules, regulations and executive orders; acts of God; strikes; lockouts; orders, wars; improper refusal or undue delay by any governmental agency in issuing a necessary approval, license or permit applied for by Lessee; equipment failures, inability to obtain materials in the open market or to transport said materials. If the period of suspension commences more than 90 days prior to the end of the primary term of this lease, then that period of suspension shall be added to the primary term. If the period of suspension commences less than 90 days prior to the end of the primary term or at any time after the primary term, then this lease shall not terminate if Lessee shall commence or resume operations within 90 days after the end of the period of suspension.
- 15. This lease shall be subject to governmental rules or regulations, and this lease shall not be terminated, in whole or in part, nor shall Lessee be held liable in damages, for failure to comply herewith, if compliance is prevented by, or such failure is the result of, any such law, rule or regulation. Lessor grants Lessee the authority to compromise or settle any dispute with governmental agencies relating to this lease or production therefrom.
- 16. In the event Lessor considers that Lessoe has not complied with any or all its obligations hereunder, either express and implied, including but not limited to, the payment of land rentals or royalties, Lessor shall notify Lessee in writing, by certified mail, return receipt requested, setting out specifically in what respects Lessee has breached this contract. Lessee shall then have sixty days after receipt of said notice within which to meet or commence to meet all or any part of the breaches alleged by Lessor. The service of said notice is shall be precedent to the bringing of any action by Lessor on said less for any cause, and no such action shall be brought until the lapse of sixty days after service of such notice on Lessee. Should Lessee not meet or commence to meet all of the breaches following the sixty-day notice, Lessor shall have the option to terminate the lease with thirty-day notice. Neither the service of said notice nor the doing of any act by Lessee aimed to meet all or any of the alleged breaches shall be deemed an admission or presumption that Lessee has failed to perform all its obligations hereunder.
- 17. In the event all wells on the leased premises, or where applicable, all wells on property pooled with the leased premises, are shut-in for any reason for a continuous period of six months, including, without limitation, inability to obtain a satisfactory market for production or failure of transportation for such production, then on or before the end of the calendar year during which such six month period is concluded and each anniversary thereafter if the wells are continuously shut-in, Lessee shall pay Lesseor a shut-in payment of Five Dollars per acre per year then covered by this lease, prorated for the period such wells are shut-in, and this lease shall continue in full force and effect as if oil and or gas and or their constituents were being produced from such wells. In the event shut-in royalties are paid pursuant to this lease, such payments shall be deemed to be advanced royalties and shall be recoupted by Lessee out of any royalties later due Lessor. For the purpose of calculating shut-in royalties which are paid on a per acre basis, the number of lease acres described in paragraph 2 shall be deemed correct, whether actually more or less.
- 18. The consideration, land rentals or royalties paid and to be paid, as herein provided, are and will be accepted by the Lessor as adequate and full consideration for all the rights herein granted to the Lessee, and the further right of drilling or not drilling on the leased premises, whether to offset producing wells on adjacent or adjoining lands or otherwise.
- 19. This written lease and all its terms, conditions and stipulations shall extend to and be binding on all heirs, successors and assigns of Lessor or Lessee. This lease contains all of the agreements and understandings of the Lessor and the Lessee respecting the subject matter hereof and no implied covenants or obligations, or verbal representations or promises, have been made or relied upon by Lessor or Lessee supplementing or modifying this lease or as an inducement thereto.
- 20. In consideration of the acceptance of this lease by the Lessee, the Lesser agrees for himself and his heirs, successors and assigns, that no other lease for the minerals covered by this lease shall be granted by the Lesser during the term of this lease or any extension or renewal thereof granted to the Lessee herein.
- 21. Lessor further agrees to sign such additional documents as may be reasonably requested by Lessee to perfect Lessee's title to the oil and gas leased herein and such other documents relating to the sale of production as may be required by Lessee or others.
- 22. It is agreed between Lessor and Lessee that Lessee does not acquire any rights or obligations to any well drilled prior to the date of this lease on the premises described herein, unless specifically noted hereunder.

See Exhibit "A" attached hereto and made a part hereof.

Witness my hand and Notary seal, the day and year aforesaid.

OSi lease 3.ppp

It is the intent of both parties to lease all available acreage of Lessor's herein. The total number of acres owned by Lessor is 1,280.64 acres, more or less, but excludes the rights to development on three parcels, consisting of a 30 acre parcel, a 45 acre parcel, and another 45 acre parcel, totalling 120 acres excluded, as depicted on Exhibit "B", granting herein, a total of 1,160 acres, more or less.

IN WITNESS WHEREOF the Lessors have hereunto set their hands. Social Security or Tax I. D. JG-1148490 IN WITNESS WHEREOF the Lessee has set its hand and seal. Signed and acknowledged in the presence of: Signature Tax I.D. 34-1549844 Weaver President On this 21st day of December, 2001, before me a Notary Public in and for County and State personally appeared the said Kean A. Weaver, the President of Triad STATE OF OHIO SS: Energy Corp. of WVa., Inc. who acknowledged that he did sign and seal the County of Washington foregoing instrument and that the same was his free act and deed and the free act and deed of said Triad Energy Corp. of Wva., Inc. Witness my hand and Notary Seal the day and year aforesaid. EDGAR J. RAYMOND 🎞 Notary Public NOTARY PUBLIC. STATE OF OHIO MY COMMISSION EXPIRES 2/1/2002 day of DECRUBIC County of WEA Before me a Notary Public in and for said County and State personally appeared the said 人、んしにた did sign and seal the foregoing instrument and that it is \_\_\_\_ free act and deed who acknowledged that and the free act and deed of said Crompton Corporation. Garage Literary

Notary Public -

This instrument prepared by: Triad Energy Corp. of WVA, Inc., P.O. Box 430, Reno. Ohio 45773-0430



#### Exhibit "A"

This Exhibit "A" to the oil and gas lease dated the 21<sup>87</sup> day of DECEMBER, 2001, by and between Crompton Corporation as Lessor, and Triad Energy Corp. of WVa., Inc. as Lessee is as follows:

Notwithstanding the terms and conditions set forth in paragraphs 1 through 22 of said lease, where the terms of this Exhibit "A" conflict with the preprinted terms of the lease, the following terms and conditions shall prevail.

