

west virginia department

environmental protection

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

Jim Justice , Governor Austin Caperton , Cabinet Secretary www.dep.wv.gov

Wednesday, December 20, 2017 WELL WORK PERMIT Horizontal 6A / New Drill

ASCENT RESOURCES-MARCELLUS, LLC 3501 NW 63RD STREET

OKLAHOMA CITY, OK 73116

Re: Permit approval for HOGE S GRN WZ 2H 47-103-03208-00-00

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: HOGE S GRN WZ 2H

Farm Name: STATE OF WV PUBLIC LD CORP. DEPT. OF COMM. LBR & Farm Name: STATE OF WV PUBLIC LD CORP. DEPT. OF COMM. LBR & Farm Name: STATE OF WV PUBLIC LD CORP. DEPT. OF COMM. LBR & Farm Name: STATE OF WV PUBLIC LD CORP. DEPT. OF COMM. LBR & Farm Name: STATE OF WV PUBLIC LD CORP. DEPT. OF COMM. LBR & Farm Name: STATE OF WV PUBLIC LD CORP. DEPT. OF COMM. LBR & Farm Name: STATE OF WV PUBLIC LD CORP. DEPT. OF COMM. LBR & Farm Name: STATE OF WV PUBLIC LD CORP. DEPT. OF COMM. LBR & Farm Name: STATE OF WV PUBLIC LD CORP. DEPT. OF COMM. LBR & Farm Name: STATE OF WV PUBLIC LD CORP. DEPT. OF COMM. LBR & Farm Name: STATE OF WV PUBLIC LD CORP. DEPT. OF COMM. LBR & Farm Name: STATE OF WV PUBLIC LD CORP. DEPT. OF COMM. LBR & Farm Name: STATE OF WV PUBLIC LD CORP. DEPT. OF COMM. LBR & Farm Name: STATE OF WV PUBLIC LD CORP. DEPT. OF COMM. LBR & Farm Name: STATE OF WV PUBLIC LD CORP. DEPT. OF COMM. LBR & Farm Name: STATE OF WV PUBLIC LD CORP. DEPT. OF COMM. LBR & Farm Name: STATE OF WV PUBLIC LD CORP. DEPT. DEP

U.S. WELL NUMBER: 47-103-03208-00-00

Horizontal 6A / New Drill

Date Issued: 12/20/2017

Promoting a healthy environment.

API Number: 103-03208

## **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: 103-032-08

## **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

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

Jim Justice, Governor Austin Caperton, Cabinet Secretary www.dep.wv.gov

# ORDER ISSUED UNDER WEST VIRGINIA CODE, CHAPTER 22, ARTICLE 6A

TO: Ascent Resources – Marcellus, LLC 3501 NW 63<sup>rd</sup> Street Oklahoma City, OK 73116

DATE: December 8, 2017 ORDER NO.: 2017-W-10

### INTRODUCTION

This Order (hereinafter "Order") is issued by the Office of Oil and Gas (hereinafter "OOG"), by and through its Chief, pursuant to the authority of W. Va. Code §§ 22-1-1, 22-6-1 and 22-6A-1 et seq. to Ascent Resources – Marcellus, LLC (hereinafter "Ascent" or "Operator"), collectively the "Parties."

### FINDINGS OF THE CHIEF

In support of this Order, the Chief hereby finds the following:

- OOG, an office within the West Virginia Department of Environmental Protection, is the agency
  with the duty and authority to execute and enforce W. Va. Code §22-6-1 and §22-6A-1 et seq., and
  the rules and regulations promulgated thereunder.
- Ascent is a "person" as defined by W. Va. Code §22-6-1(n), with a corporate address as 3501 NW 63rd Street, Oklahoma City, Oklahoma.
- On August 17, 2017, Ascent submitted well work permit applications identified as API#s 47-103-3206 and 47-103-3207. On September 11, 2017, Ascent submitted well work permit applications identified as API#s 47-103-3208, 47-103-3209 and 47-103-3210. The five proposed wells are to be located on the Hoge GRN WZ Pad in Green District of Wetzel County, West Virginia.
- On September 11, 2017 Ascent requested a waiver for Wetlands 3 and 5 outlined in Attachment 1, from well location restriction requirements in W. Va. Code §22-6A-12(b) for the well work permit applications identified as API#s 47-103-3206, 47-103-3207, 47-103-3208, 47-103-3209 and 47-103-3210.

### **CONCLUSIONS OF LAW**

- 1. West Virginia Code §22-1-6(d) requires, in part, that "[i]n addition to other powers, duties and responsibilities granted and assigned to the secretary by this chapter, the secretary is authorized and empowered to...(3) Enter private lands to make surveys and inspections for environmental protection purposes; to investigate for violations of statutes or rules which the Office of Oil and Gas is charged with enforcing; to serve and execute warrants and processes; to make arrests; issue orders, which for the purposes of this chapter include consent agreements; and to otherwise enforce the statutes or rules which the Office of Oil and Gas is charged with enforcing."
- 2. West Virginia Code §22-6A-2(a)(6) requires, in part, that "Concomitant with the broad powers to condition the issuance of well work permits, the secretary should also have broad authority to waive certain minimum requirements of this article when, in his or her discretion, such waiver is appropriate: *Provided*, That the secretary shall submit a written report of the number of waivers granted to the Legislature commencing January 1, 2013, and each year thereafter."
- 3. West Virginia Code §22-6A-12(b) requires, in part, that "[n]o 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 Office of Oil and Gas 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 Office of Oil and Gas 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."