- 1.) The location, size, maintenance, and restoration of any well, access road, tank battery site, pipeline, or other equipment or facilities shall be agreed upon by both parties, and said agreement shall not be unreasonably withheld. The approval of all surface use shall be acknowledged by the signature of both parties on a plat furnished by Lessee. Notwithstanding any agreement of the parties as to the location of any access road, tank battery site, pipeline or other equipment or facilities (other than any well), in the event that Lessor shall request the relocation thereof, Lessee shall undertake such relocation as promptly as practicable to another site agreed upon in the manner provided in the first two sentences of this Exhibit "A", Paragraph 1; provided that any such relocation shall be at Lessor's sole expense.
- 2.) Lessor shall have the right to review any design and materials used by Lessee on said premises in the construction and installation of pipelines and other equipment or facilities appurtenant thereto to produce any well or wells, and in the event Lessor requests a design or material for said installation or construction that is above the normal oil and gas industry standards, Lessor agrees to pay for any extra expense incurred by Lessee to meet Lessor's standards.
- 3.) In the event Lessor requests that Lessee odorizes gas at each wellhead, and/or along its pipeline system on said premises, Lessor agrees to pay for the actual odorizing, and related facilities necessary to perform said function.
- 4.) All access roads, other than those originating from Lessor's access roads, shall have a permanent gate installed by Lessee, with a chain, on which Lessor shall place its own lock, along with Lessee's lock on said chain, which shall be kept gated and locked by both parties when not in use.
- 5.) Any substance injected into any strata shall be only material pertaining to, and commonly used by the oil and gas industry for recovery of oil and natural gas.
- 6.) The completion of a well shall be defined as the placing of the well into production to a paying customer.
- 7.) Notwithstanding the terms of Paragraphs 3 and 5 of said lease, Lessee agrees to complete one well every six months to extend its drilling rights for another six month period, for a total of thirty six months until a total of six wells have been drilled and completed, and Lessee shall have earned all rights to the leasehold estate from the surface down to six thousand (6,000') feet. In the event any one of the six wells completed is drilled and completed below six thousand (6,000°) feet, Lessee shall have earned all its rights to the entire leasehold estate, with no depth restrictions imposed herein. If more than one well is drilled within any given six month period, Lessee shall have earned another six month period extension, multiplied by the number of wells drilled within said period. In the event of completion of a well below six thousand (6,000') feet within thirty-six months of the date of this lease. Lessee shall have a total of sixty months from the date of this lease within which to drill the six wells contemplated by this section. Lessor may grant any additional extensions it deems appropriate, beyond those stated herein. In the event Lessee fails to complete the drilling requirements within the time constraints stated above, Lessee shall earn 745 feet in each direction from the center of the well, down to 6,000 feet for any well drilled shallower than 6,000 feet, and shall earn 1,490 feet in each direction from the center of the well, with no depth restrictions for any well drilled below 6,000 feet, and all remaining acreage shall be surrendered.



- 8.) During Lessee's possession of said lease, any gas storage rights that may be granted by Lessor under said premises may be granted to Lessee only, and if said rights are granted, they shall be granted under a separately negotiated document.
- 9.) No assignment without prior written consent of Lessor, unless said assignment is to a joint venture partner and Triad Energy Corp. of Wva., Inc. remains the operator of any production developed within said assignment, nor is written consent required to finance the development of said premises for oil and gas. In any event, Triad Energy Corp. of WVa., Inc. cannot be removed as operator of any and all wells hereunder, without the prior written consent of Lessor. Said written consent shall not be unreasonably withheld. Withholding written consent shall not be deemed unreasonable if, based on Lessor's opinion that the proposed assignee does not have acceptable financial resources or expertise to develop and maintain the wells and natural gas supply contemplated herein.
- 10.) A separate pipeline right of way agreement shall be obtained for any pipeline not servicing well(s) on Lessor's property.
- 11.) In lieu of actual payment of royalties for oil and/or gas, upon notification in writing to Lessee, Lessor has the option to take said product(s) in kind, its one-eighth (1/8<sup>th</sup>) share delivered to the credit of the Lessor in tanks or pipelines.
- 12.) In the event Lessor purchases gas from Lessee, the Lessee shall credit Lessor the cost of the free gas allotted per year, at the end of each calendar year, at the rate of the average cost of gas for the entire calendar year, as determined under the gas purchase agreement between the two parties.
- 13.) The right to pool/unitize said lease shall be agreed upon with Lessor, which shall not be unreasonably withheld.
- 14.) The Lessee shall not use water from said premises without the consent of Lessor.
- 15.) The Lessor shall be granted one copy of all seismic data generated by the Lessee, covering only Lessor's premises hereunder. Said data shall be considered confidential information, and shall be granted when requested by Lessor, only after obtaining from Lessor a confidentiality agreement of non-disclosure of data, to be effective for five years from the date of disclosure. If Lessor grants the seismic data to any other party, said party shall be required to sign a confidentiality agreement with the same terms and conditions as Lessor's agreement, prior to the release of data by Lessor, and such third party confidentiality agreement shall expire on the same date as Lessor's original confidentiality agreement.
- 16.) All health and safety rules established by Lessor for its employees shall apply to Lessee, its employees, agents, representatives, and assigns. Lessor shall provide said rules to Lessee prior to operations under said lease.
- 17.) Lessee shall take no action pursuant to this lease, which will result in loss of lateral or subjacent support of Lessor's surface properties and facilities, nor which will result in subsidence of Lessor's surface properties or facilities. Lessee hereby agrees to indemnify and hold harmless Lessor and Lessor's assigns, or successors in interest from any loss, costs, or damages incurred as a result of surface subsidence caused by Lessee's operations hereunder.
- 18.) In case either party to this Agreement fails to perform any obligation hereunder assumed by it, and such failure is due to lack of an acceptable market in the judgment of the Lessee, acts of God, or a public enemy, strikes, riots, injunctions or other interference through legal proceedings, breakage (other than breakage caused by negligence or Lessor's requirements for standards outside what is commonly used in the oil and gas industry, or failure to comply with proper maintenance standards), or accident to machinery or lines of pipe, washouts, earthquakes, storms, freezing of lines or wells (other than freezing caused by negligence or Lessor's requirements for standards outside what is commonly used in the oil and gas industry, or failure to comply with proper

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maintenance standards), or the compliance with any statute, either Federal or State, or with any order of the Federal Government or any branch thereof, or of the Government of the State of West Virginia, or any local laws pertaining thereto, or to any cause not due to the fault of such party, or caused by the necessity for making repairs or alterations in machinery or lines of pipe, such failure shall not be deemed to be a violation by such party of its obligations hereunder, but such party shall use due diligence to again put itself in position to carry out all of the obligations which by the terms hereof it has assumed. If within ninety (90) days from the ending of the event of force majeure, operations have not fully resumed at a level consistent with the operations immediately prior to the event of force majeure, Lessor shall have the option to take the steps as outlined in paragraph 16 of said lease to terminate the lease agreement.

- 19.) In Paragraph 12 of said lease, it is understood that if Lessee's efforts to reestablish production are successful and results in production, the lease shall remain in force as long thereafter as oil or gas or other hydrocarbons are, in the judgement of the Lessee, produced in paying quantities from the premises or lands pooled therewith.
- 20.) Notwithstanding the first sentence of Paragraph 10 of the lease, in the event that Lessor shall, at any time during the term hereof, or any extension or renewal thereof, convey title or any other rights to the land herein described (provided that any such conveyance would not include the oil and gas rights leased to Lessee in accordance with Paragraph 1 of the lease), Lessor shall have no obligation to defend title to the conveyance, once conveyance of title or any other rights to the land herein have been completed.
- 21.) The second sentence of Paragraph 15 of said lease shall be changed to read as follows: It is agreed that both Lessor and Lessee individually have full authority to compromise or settle any dispute with all governmental agencies relating to its own interests pertaining to this lease or production therefrom, provided that such compromise or settlement does not adversely affect any interest or right of the other party, and each party herein shall be obligated to pay any cost to reach compliance associated with its individual interests herein.
- 22.) A. Petition. If a petition is filed by or against Lessee for relief under Title 11 of the United States Code, as amended (the "Bankruptcy Code"), and Lessee (including for purposes of this Exhibit "A", Paragraph 22, Lessee's successor in bankruptcy, whether a trustee, Lessee as debtor-in-possession or other responsible person) assumes, or assumes and proposes to assign this lease pursuant to the provisions of the Bankruptcy Code to any person or entity that has made or accepted a bona fide offer to accept an assignment of this lease, such assumption or assumption and assignment may only be made if all of the terms and conditions of this Exhibit "A", Paragraph 22 are satisfied.
- Conditions to Assumption (i) No election by Lessee to assume this Lease shall be effective unless each of the following conditions, which Lessee and Lessor acknowledge are commercially reasonable, have been satisfied and Lessor has acknowledged in writing that (a) Lessee has cured, or has provided to Lessor adequate assurance (as defined below) that within ten (10) days from the date of such assumption Lessee will cure all monetary defaults under this lease; (b) Lessee has compensated, or has provided to Lessor adequate assurance that within ten (10) days from the date of assumption Lessor will be compensated for any pecuniary loss incurred by Lessor arising from the default of Lessee as recited in Lessor's written statement of pecuniary loss sent to the Lessee; (c) Lessee has provided to Lessor adequate assurance of the future performance (as defined below) of each of Lessee's obligations under this lease and under that certain Gas Purchase Contract ("Gas Contract") dated the date of this lease between Lessor and Lessee (unless the Gas Contract shall have been theretofore terminated in accordance with the provisions of the Gas Contract); and (d) Lessee shall have provided Lessor at least forty-five (45) days' prior written notice of any proceeding concerning the assumption or assumption and assignment of this lease. (ii) For purposes of this Exhibit "A", Paragraph 22, Lessor and Lessee acknowledge that: (a) "adequate assurance" shall mean that the Bankruptcy Court shall have entered an Order segregating sufficient cash funds to be payable to Lessor and/or Lessee shall have granted to Lessor a valid and perfected first lien and security interest and/or mortgage encumbering property