### **ORDER**

West Virginia Code §22-6A-12(b) requires, in part, that "[n]o 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. The Office of Oil and Gas grants the request for a waiver for Wetland 3 and 5 from well location restriction requirements in W. Va. Code §22-6A-12(b) for the well work permit applications identified as API#s 47-103-3206, 47-103-3207, 47-103-3208, 47-103-3209 and 47-103-3210. The Office of Oil and Gas hereby **ORDERS** that Ascent shall meet the following site construction and operational requirements for the Hoge GRN WZ Well Pad:

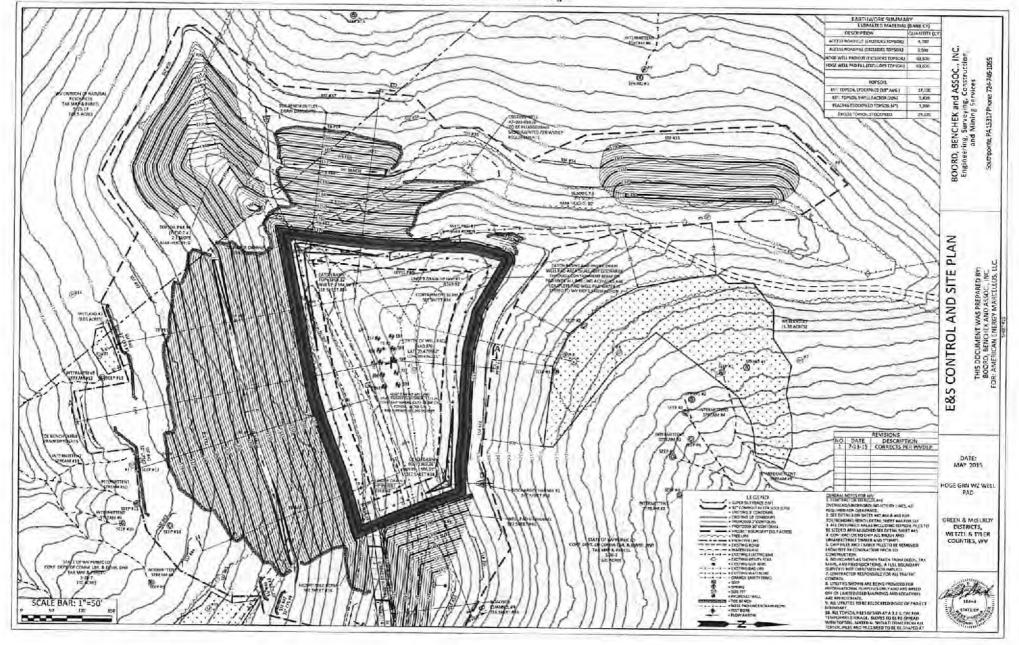
- a. A berm shall be constructed around the perimeter of the pad to contain any potential spills and storm water runoff. Berm is to be at least twenty-four inches (24") in height:
- b. Erosion control blankets shall be installed on all slopes and down gradient locations of the pad as erosion and sediment controlling BMPs;
- c. Wetland 3 shall have thirty two inch (32") compost filter sock and super silt fencing to prevent sediment from reaching the wetlands.
- d. Wetland 5 shall have super silt fencing to prevent sediment from reaching the wetlands from the access road.
- e. Disturbed areas not used for operations shall be seeded and mulched per the seeding tables in the WVDEP-OOG Erosion and Sediment Control Manual:
- f. Drill cuttings and associated drilling mud shall be disposed of in a permitted landfill;
- g. Waste generated by the flowback treatment systems shall be sent to offsite disposal at a permitted landfill;
- h. Weekly site inspections shall be conducted to monitor and maintain the integrity of the BMP storm water controls;
- i. Weekly storm water and spill prevention inspections shall be conducted focusing on storm water and spill prevention BMPs and maintenance of these BMPs;
- j. Inspections of the storm water and spill prevention measures shall be conducted after any major storm event defined as a half inch (½") rain within any twenty-four (24) hour period;
- k. Pad inspections shall be conducted no less than once a week to identify and mitigate potential deficiencies;
- l. All records from inspections shall be maintained on site for the life of the project and be available upon request.

Thus ORDERED, the 8th day of December, 2017.

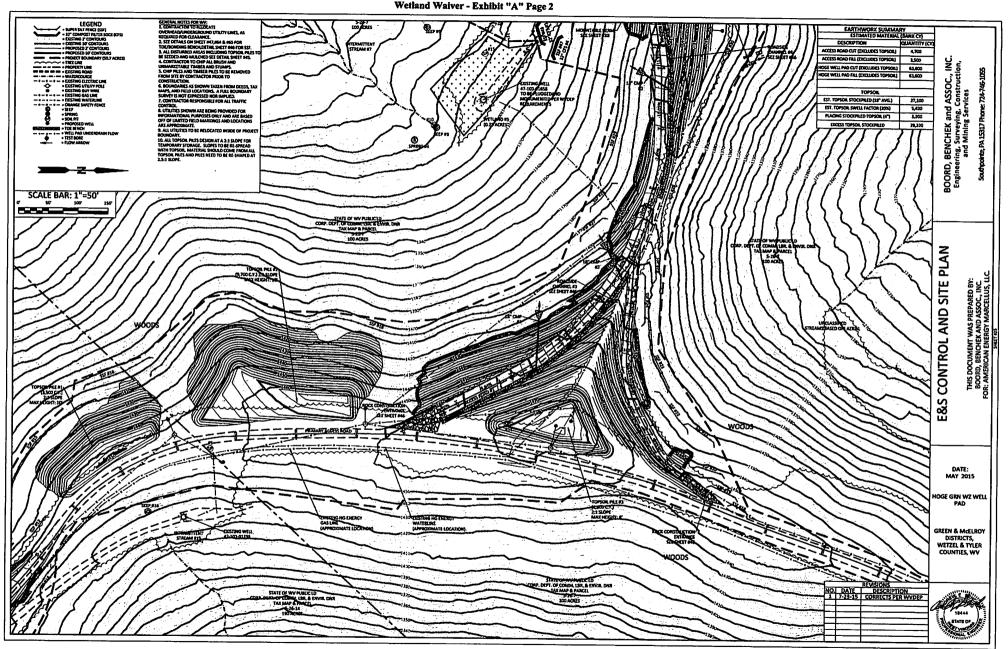
## IN THE NAME OF THE STATE OF WEST VIRGINIA:

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

James A. Martin, Chiếf



### Wetland Waiver - Exhibit "A" Page 2



API NO. 47- 103 - 03208

OPERATOR WELL NO. Hoge S GRN WZ 2H

Well Pad Name: Hoge GRN WZ

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

1) Well Opera	ator: Ascent Re	esources	-Marcellu	494514693	Wetzel	Green	Center Point
A Comment of the comment			A. Service	Operator ID	County	District	Quadrangle
2) Operator's	Well Number: 1	Hoge S G	RN WZ 2	H Well I	Pad Name: Hog	ge GRN WZ	<u> </u>
3) Farm Name	e/Surface Owner	: WV DNR	Public Land	s Corp Public R	oad Access: C	R 13/8	
4) Elevation, o	current ground:	1380'	Ele	evation, propose	ed post-construc	ction: 1371	.25'
5) Well Type	(a) Gas X		Oil X		iderground Stor		
	Other						
	(b)If Gas Si	hallow	X	Deep			2
	Н	orizontal	X				
	d: Yes or No N				_		H12/14/17
	arget Formation Approximate TVD					ed Pressure(s	):
8) Proposed T	otal Vertical De	pth: 735	2'				
9) Formation a	at Total Vertical	Depth:	Marcellus				
10) Proposed	Total Measured	Depth:	19400'				
11) Proposed	Horizontal Leg I	Length:	13995'				
12) Approxim	ate Fresh Water	Strata De	pths:	472'			
13) Method to	Determine Fres	h Water D	epths: E	Based on drillin	g history in ne	arby wells	
14) Approxim	ate Saltwater De	epths: 97	0'				
15) Approxim	ate Coal Seam D	Depths: 1	162'				
16) Approxim	ate Depth to Pos	ssible Voi	d (coal min	ne, karst, other)	: None anticip	oated	
	oosed well location			Yes	N	ло <u>X</u>	
(a) If Yes, pr	rovide Mine Info	: Name					
		Depth	REC	CEIVED			
		Seam:	Office of	Oil and Gas	DECEN	VED	
		Owner	r:		Office of Oil	and Gas	
				1 5 2017	15		
		Foul	W Depo	artment of	DEC M	2017	
		LIVI	onment	arment of al Protection	WV Depar	tment of	
				E	nvironmenta	I Protectic	rPage 12/22/20

OPERATOR WELL NO. Hoge S GRN WZ 2H

Well Pad Name: Hoge GRN WZ

### 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	20"	New	J-55	94#	100'	100'	330, CTS
Fresh Water	13-3/8"	New	J-55	54.5#	600'	600'	320, CTS
Coal							
Intermediate	9-5/8"	New	J-55	40#	3490'	3490'	1400, CTS
Production	5-1/2"	New	P-110	20#	19400'	19400'	4910
Tubing	2-7/8"	New	N-80	4.7#			
Liners							

DMH 12/14/17

ТҮРЕ	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Max. Associated Surface Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20"	26"	0.438	2110	50	Class A	1.2
Fresh Water	13-3/8"	17-1/2"	0.38	2740	600	Class A	1.2
Coal							
Intermediate	9-5/8"	12-1/4"	0.395	3520	1500	Class A	Tail 1.27, Lead 1.51
Production	5-1/2"	8-3/4"	0.361	12640	5000	Premium H/50-50 Poz H	Tail 1.27, Lead 1.51
Tubing	2-7/8"	4.778"	0.19	11100			
Liners							

## **PACKERS**

Kind:		
Sizes:	- SWED S	
Depths Set:	Office of Oil and Gas	

DEC 15 2017

Wy Department of Environmental Protection

WW-6B (10/14) API NO. 47-103\_ 03208

OPERATOR WELL NO. Hoge S GRN WZ 2H

Well Pad Name: Hoge GRN WZ

19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

The well will be spud using a conductor rig. It will drill down 100' per the casing program. It will set 20" casing and circulate cement back to surface. The conductor rig will move off location, a rig capable of drilling to TD will move on and finish drilling the well. We will drill on air with a tri-cone bit to 600' and set freshwater casing. We will then continue drilling vertically and setting casing per the attached casing program to TD.