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of Lessee, acceptable to Lessor as to value and kind, to secure Lessee's obligation to Lessor to cure all monetary and/or non-monetary defaults under this lease within the periods set forth above; and (b) "adequate assurance of future performance" shall mean that Lessee had and will continue to have sufficient unencumbered assets after the payment of all secured obligations and administrative expenses to fulfill the obligations of Lessee under this lease and under the Gas Contract (unless the Gas Contract shall have been theretofore terminated in accordance with the provisions of the Gas Contract), and to actively conduct and promote the operations contemplated by this lease and by the Gas Contract (unless the Gas Contract shall have been theretofore terminated in accordance with the provisions of the Gas Contract).

Conditions to Assignment. In addition to satisfying the terms and conditions of Subparagraph B of this Exhibit "A", Paragraph 22, Lessee shall give notice to Lessor of any proposed assignment of this lease setting forth (i) the name and address of the proposed assignee and (ii) all of the terms and conditions of the proposed assignment. Lessee shall also deliver to Lessor a statement confirming that the assignee will continue to operate under the lease and under the Gas Contract (unless the Gas Contract shall have been theretofore terminated in accordance with the provisions of the Gas Contract) in accordance with terms and conditions of this lease and of the Gas Contract (unless the Gas Contract shall have been theretofore terminated in accordance with the provisions of the Gas Contract). Lessor and Lessee acknowledge that Lessor's assets will be substantially impaired if the trustee in bankruptcy or any assignee of this lease fails to observe any of the terms and conditions of this Lease or of the Gas Contract (unless the Gas Contract shall have been theretofore terminated in accordance with the provisions of the Gas Contract). Adequate assurance of future performance of this Lease and of the Gas Contract (unless the Gas Contract shall have been theretofore terminated in accordance with the provisions of the Gas Contract) shall be furnished by the proposed assignee not later than twenty (20) days after the Lessee has made or received an offer for such assignment, but in no event later than ten (10) days prior to the date on which Lessee applies to a court of competent jurisdiction for authority and approval to effect the proposed assignment. The description of the adequate assurance of future performance of the proposed assignee in such notice shall include such financial and other information as is necessary to demonstrate that the financial condition and operating performance and oil and gas exploration, development and production experience of the assignee and its guarantors, if any, is similar to the financial condition and operating performance and oil and gas exploration, development and production experience of Lessee as of the time that Lessee first became the lessee under this lease and shall be satisfactory to Lessor in all respects. Lessor shall have the prior right and option, to be exercised by notice to Lessee given at any time prior to the date on which the court order authorizing such assignment becomes final and non-appealable, to accept an assignment of this lease upon the same terms and conditions, and for the same consideration, if any, as the proposed assignee. Any person or entity to whom or to which this lease is assigned pursuant to the provisions of the Bankruptcy Code shall be deemed, without further act or documentation, to have assumed all of Lessee's obligations arising under this lease on and after the date of such assignment. Any such assignee shall, upon demand, execute and deliver to Lessor an instrument confirming such assumption. No provision of this lease shall be deemed a waiver of Lessor's rights or remedies under the Bankruptcy Code to oppose any assumption and/or assignment of this lease, to require timely performance of Lessee's obligations under this lease or to regain possession of the oil, gas and other rights subject to this lease if this lease has not been assumed or rejected within sixty (60) days after the date of the Bankruptcy Court's order for relief or within such additional time as a court of competent jurisdiction may have fixed. Notwithstanding anything in this lease to the contrary, all amounts payable by Lessee to or for the benefit of Lessor under this lease, whether or not expressly denominated as such, shall constitute "rent" for the purposes of Section 502(b)(6) of the Bankruptcy Code.

23.) (a) Triad agrees to defend, indemnify and hold harmless Crompton and its officers, directors, employees and agents from and against any and all claims, costs, expenses, judgments and awards (including reasonable attorneys' fees) (collectively, "Damages") incurred by Crompton and/or such officers, directors, employees or agents in any way resulting from, arising out of or related to (i) any activities carried on or conducted by or on behalf of Triad at, above, on or under the Property, whether alleged to be in

95-6254*G* 05/17/2019

connection with injury to persons or property, injury or potential injury to the environment or otherwise, (ii) noncompliance by Triad with any laws, ordinances or governmental rules or regulations of any federal, state or local governmental authority (including but not limited to environmental authorities) applicable to Triad's production of oil and/or gas or any other activities carried on or conducted by or on behalf of Triad at, above, on or under the Property, (iii) breach by Triad of any of its obligations under this Lease, or (iv) the negligence or willful misconduct of Triad; provided, however, that Triad shall not be obligated to indemnify Crompton pursuant to this subsection (a) if and to the extent that any Damages are the result of failure of Crompton's willful misconduct or gross negligence.

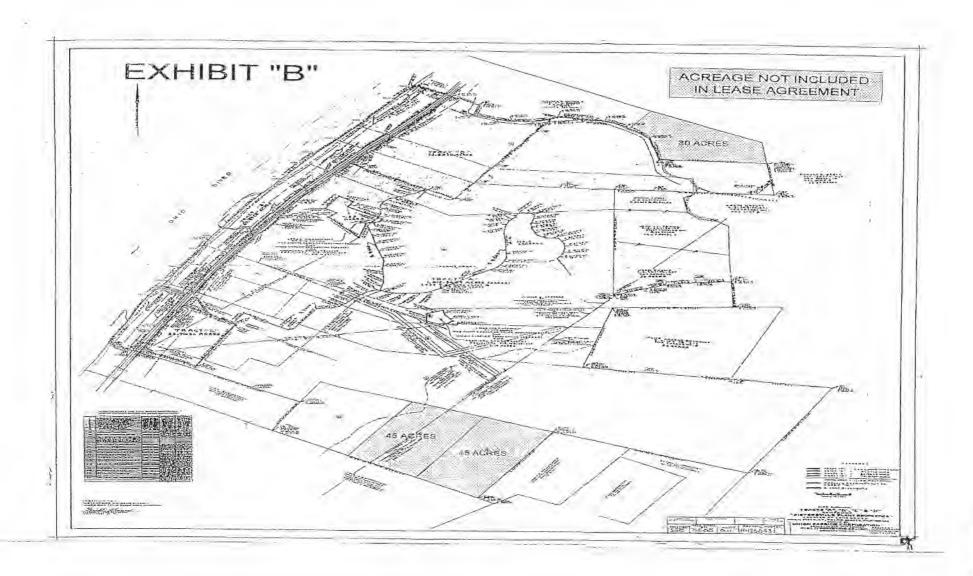
- (b) Crompton agrees to defend, indemnify and hold harmless Triad and its officers, directors, employees and agents from and against any and all Damages incurred by Triad and/or such officers, directors, employees or agents in any way resulting from, arising out of or related to (i) breach by Crompton of any of its obligations under this Lease, or (ii) the negligence or willful misconduct of Crompton; provided, however, that Crompton shall not be obligated to indemnify Triad pursuant to this subsection (b) if and to the extent that any Damages are the result of failure of Triad's willful misconduct or gross negligence.
- (c) The obligations of indemnification set forth in the foregoing subsections (a) and (b) shall survive the expiration or any termination of this Lease.
- 24.) Lessee shall maintain Statutory Workmen's Compensation Insurance and shall purchase and maintain Employer's General Liability Insurance in the amounts as specified below. Lessee shall furnish copies of such insurance certificates to Lessor prior to commencement of any work at the leased premises. Lessee shall name Lessor as an additional insured by endorsement to its policies with respect to General Liability only. Lessor must receive written notice at the address listed at least 30 days prior to any cancellation or non-renewal or modification of the insurance policies referenced.

Employer's Liability

\$100,000 each accident and disease \$500,000 Policy Limit

Contractor's Comprehensive General Liability, including Contractual Liability and Completed Operations. If Subcontractors are employed, Contractor's Protective Liability must be included.

Combined Bodily Injury and Property Damage \$1,000,000 each person \$1,000,000 each occurrence



95-62549

# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE CERTIFICATION

Date of Notic	e Certification;	API	I No. 47-	
			erator's Well No. 1	
		We	Il Pad Name: Moment	ive
Notice has b	een given:			
	e provisions in West Virginia Code	§ 22-6A, the Operator has provided	d the required parties v	with the Notice Forms listed
	tract of land as follows:		The lead of the	
State:	West Virginia		ting: 1521319.70'	
County:	Tyler	Public Road Access:		
District: Quadrangle:	Bens Run	Generally used farm i		
Watershed:	Little Musringum -Middle Island	Generally used farm i	name.	
prescribed by it has provide information re of giving the requirements Virginia Code of this article	West Virginia Code § 22-6A-7(b), the secretary, shall be verified and set the owners of the surface descriequired by subsections (b) and (c), surface owner notice of entry to so of subsection (b), section sixteen (e § 22-6A-11(b), the applicant shall have been completed by the applicant West Virginia Code § 22-6A, the O	shall contain the following information bed in subdivisions (1), (2) and (section sixteen of this article; (ii) the arrivey pursuant to subsection (a), so of this article were waived in writtender proof of and certify to the sent.	ation: (14) A certificati 4), subsection (b), set at the requirement was section ten of this arti- ting by the surface ov- ecretary that the notice	on from the operator that (i) ction ten of this article, the deemed satisfied as a resul- cle six-a; or (iii) the notice wher; and Pursuant to West
	erator has properly served the require ECK ALL THAT APPLY	ed parties with the following:		OOG OFFICE USE ONLY
□ 1. NO	TICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIRED SEISMIC ACTIVITY WAS CO		RECEIVED/ NOT REQUIRED
■ 2, NO	TICE OF ENTRY FOR PLAT SUR	VEY or NO PLAT SURVEY	WAS CONDUCTED	RECEIVED
☐ 3. NO	TICE OF INTENT TO DRILL or	NOTICE NOT REQUIRED NOTICE OF ENTRY FOR PLA WAS CONDUCTED OF		RECEIVED/ NOT REQUIRED
		☐ WRITTEN WAIVER BY S (PLEASE ATTACII)	SURFACE OWNER	
■ 4. NO	TICE OF PLANNED OPERATION			☐ RECEIVED
■ 5, PUI	BLIC NOTICE			☐ RECEIVED
				22.5.0000000000000000000000000000000000

#### Required Attachments:

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code § 22-6A-11(b), the Certification of Notice to the person may be made by affidavit of personal service. The return receipt card or other postal receipt for certified mailing.

#### Certification of Notice is hereby given:

above, to the re signature confir in this Notice obtaining the in	at as required under West Virginia Cod equired parties through personal service mation. I certify under penalty of law the Certification and all attachments, and	e § 22-6A, I have so e, by registered mail nat I have personally that based on my in is true, accurate and	I the notice requirements within West Virg erved the attached copies of the Notice F I or by any method of delivery that require examined and am familiar with the information inquiry of those individuals immediately d complete. I am aware that there are sign comment.	orms, identified ires a receipt or nation submitted responsible for
Well Operator:	Triad Hunter, LLC	Address:	125 Putnam Street	
By:	Mike Horan 11/2 ff w		Marietta, OH 45750	
Its:	Operations Manager	Facsimile:	740-374-5270	
Telephone:	740-868-1324	Email:	mhoran@brmresources.com	
# BOOK SEE	NOTARY SEAL  Panela K. Nicholson, Notary Public  III and For The State of Ohio  My Commission Expires 9 9-20	Janua ,	orn before me this 2nd day of July,  Khickalian 1	ZO18 .  Notary Public

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

Office of Oil and Gas

AUG 15 2018

WV Department of Environmental Protection

API NO. 47-95-02549
OPERATOR WELL NO. 1 05/17/2019
Well Pad Name: Momentive

# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF APPLICATION

Notice Time Requirement: notice shall be provided no later that	an the filing date of permit application.
Date of Notice: 7/2/2018 Date Permit Application Filed: Notice of:	
✓ PERMIT FOR ANY ☐ CERTIFICATE OF API	PROVALEOR THE
	AN IMPOUNDMENT OR PIT
Delivery method pursuant to West Virginia Code § 22-6A-10	(b)
	OD OF DELIVERY THAT REQUIRES A
SERVICE MAIL RECE	IPT OR SIGNATURE CONFIRMATION
sediment control plan required by section seven of this article, and the surface of the tract on which the well is or is proposed to be loc oil and gas leasehold being developed by the proposed well work, i described in the erosion and sediment control plan submitted pursu operator or lessee, in the event the tract of land on which the well p more coal seams; (4) The owners of record of the surface tract or tr well work, if the surface tract is to be used for the placement, const impoundment or pit as described in section nine of this article; (5) have a water well, spring or water supply source located within one provide water for consumption by humans or domestic animals; and proposed well work activity is to take place. (c)(1) If more than thresubsection (b) of this section hold interests in the lands, the applicate records of the sheriff required to be maintained pursuant to section provision of this article to the contrary, notice to a lien holder is not Code R. § 35-8-5.7.a requires, in part, that the operator shall also part application Notice  WSSP Notice  E&S Plan Notice  SURFACE OWNER(s)	or signature confirmation, copies of the application, the erosion and the well plat to each of the following persons: (1) The owners of record of ated; (2) The owners of record of the surface tract or tracts overlying the f the surface tract is to be used for roads or other land disturbance as ant to subsection (c), section seven of this article; (3) The coal owner, roposed to be drilled is located [sic] is known to be underlain by one or acts overlying the oil and gas leasehold being developed by the proposed ruction, enlargement, alteration, repair, removal or abandonment of any Any surface owner or water purveyor who is known to the applicant to a thousand five hundred feet of the center of the well pad which is used to d (6) The operator of any natural gas storage field within which the extenants in common or other co-owners of interests described in the neight, article one, chapter eleven-a of this code. (2) Notwithstanding any thouse to a landowner, unless the lien holder is the landowner. W. Va. provide the Well Site Safety Plan ("WSSP") to the surface owner and any as provided in section 15 of this rule.
Name: Crompton Corp, GE Silicones WV LLC Address: 180 E Broad Street	Name:Address:
Columbus, OH 43215	
Name:	□ COAL OPERATOR
Address:	Name:
SURFACE OWNER(s) (Road and/or Other Disturbance)	Address:
Name:	SURFACE OWNER OF WATER WELL
Address:	AND/OR WATER PURVEYOR(s)
	Name: Crompton Corp. GE Silicones WV LLC
Name: Address:	Address: 180 E Broad Street Columbus, OH 43215
Address.	OPERATOR OF ANY NATURAL GAS STORAGE FIELD
□ SURFACE OWNER(s) (Impoundments or Pits)	
Name:Address:	Name:  Address:  RECEIVED Gas  *Please attach additional forms if necessary 7018
Address:	Office of Oil
	Trease attach additional forms in necessary
	AUG 19  WV Department of WV Department of Environmental Protection
	EUA

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(b), notice is hereby given that the undersigned well operator has applied for a permit for well work or for a certificate of approval for the construction of an impoundment or pit.