DMH 12/14/17

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

We plan to hydraulically fracture/stimulate the well utilizing the "slickwater" frac technique. We will plug and perforate through cased hole and frac with an anticipated max pressure that will not exceed 10,000 psi.

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 50.7
- 22) Area to be disturbed for well pad only, less access road (acres): 13.6
- 23) Describe centralizer placement for each casing string:

Conductor: N/A

Surface: Centralizer every 3 joints or 120' Intermediate: Centralizer every 3 joints or 120'

Production: Run 1 spiral centralizer every 120' from the first 5.5" long joint to the top of the curve

Run 1 spiral centralizer every 200' from the top of the curve to surface

24) Describe all cement additives associated with each cement type:

Conductor: Class A Cement (see attachment for complete description)
Surface: Class A Cement (see attachment for complete description)
Intermediate: Class A Cement (see attachment for complete description)

Productions: Premium H/50-50 Poz H Cement (see attachment for complete description)

### 25) Proposed borehole conditioning procedures:

The wellbore will be properly circulated at TD of each section until as much of the residual drill cuttings have been removed from the wellbore as possible, residual drilling gas has been circulated out and until the mud and wellbore are both constant and stable. Mud properties will be adjusted if needed. Hole cleaning times may vary from well to well, hole section.

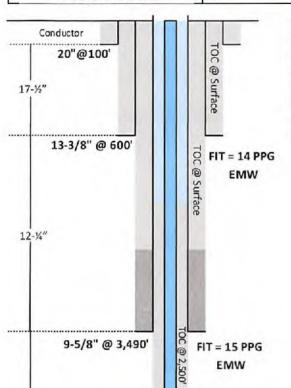
Office of Oil and Gas

DEC 1 5 2017

\*Note: Attach additional sheets as needed.



#### Hoge S GRN WZ 2H Wetzel, West Virginia Marcellus Grant RKB / Elevation: SHL Lat/Long: 39.479706 N, 80.696547 W AFE DC/CWC: **NAD 27** USDW: BHL Lat/Long: Property #: 472 Target Line: 7,352' TVD @ 0' VS, 89.6 Inc, 150 Azi AFE N:



			Casi	ng Des	ign				
Interval	Hole size (in)	Size (in)	Weight #/ft	Grade	Conn.	Collapse (PSI)	Burst (PSI)	Depth (ft)	Cost \$/ft
Conductor	26"	20"	-	-		-		100	(4)
Surface	17-1/2"	13-3/8"	54.5	J-55	BTC	1,130	2,740	600	36
Intermediate	12-1/4"	9-5/8"	36	J-55	LTC	2,020	3,520	3,490	22
Production	8-3/4"	5-1/2"	20	P-110	ULT-DQX	11,110	12,640	19,400	22

		C	ement [	Design		
Interval	Slurry	Weight	Ft <sup>3</sup>	Yeild	Excess	Cement Top
Conducor					50%	
conductor	Tail	15.6 ppg	330	1.20 cuft/sk	3070	Surface
Surface					50%	4-2
Juliace	Tail	15.6 ppg	320	1.20 cuft/sk	30%	Surface
Intermediate	Lead	13.5 ppg	250	1.51 cuft/sk	30%	Surface
mtermediate	Tail	15.3 ppg	1150	1.27 cuft/sk	30%	700
Production	Lead	13.5 ppg	810	1.51 cuft/sk	10%	2500
Production	Tail	15.3 ppg	4100	1.27 cuft/sk	10%	5500

Mud up @ 5,500'

10.0 ppg mud with 12 #/bbitcm

Kick Off Point

Kick Off Point

WV Decurrence of Management of Environmental Protection

Environmental Protection

8-3/4" Curve and Lateral

Formation	TVD	Sub Sea
Freshwater	472	900'
Saltwater	970	402'
Pittsburgh Coal	1162	210'
Big Injun	2447	-1,075
Big Injun Base	2647	-1,275
Berea	3019	-1,647
Gordon	3225	-1,853
Gordon Base	3291	-1,919'
Middlesex	7052	-5,680'
Geneseo	7190	-5,818'
Tully	7218	-5,8461
Hamilton	7241	-5,869'
Marcellus	7312	-5,940'
Purcell	7327	-5,955'
Lower Marcellus	7329	-5,957'
Basal Marcellus	7340	-5,968'
Onondaga	7362	-5,990'

5-1/2" Casing @ 19.400'

7,352' TVD @ 0' VS, 89.6° Inc, 150° Azi

					Drilli	ng Fluids Infor	mation							
	AIRINT	ERVALS					SYI	NTHETIC O	IL BASED MU	D INTERVAL				
Interval	Depth (MD)	Rate (cfpm)	Water (bbl/hr)	Foamer (gal/hr)	Interval	Depth (MD)	1015 75 103	Viscosity (sec/qt)	HTHP (ml/30min)	PV (cps)	YP (#/100 ft <sup>2</sup> )	6 RPM	WPS ppm	OWR % by vol
Surface	0'-600'	>5000	30-50	1/2 -3/4	Curve	6,500'-7,819'	10.5 - 13.5	50-60	4-6	18-24	10-12	6-9	150K -	75:25 -
Intermediate	600'-3490'	>5000	30-50	1/2 -3/4	Lateral	7,819'-19,400'	13.5 - 13.7	50-60	4-6	18 - 24	10-12	6-9	180K	70:30
Vert/Nudge	3,490'-6,500'	>5000	40-60	3/4-1								12	12212	.017

API Number 47 -	103	-	03208
Operator's	Well No	). Ho	ge S GRN WZ 2H

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

### FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Ascent Resources - Mare	cellus, LLC	OP Code _494514693	1
Watershed (HUC 10)_Fishing Creek		Quadrangle Center Point	
Elevation 1380	County_Wetzel	District Green	
Do you anticipate using more than 5,0 Will a pit be used? Yes N	00 bbls of water to complete	the proposed well work? Yes	No
If so, please describe anticipa	ted pit waste: Closed loop	system no pits will be used	
Will a synthetic liner be used	in the pit? Yes No	If so, what ml.?	
Proposed Disposal Method Fe	or Treated Pit Wastes:	DWO	412/14/17
Reuse (at A	nd Injection (UIC Permit Nu API Number next anticipated well sposal (Supply form WW-9 for	mber_see attached sheet titled UIC Wells	
Will closed loop system be used? If so	o, describe:yes; see attached s	sheet titled Closed loop typical descripti	on
Drilling medium anticipated for this w	ell (vertical and horizontal)?	Air, freshwater, oil based, etc. Air, Fresw	ater mist, and Synthetic based oil
-If oil based, what type? Syn	thetic, petroleum, etc.Synthetic	oil based drilling mud	
Additives to be used in drilling mediur			
Drill cuttings disposal method? Leave			
-If left in pit and plan to solid			
-Landfill or offsite name/pern			
on August 1, 2005, by the Office of Oi provisions of the permit are enforceab law or regulation can lead to enforcem I certify under penalty of lay application form and all attachments obtaining the information, I believe the penalties for submitting false information.  Company Official Signature	and Gas of the West Virgini ole by law. Violations of any ent action.  We that I have personally exals thereto and that, based on that the information is true, ion, including the possibility of the possi	mined and am familiar with the info my inquiry of those individuals in accurate, and complete. I am awar of fine or imprisonment. I am awar Office of Oil and G	ection. I understand that the mit and/or other applicable formation submitted on thi numediately responsible for that there are significan
Company Official (Typed Name) Asc	ent Resources - Marcellus, Ll	LC	
Company Official Title Regulatory Ar	alyst	DEC 15 2017	
Subscribed and sworn before me this 7	day of August	WV Department Environmentali Prote Notary Public	# 14000742 # 14000742
My commission expires 1/23/	18		COBLIC TO

Form WW-9	Operator's Well No. Hoge S GRN V
Ascent Resources - Marcellus, LLC	Operators well No
Proposed Revegetation Treatment: Acres Disturbed	Prevegetation pH
Lime 3 Tons/acre or to cor	
Fertilizer type10-20-20	
Fertilizer amount 500	lbs/acre
Mulch minimum of 2-3	Tons/acre
	Seed Mixtures
Temporary	Permanent
Seed Type lbs/acre See attached	Seed Type Ibs/acre See attached
Prawing(s) of road, location, pit and proposed area for rovided)	or land application (unless engineered plans including this info have been
Orawing(s) of road, location, pit and proposed area forovided)  Photocopied section of involved 7.5' topographic sheet	et.
Orawing(s) of road, location, pit and proposed area forovided)  Photocopied section of involved 7.5' topographic sheet	et.
Orawing(s) of road, location, pit and proposed area for provided) Photocopied section of involved 7.5' topographic sheet Plan Approved by: Darake M. Haugh	et.
Orawing(s) of road, location, pit and proposed area for rovided)  Photocopied section of involved 7.5' topographic sheet lan Approved by:  Dense M. Haugh	et.
Orawing(s) of road, location, pit and proposed area for rovided)  Photocopied section of involved 7.5' topographic sheet lan Approved by:  Dense M. Haugh	RECEIVED Gas
Orawing(s) of road, location, pit and proposed area for provided) Photocopied section of involved 7.5' topographic sheet Plan Approved by: Darake M. Haugh	RECEIVED Gas
Orawing(s) of road, location, pit and proposed area for provided)  Photocopied section of involved 7.5' topographic sheet area for the section of involved 7.5' topographic sheet area for the section of involved 7.5' topographic sheet area for the section of involved 7.5' topographic sheet area for the section of involved 7.5' topographic sheet area for the section of involved 7.5' topographic sheet area for the section of involved 7.5' topographic sheet area for the section of involved 7.5' topographic sheet area for the section of involved 7.5' topographic sheet area for the section of involved 7.5' topographic sheet area for the section of involved 7.5' topographic sheet area for the section of involved 7.5' topographic sheet area for the section of involved 7.5' topographic sheet area for the section of involved 7.5' topographic sheet area for the section of involved 7.5' topographic sheet area for the section of involved 7.5' topographic sheet area for the section of involved 7.5' topographic sheet area for the section of involved 7.5' topographic sheet area for the section of the	RECEIVED Gas
Attach:  Drawing(s) of road, location, pit and proposed area for provided)  Photocopied section of involved 7.5' topographic sheet  Plan Approved by:  Darake M. Haught  Comments:	RECEIVED Gas