#### This Notice Shall Include:

Pursuant to W. Va. Code § 22-6A-10(b), this notice shall include: (1) copies of the application; (2) the erosion and sediment control plan required by section seven of this article; and (3) the well plat.

Pursuant to W. Va. Code § 22-6A-10(f), this notice shall include: (1) a statement of the time limits for filing written comments; (2) who may file written comments; (3) the name and address of the secretary for the purpose of filing the comments and obtaining additional information; and (4) a statement that the persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Pursuant to W. Va. Code R. § 35-8-5.7.a, the operator shall provide the Well Site Safety Plan to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Pursuant to W. Va. Code R. § 35-8-15.2.c, this notice shall: (1) contain a statement of the surface owner's and water purveyor's right to request sampling and analysis; (2) advise the surface owner and water purveyor of the rebuttable presumption for contamination or deprivation of a fresh water source or supply; advise the surface owner and water purveyor that refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability; (3) advise the surface owner and water purveyor of his or her independent right to sample and analyze any water supply at his or her own expense; advise the surface owner and water purveyor whether or not the operator will utilize an independent laboratory to analyze any sample; and (4) advise the surface owner and or water purveyor that he or she can obtain from the Chief a list of water testing laboratories in the subject area capable of and qualified to test water supplies in accordance with standard acceptable methods.

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting <a href="www.dep.wv.gov/oil-and-gas/pages/default.aspx">www.dep.wv.gov/oil-and-gas/pages/default.aspx</a>.

#### Well Location Restrictions

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary well location restrictions regarding occupied dwelling structures pursuant to this section. the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to addressettle flems

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WV Department of Environmental Protection

API NO. 47-95 - 02549 OPERATOR WELL NO. 1 05/17/2019

Well Pad Name: Momentive

examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

#### Water Well Testing:

Pursuant to West Virginia Code § 22-6A-10(d), notification shall be made, with respect to surface landowners identified in subsection (b) or water purveyors identified in subdivision (5), subsection (b) of this section, of the opportunity for testing their water well. The operator shall provide an analysis to such surface landowner or water purveyor at their request.

#### Water Testing Laboratories:

Pursuant to West Virginia Code § 22-6A-10(i), persons entitled to notice pursuant to subsection (b) of this section may contact the department to ascertain the names and locations of water testing laboratories in the subject area capable and qualified to test water supplies in accordance with standard accepted methods. In compiling that list of names the department shall consult with the state Bureau for Public Health and local health departments. A surface owner and water purveyor has an independent right to sample and analyze any water supply at his or her own expense. The laboratory utilized by the operator shall be approved by the agency as being certified and capable of performing sample analyses in accordance with this section.

#### Rebuttable Presumption for Contamination or Deprivation of a Fresh Water Source or Supply:

W. Va. Code § 22-6A-18 requires that (b) unless rebutted by one of the defenses established in subsection (c) of this section, in any action for contamination or deprivation of a fresh water source or supply within one thousand five hundred feet of the center of the well pad for horizontal well, there is a rebuttable presumption that the drilling and the oil or gas well or either was the proximate cause of the contamination or deprivation of the fresh water source or supply. (c) In order to rebut the presumption of liability established in subsection (b) of this section, the operator must prove by a preponderance of the evidence one of the following defenses: (1) The pollution existed prior to the drilling or alteration activity as determined by a predrilling or prealteration water well test. (2) The landowner or water purveyor refused to allow the operator access to the property to conduct a predrilling or prealteration water well test. (3) The water supply is not within one thousand five hundred feet of the well. (4) The pollution occurred more than six months after completion of drilling or alteration activities. (5) The pollution occurred as the result of some cause other than the drilling or alteration activity. (d) Any operator electing to preserve its defenses under subdivision (1), subsection (c) of this section shall retain the services of an independent certified laboratory to conduct the predrilling or prealteration water well test. A copy of the results of the test shall be submitted to the department and the surface owner or water purveyor in a manner prescribed by the secretary. (e) Any operator shall replace the water supply of an owner of interest in real property who obtains all or part of that owner's supply of water for domestic, agricultural, industrial or other legitimate use from an underground or surface source with a comparable water supply where the secretary determines that the water supply has been affected by contamination, diminution or interruption proximately caused by the oil or gas operation, unless waived in writing by that owner. (f) The secretary may order the operator conducting the oil or gas operation to: (1) Provide an emergency drinking water supply within twenty-four hours; (2) Provide temporary water supply within seventy-two hours; (3) Within thirty days begin activities to establish a permanent water supply or submit a proposal to the secretary outlining the measures and timetables to be used in establishing a permanent supply. The total time in providing a permanent water supply may not exceed two years. If the operator demonstrates that providing a permanent replacement water supply cannot be completed within two years, the secretary may extend the time frame on case-by-case basis; and (4) Pay all reasonable costs incurred by the real property owner in securing a water supply. (g) A person as described in subsection (b) of this section aggrieved under the provisions of subsections (b), (e) or (f) of this section may seek relief in court... (i) Notwithstanding the denial of the operator of responsibility for the damage to the real property owner's water supply or the status of any appeal on determination of liability for the damage to the real property owner's water supply, the operator may not discontinue providing the required water service until authorized to do so by the secretary or a court of competent jurisdiction.

#### Written Comment:

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written comments as to the location or construction of the applicant's proposed well work to the Secretary at:

Chief, Office of Oil and Gas Department of Environmental Protection 601 57<sup>th</sup> St. SE Charleston, WV 25304 (304) 926-0450

Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons medical contents water. NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.

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WW-6A (8-13)

API NO. 47- <u>95 - 02549</u> OPERATOR WELL NO. <u>1 05/17/2</u>019 Well Pad Name: Momentive

Time Limits and Methods for Filing Comments.

The law requires these materials to be served on or before the date the operator files its Application. You have THIRTY (30) DAYS after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Pursuant to West Virginia Code § 22-6A-11(c)(2), Any objections of the affected coal operators and coal seam owners and lessees shall be addressed through the processes and procedures that exist under sections fifteen, seventeen and forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article. The written comments filed by the parties entitled to notice under subdivisions (1), (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the secretary in the permit issuance process, but the parties are not entitled to participate in the processes and proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article.

#### **Comment Requirements**

Your comments must be in writing and include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

Disclaimer: All comments received will be placed on our web site <a href="http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx">http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx</a> and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

#### Permit Denial or Condition

The Chief has the power to deny or condition a well work permit. Pursuant to West Virginia Code § 22-6A-8(d), the permit may not be issued or be conditioned, including conditions with respect to the location of the well and access roads prior to issuance if the director determines that:

- (1) The proposed well work will constitute a hazard to the safety of persons:
- (2) The plan for soil erosion and sediment control is not adequate or effective;
- (3) Damage would occur to publicly owned lands or resources; or
- (4) The proposed well work fails to protect fresh water sources or supplies.