### **UIC WELLS and Landfills**

Disposal Location	Туре	Permit No.
Wetzel County Landfill –	Landfill	SWF-1021/WV010985
Short Creek Landfill –	Landfill	SWP-1034/WV0109517
Brooke County –	Landfill	SWF-1013/WV0109029
Kemble -	UIC Well	34-119-2-8780-00-00
Elkhead-	UIC Well	34-157-2-5511-00-00
Kent Injection Well	UIC Well	34-119-2-7350-00-00
Moran Well	UIC Well	34-089-2-4412-00-00

### Closed Loop Typical Description

A series of storage tanks that separate liquids and solids along with screen shakers, hydro cyclones, centrifuges and collection equipment (e.g., vacuum trucks, shale barges) may be on site. The wastes created are minimizes and transfer red off-site for disposal.

DMH 12/14/17

### **Drilling Additives**

Air mist system additives are commonly; Drilling Foam, Drilling Soap, and occasionally Shale Stabilizer (KCI).

### Synthetic Oil Based Additives

The base oil is the main ingredient, and it will run approx. 70% of the fluid volume, water will make up about 25%, the remaining 5% by volume will include a mixture of the following:

	- = 11/5/
ANCO Gel	Anco Mul P Office of Oil and Gas
Cottonseed Hulls	Anco Mul P Office of On
D294	Anco Mul S
Anco Bar	Anco Mul Thin DEC 15 2017
Petrogel 100	Anco Thunder Plug
Claytone	Anco Mul Thin Anco Thunder Plug Calcium Carbonate Wy Department of Cedar Fiber LCF Blend Environmental Projection
Lime	Cedar Fiber
Calcium Chloride	LCF Blend Environment
Anco Trol	Mica Fine
Base Oil (Kensol 48H)	Walnut Shell Med
Anco Mul Mod	Anco Drill A

### **Temporary and Permanent Seed Mix**

250 lbs. /acre

### Mix Details

Medium red clover	4%
Alsike clover	4%
Birds foot trefoil	5%
Forage tall fescue	45%
Forage perineal rye	20%
Annual rye	11%
Winter wheat	10%

Straw

DMH 12/14/17

Winter - 3 ton per acre

Summer - 2 ton per acre

Office of Oil and Gas

DEC 15 2017

WV Department of Environmental Profession

### **UIC WELLS and Landfills**

Disposal Location	Туре	Permit No.
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Short Creek Landfill –	Landfill	SWP-1034/WV0109517
Brooke County –	Landfill	SWF-1013/WV0109029
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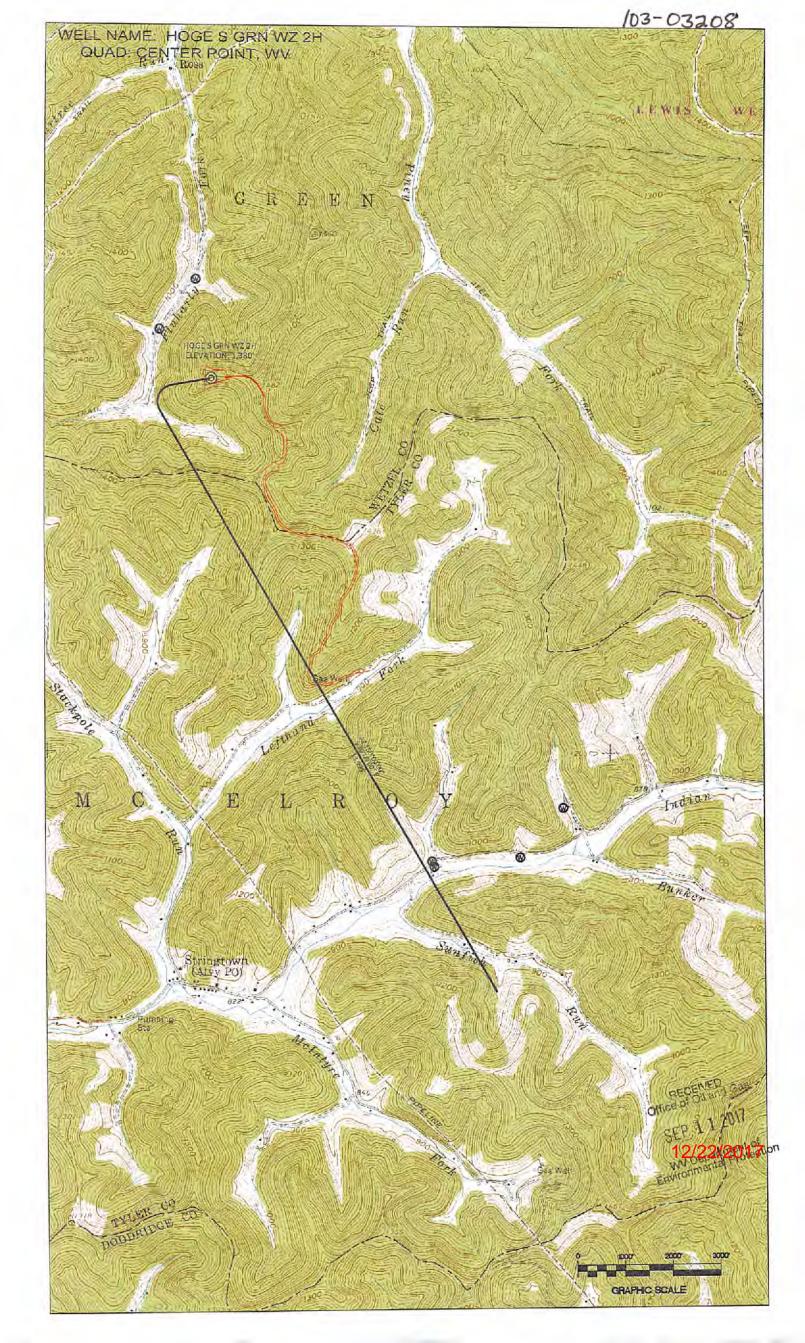
	Office of (	Mi C.
ANCO Gel		
Cottonseed Hulls	Anco Mul P DEC	15 2017
D294	Anco Mul P  Anco Mul S  Anco Mul Thin  Anco Thunder Plug Vironii  Calcium Carbonate M	THE WATER OF THE PARTY OF
Anco Bar	Anco Mul Thin	THE PROPOSITION
Petrogel 100	Anco Thunder Plug Nirofill	Strong St
Claytone	Calcium Carbonate M	Office of Oil and Gas
Lime	Cedar Fiber	
Calcium Chloride	LCF Blend	SEP 1 1 2017
Anco Trol	Mica Fine	WV Department of Environmental Protection
Base Oil (Kensol 48H)	Walnut Shell Med	Environmental Protection
Anco Mul Mod	Anco Drill A	

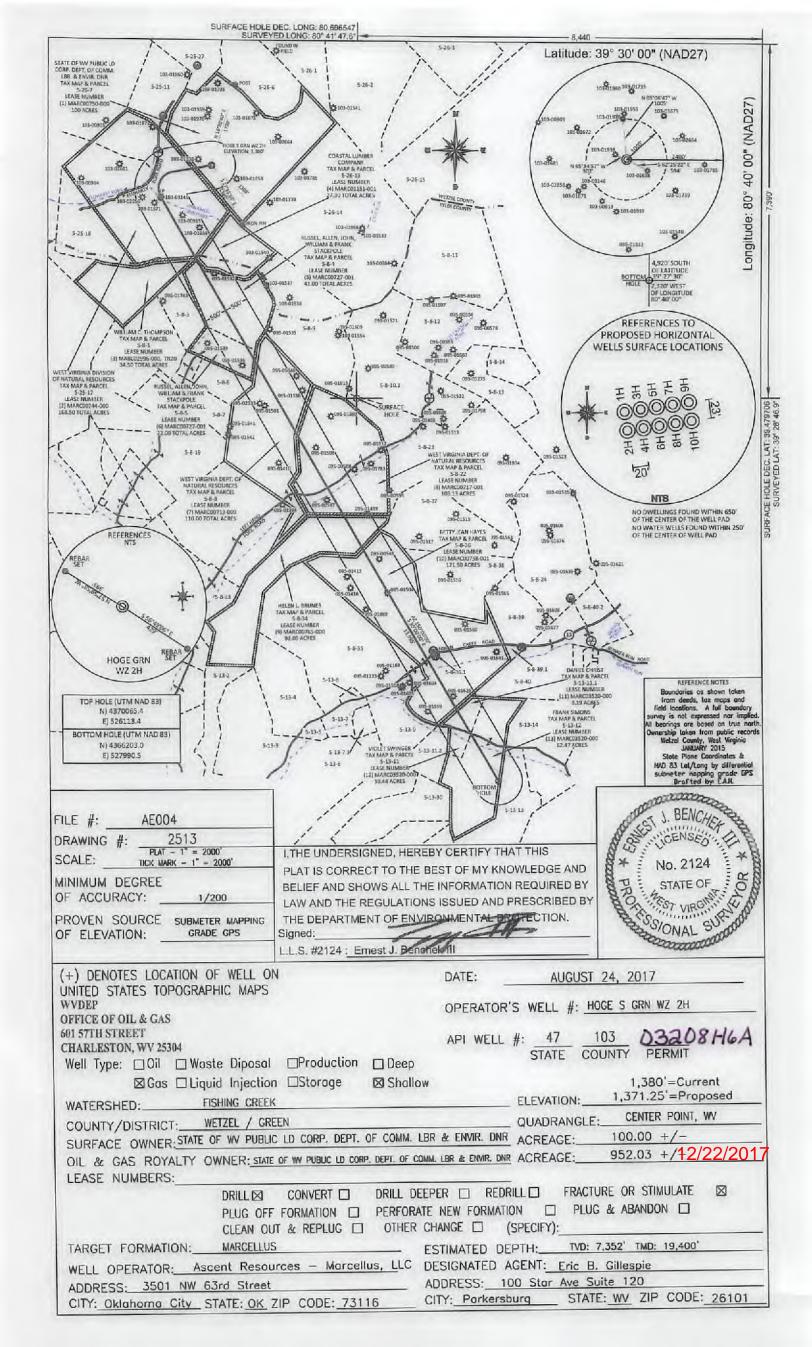
## 103-03208

# WATER WELLS WITHIN 3000'

## INTERNAL

Applicant / Well Operator Name:	Well (Farm) Name:		Well #: Serial #:
Ascent Resources - MARCELLUS, LLC	HOGE S GRN WZ		2H
	urface Owner or Water Purveyor with Water Supply v	vithin 3,000'	
1. YELLOW HOUSE SPORTSMAN CLUB (05-25-11)	1522 MAIN ST, WELLSBURG, WV 26070	(NAD 83 WV North)	39.482521,-80.700162
2. RICHARD HEIMBROD (05-25-7)	PO BOX 25, CLARINGTON, OH 43915	(NAD 83 WV North)	39.485363,-80.697558
<del></del>			
		Offic	RECEIVED be of Oil and Gas
			EP 1 1 2017
			V Department of onmental Protection
			12/22/2017
			17/7///11/





WW-6A1 (5/13)

### 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
Nu	mber	

Grantor, Lessor, etc.

Grantee, Lessee, etc.

Royalty

Book/Page

Please see attached.

### 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

Office of Oil and Gas

SEP 1 1 2017

WV Department of Environmental Protection

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: Ascent Resources - Marcellus, LLC

By:

Its:

Regulatory Analyst

Operator's Well No.

Höge 5 6RN W/ 211

### INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE Chapter 22, Article 6A, Section 5(a)(5) IN LIEU OF FILING LEASE(8) AND OTHER CONTINUING CONTRACT(S)

Under the earli 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 most of land is the same tract described in this Application, partly or wholly depetted 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:

Ascert Resources - Marcellus, LLC is the record title owner of the leases identified herein. Listed below each lease is the applicable chain of title by which Ascent Resources - Marcellus, LLC is the record title owner of the leases identified herein. Listed below each lease is the applicable chain of title by which Ascent Resources - Marcellus, LLC is the record title owner of the record title owner of the record of title owner of the record of the West Virginia Secretary of State, where cold documentation can be found.

	Parcel No.	Fee/Lease No.	Lessor/Assignor	Lassee/Assignee	Royalty/Instrument	Book/Page
1	5-26-7	MARC00750-000	M.H. Penick and C.C. Penick	South Penn Oil Company	1/8	47/214
		110111111111111111111111111111111111111	South Penn Oil Company	South Penn Natural Gas Company	Assignment	33A/455
			South Penn Natural Gas Company	South Penn Di Company	Assignment	215/478
			South Penn Oil Company	Ponnzoil Company	Cert of Name Change	WV Sec. of State record
			Pennzell Company	Fernizeii United, Inc.	Assignment	248/491
			Pennzoil United, Inc.	Personii Company	Cert. of Name Change	WV Sec. of State record
			Pennzol Company	Pennaoil Products Company	Assn & Supp Assn	319/397 & 322/577
			Penazos Products Company	Pennsoll Exploration and Production Company	Assignment	383/384
			Penezeil Exploration and Production Company	PennaEnergy Exploration and Production, L.L.C.	Cert of Merge:	12/177
	- 10		PennzEnergy Exploration and Production, L.L.C.	Devon Energy Production Company, 1 P.	Gest of Merger	12/278
			Deven Energy Production Company, L.P.	East Resources, Inc.	Asaignment	370/680
-			East Resources, Inc.	HG Energy, LLC	Assignment	118A/253
			East Resources, Inc. and HG Energy, LLC	American Energy - Marcellus, LLC	Assignment	153A/238
	,		American Energy - Marcellus, LLC	Ascent Resources - Mancellus, LLC	Cert. of Name Change	WV Sec. of State record:
2	5-25-17	MARC00744-000	William Fluharty and Martha Fluharty, his wife	S.A. Smith	1/8	47/60
		111111111111111111111111111111111111111	S A Smth	South Penn Dil Company	Assignment	47/92
			South Penn Oil Company	South Penn Natural Ges Company	Assignment	33A/455
			South Penn Natural Gas Company	South Penn Dil Company		215/478
					Assignment	
			South Penn Oil Company	Penszoli Company	Cert. of Name Change	WV Sec of State record
_			Pennani Company	Pennzoii United, Inc.	Assignment	246/491
_			Pennzall United, Inc.	Pennzeil Company	Cert. of Name Change	WV Sec. of State record
	-		Pennzoli Company	Pennzoli Products