A permit may also be denied under West Virginia Code § 22-6A-7(k), the secretary shall deny the issuance of a permit if the secretary determines that the applicant has committed a substantial violation of a previously issued permit for a horizontal well, including the applicable erosion and sediment control plan associated with the previously issued permit, or a substantial violation of one or more of the rules promulgated under this article, and in each instance has failed to abate or seek review of the violation within the time prescribed by the secretary pursuant to the provisions of subdivisions (1) and (2), subsection (a), section five of this article and the rules promulgated hereunder, which time may not be unreasonable.

Pursuant to West Virginia Code § 22-6A-10(g), any person entitled to submit written comments to the secretary pursuant to subsection (a), section eleven of this article, shall also be entitled to receive from the secretary a copy of the permit as issued or a copy of the order modifying or denying the permit if the person requests receipt of them as a part of the written comments submitted concerning the permit application. Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

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AUG 15 2018

WW-6A (8-13)

API NO. 47- 9 < -OPERATOR WELL NO. 1

Well Pad Name: Momentive

Notice is hereby given by:

Well Operator: Triad Hunter, LLC Telephone: 740-868-1324

Email: mhoran@brmresources.com

Address: 125 Putnam Street

Marietta, OH 45750

Facsimile: 740-374-5270

#### Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.



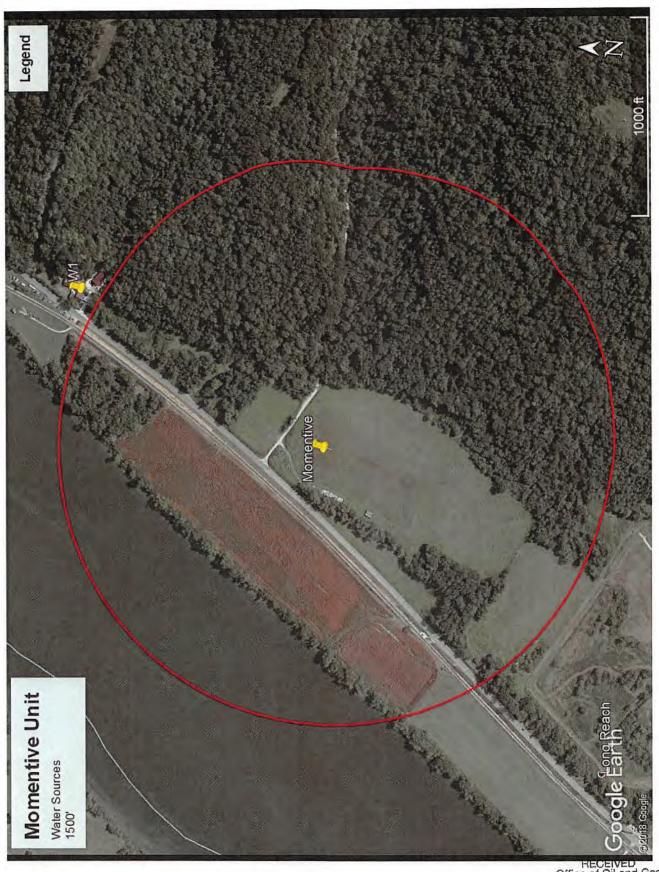
Subscribed and sworn before me this 2nd day of July, 2018.

Notary Public

My Commission Expires

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AUG 1 5 2018



Office of Oil and Gas

AUG 15 2018

95-05/17/2019

# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF ENTRY FOR PLAT SURVEY

entry			nned Entry:		n FORTY-FIVE (45) days prior to
Delivery met	hod pursuant to	o West Virginia C	ode § 22-6A-10a		
□ PERSON SERVIC		REGISTERED MAIL	☐ METHOD OF DEI RECEIPT OR SIGN		
on to the surfa but no more the beneath such to owner of mine and Sediment Secretary, while enable the sur	nce tract to cond nan forty-five da tract that has file erals underlying Control Manual ich statement sh face owner to ob	uct any plat survey tys prior to such en- ed a declaration pur such tract in the co- l and the statutes an all include contact otain copies from the	s required pursuant to this a try to: (1) The surface owne suant to section thirty-six, a punty tax records. The notic ad rules related to oil and ga information, including the a	rticle. Such notice s r of such tract; (2) rticle six, chapter t e shall include a sta s exploration and p	shall provide notice of planned entry shall be provided at least seven days to any owner or lessee of coal seams wenty-two of this code; and (3) any attement that copies of the state Erosion production may be obtained from the age on the Secretary's web site, to
	eby provided to				-
	E OWNER(s)	20,000		L OWNER OR LE	
Name: Crompton	n Corp. GE Silicones V	W LLC	Name:		
Address: 180 E Columbus, OH 432	Broad Street				
- 5 John 10 BOOK 11 10 60	100				<del></del>
Address:			- П ми	ERAL OWNER(s)	
				and the second s	
Name:			_ Name:		
Address:			- Address.		
			*please attac	h additional forms if ne	ecessary
a plat survey of State:			Approx. Latit	ude & Longitude:	l operator is planning entry to conduct 39.494743, -81.083789
County:	Tyler		Public Road	Access:	County Road 2/4
District:	Union		Watershed:		Little Musringum -Middle Island
Quadrangle:	Bens Run		Generally use	d farm name:	Momentive
may be obtain Charleston, W	ed from the Sec V 25304 (304-	retary, at the WV I 926-0450). Copies	Department of Environmenta	l Protection headquional information r	il and gas exploration and production uarters, located at 601 57 <sup>th</sup> Street, SE, related to horizontal drilling may be
Notice is her	eby given by:				RECEIVED Office of Oil and Gas
Well Operator		0 - 1 0	Address:	125 Putnam Street	Office of Oil and Gas
Telephone:	740-374-2940	Program by Shanest street		Marietta, OH 45750	AUG 1 5 2018
Email:	wharless@brmres	ources.com	Facsimile:	740-374-5270	7100 10 2010
					_ WV Department of

#### Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at <a href="mailto:depprivacyofficer@wv.gov">depprivacyofficer@wv.gov</a>.

WW-6A5 (1/12)

Operator Well No. Momentive 1

# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF PLANNED OPERATION

		7-1-8-22 (1-16/-)	
elivery met	hod pursuant to West Virginia (	ode § 22-6A-16(c)	
CERTIF	FIED MAIL	☐ HAND	
RETUR	RN RECEIPT REQUESTED	DELIVERY	
eturn receipt the planned of equired to be rilling of a lamages to the d) The notice of notice.	requested or hand delivery, give to operation. The notice required by provided by subsection (b), section norizontal well; and (3) A propose we surface affected by oil and gas of	the surface owner whose land will be this subsection shall include: (1) on ten of this article to a surface owned surface use and compensation apperations to the extent the damages given to the surface owner at the acceptance of the surface owner at	nit application, an operator shall, by certified mail e used for the drilling of a horizontal well notice of A copy of this code section; (2) The information ner whose land will be used in conjunction with the agreement containing an offer of compensation for are compensable under article six-b of this chapter. ddress listed in the records of the sheriff at the time
t the address	s listed in the records of the sherif	f at the time of notice):	
ame: Crompton	n Corp, GE Silicones WV LLC	Name:	
ame: Crompton ddress: 180 E	Broad Street	Name:Address:	
ame: Crompton ddress: 180 E Columbus, OH 43	E Broad Street 215 eby given:	Address:	
ame: Crompton ddress: 180 E Columbus, OH 43 Cotice is here ursuant to W peration on tate: county:	eby given:  Vest Virginia Code § 22-6A-16(c), the surface owner's land for the p  West Virginia  Tyler	Address:  notice is hereby given that the unde urpose of drilling a horizontal well of the urbose of t	ersigned well operator has developed a planned on the tract of land as follows: asting: 1521319.70' orthing: 365959.83'
ame: Crompton ddress: 180 E Columbus, OH 43  fotice is here ursuant to W peration on tate: county: pistrict:	eby given: Vest Virginia Code § 22-6A-16(c), the surface owner's land for the p West Virginia Tyler Union	Address:  notice is hereby given that the unde urpose of drilling a horizontal well of UTM NAD 83	ersigned well operator has developed a planned on the tract of land as follows: asting: 1521319.70' orthing: 365959.83' : County Road 2/4
ame: Crompton ddress: 180 E Columbus, OH 43 Cotice is here ursuant to W peration on tate: county:	eby given:  Vest Virginia Code § 22-6A-16(c), the surface owner's land for the p  West Virginia  Tyler	Address:  notice is hereby given that the unde urpose of drilling a horizontal well of the urbose of t	ersigned well operator has developed a planned on the tract of land as follows: asting: 1521319.70' orthing: 365959.83' : County Road 2/4
ddress: 180 E Columbus, OH 43  fotice is her ursuant to W peration on tate: county: co	eby given:  Vest Virginia Code § 22-6A-16(c), the surface owner's land for the p  West Virginia  Tyler  Union  Bens Run  Little Musringum -Middle Island  Shall Include: Vest Virginia Code § 22-6A-16(c) ed by W. Va. Code § 22-6A-10(lell; and (3) A proposed surface use ted by oil and gas operations to the lated to horizontal drilling may located at 601 57th Street, SE,	notice is hereby given that the under urpose of drilling a horizontal well of UTM NAD 83 No Public Road Access: Generally used farm this notice shall include: (1)A copy to a surface owner whose land the extent the damages are compensible obtained from the Secretary, at	ersigned well operator has developed a planned on the tract of land as follows: asting: 1521319.70' orthing: 365959.83' : County Road 2/4
ddress: 180 E Columbus, OH 43  fotice is her ursuant to W peration on tate: county: bistrict: buadrangle: Vatershed:  This Notice Sursuant to W be provide orizontal we urface affect afformation readquarters, as/pages/def	eby given: Vest Virginia Code § 22-6A-16(c), the surface owner's land for the p West Virginia  Tyler Union Bens Run Little Musringum - Middle Island  Shall Include: Vest Virginia Code § 22-6A-16(c) ed by W. Va. Code § 22-6A-10(e) ed by oil and gas operations to the lated to horizontal drilling may located at 601 57th Street, SE, ault.aspx.	notice is hereby given that the undergrose of drilling a horizontal well of UTM NAD 83 No Public Road Access:  Generally used farm  this notice shall include: (1)A copy to a surface owner whose land to and compensation agreement contribute extent the damages are compensible obtained from the Secretary, at Charleston, WV 25304 (304-92)	ersigned well operator has developed a planned on the tract of land as follows: asting: 1521319.70' 365959.83' County Road 2/4 name: Momentive  y of this code section; (2) The information required will be used in conjunction with the drilling of a aining an offer of compensation for damages to the sable under article six-b of this chapter. Additional the WV Department of Environmental Protection
ddress: 180 E Columbus, OH 43  fotice is hereursuant to W peration on tate: county: bistrict: puadrangle: Watershed: This Notice Sursuant to W o be provide orizontal we arrace affect information readquarters, as/pages/def	eby given:  Vest Virginia Code § 22-6A-16(c), the surface owner's land for the p  West Virginia  Tyler  Union  Bens Run  Little Musringum -Middle Island  Shall Include:  Vest Virginia Code § 22-6A-16(c) ed by W. Va. Code § 22-6A-10(le); and (3) A proposed surface used by oil and gas operations to the lated to horizontal drilling may located at 601 57th Street, SE, ault.aspx.	Address:	ersigned well operator has developed a planned on the tract of land as follows: asting: 1521319.70' 365959.83' County Road 2/4 name: Momentive  y of this code section; (2) The information required will be used in conjunction with the drilling of a aining an offer of compensation for damages to the sable under article six-b of this chapter. Additional the WV Department of Environmental Protection 26-0450) or by visiting www.dep.wv.gov/oil-and-

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#### WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

### Division of Highways

Office of the District Engineer/Manager
District Six

June 8, 2018

1 DOT Drive \* Moundsville, WV 26041 \* 304-843-4000

Thomas J. Smith, P.E. Secretary of Transportation Commissioner of Highways

TRIAD HUNTER, LLC

125 PUTNAM STREET MARIETTA, OH 45750

Dear Applicant:				
Your approved cop	y of Permit Number	06-2018-0471	for a	MS - Miscellaneous
permit type is enclo	osed. A description of	of the work is on the po	ermit.	
Please contact the l	District Six	office:		
	Please notify	the Oil and Gas Div	ision at 304	-843-4019
at least 48 hours in a	dvance of the date you	plan to begin work so ar	rangements c	an be made to inspect the work authorized
by the permit.				
Failure to comply	will result in cance	llation of your permi	t.	
	nit is to be available ision of Highways' po		while the we	ork is in progress for inspection by the
		Sincerel	y,	
				Quantity of the same of the sa
		and pain and any analysis	District	Engineer / District Manager
			0	117
Initials: CMG:w			Ly	Lmilt
Attachments: Yes			V	
Enclosure: No				Oil and Gas Coordinator

E.E.O./AFFIRMATIVE ACTION EMPLOYER

Office of Oil and Gas

AUG 1 5 2018



### WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

### **Division of Highways**

1900 Kanawha Boulevard East • Building Five • Room 110 Charleston, West Virginia 25305-0430 • (304) 558-3505

September 5, 2018

Thomas J. Smith, P. E. Secretary of Transportation/Commissioner of Highways

Jill M. Newman Deputy Commissioner

James A. Martin, Chief Office of Oil and Gas Department of Environmental Protection 601 57<sup>th</sup> Street, SE Charleston, WV 25304

Subject: DOH Permit for the Momentive Well Pad

Pad State Road Entrance

Dear Mr. Martin,

The West Virginia Division of Highways has issued Permit # 06 -2018-0470 to Triad Hunter, LLC for access to the State Road for a well site located off of Tyler County Route 2/4 SLS.

The operator has signed an OIL AND GAS DISTRICT WIDE ROAD MAINTENANCE BONDING AGREEMENT for District 6 and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated January 3, 2012.

Very Truly Yours,

Gary K. Clayton

Regional Maintenance Engineer

Central Oil & Gas Coordinator

Cc: Cecily Kern Triad Hunter, LLC CH, OM, D-6

File

#### CAS Numbers for frac additives:

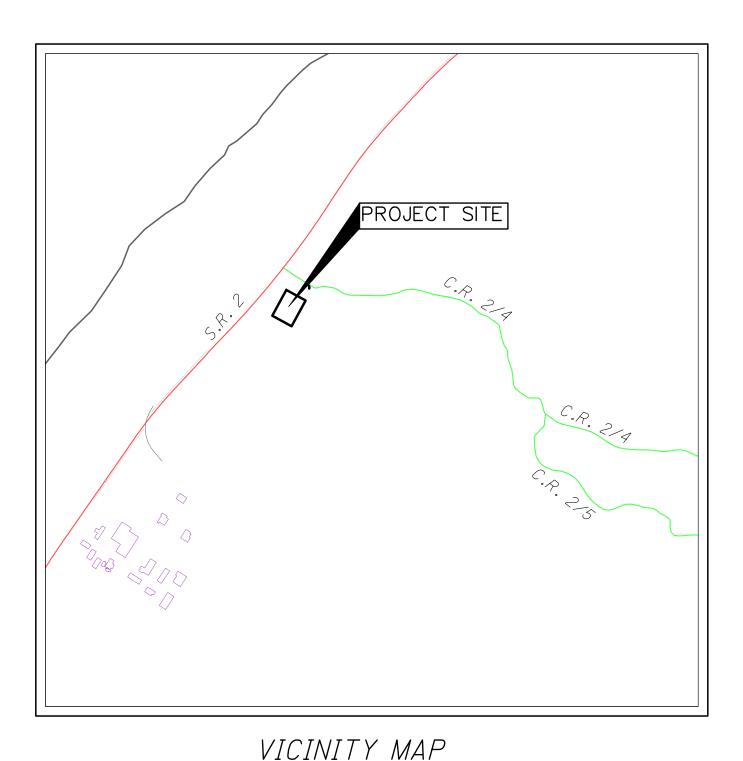
1. Friction reducers, (PSC) AS-9810

	a.	Acrylamide,	CAS #26100-47-0	34-40%
2.	Scale in	hibitor, (PSC) AS-9220		
	a.	Organic phosphate,	CAS #11024-99-2	10-25%
3.	Flowba	ick surfactant + iron stal	bilizer, (PSC) AS-9899	
	a.	Ethoxylated alcohol,	CAS #65439-46-3	10-15%
	b.	Stannous chloride,	CAS #7772-99-8	5-10%
	c.	Sulfamic acid,	CAS #5329-14-6,	5-8%
	d.	Monoethylamine	CAS #141-43-5	2-6%

4. Microbiocide, One AquaSource MB-7530 (see attached MSDS, page 1)

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## **CONSTRUCTION SEQUENCE:**

PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVIES, THE CONTRACTOR
SHALL CONTACT THE APPLICABLE ONE CALL SYSTEM FOR LOCATION OF
ALL UTILITIES WITHIN THE VICINITY OF THE PROJECT.

NOT TO SCALE

- 2. INSTALL PERIMETER EROSION & SEDIMENT CONTROL MEASURES, AS SPECIFIED HEREIN.
- 3. STRIP AND STOCKPILE TOPSOIL WITHIN CONSTRUCTION LIMITS.
- 4. CLEAR AND GRUB FOR CONSTRUCTION ENTRANCE AND ACCESS DRIVE. ANY TIMBER REMOVED WITHIN THE CLEARING LIMITS SHALL BE STACKED IN THE AREA SHOWN ON THE PLANS. NON-COMPOSTING DEBRIS SHALL BE REMOVED AND DISPOSED OF OFF-SITE IN AN APPROVED MANNER ACCORDING TO ALL

# TRIAD HUNTER, LLC

SUBSIDIARY OF BLUE RIDGE MOUNTAIN RESOURCES, INC

# MOMENTIVE WELL PAD

# TYLER COUNTY WEST VIRGINIA

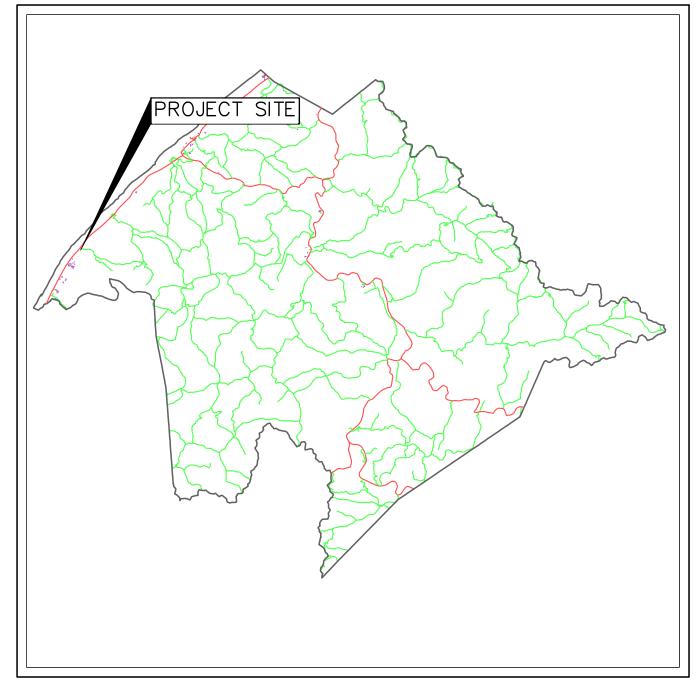
05/17/2019



SURFACE LOCATION (NAD 83) 39.493842° N, 81.084777° W (NAD 27) 39.492283° N, 81.196335° W

ACCESS LOCATION (NAD 83) 39.494678° N, 81.083665° W (NAD 27) 39.493120° N, 81.195224° W

	SHEET LIST TABLE
SHEET NUMBER	SHEET TITLE
1	TITLE SHEET
2	GENERAL NOTES & TYPICALS
3	TYPICALS & QUANTITIES
4	EXISTING FEATURES PLAN
5	SITE DISTURBANCE PLAN
6	OVERALL SITE PLAN
7	ACCESS ROAD PLAN & PROFILE
8	WELL PAD SITE PLAN
9	CROSS SECTIONS
10	EROSION & SEDIMENT CONTROL NOTES
11	EROSION & SEDIMENT CONTROL DETAILS
12	EROSION & SEDIMENT CONTROL PLAN PRE CONSTRUCTION
13	EROSION & SEDIMENT CONTROL PLAN POST CONSTRUCTION
14	GEOTECHNICAL ENGINEERING PLAN
15	GEOTECHNICAL CROSS SECTIONS
16	SOILS MAP
17	OVERALL SITE RECLAMATION PLAN



LOCATION MAP

## PROJECT DESCRIPTION:

NATURAL GAS WELL PAD AND 271± FOOT ACCESS DRIVE CONSTRUCTION. THE PROJECT LIMITS OF DISTURBANCE TOTAL 10.47± ACRES.

### LAND OWNER:

GE SILICONES WV LLC PID: 48-10-0007-0001-0000

## **DEVELOPER:**

TRIAD HUNTER, LLC
125 PUTNAM ST
MARIETTA, OH 45750
EMERGENCY CONTACT: SAM MIRACLE
P: 1-800-276-2845
E: SMIRACLE@BRMRESOURCES.COM

### ENGINEER:

E.L. ROBINSON ENGINEERING OF OHIO
1801 WATERMARK DRIVE, SUITE 310
COLUMBUS, OH 43215
CONTACT: MATT CORNETT, P.E.
P: 614-586-0642
E: MCORNETT@ELROBINSON.COM

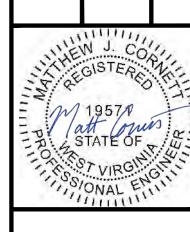


KNOW WHATS BELOW CALL BEFORE YOU DIG! DIAL 811 OR 800-245-4848 WWW.WV811.COM

				TC	NO. DATE
EPARED FOR:	/	/	,	<b>HONTER LLC</b>	

K /	TRIAD HUNTER

TITLE SHEET



E.L. ROBINSON

E.N. G. I.M. E. E. R. I.M. G.

1801 Watermark Drive, Suite 310

Columbus, Ohio 43215

Phone: 614-586-0642

Fax: 614-586-0648

www.elrobinsonengineering.com

PROJECT NUMBER
1418019
DATE
11/09/2018
SHEET NUMBER

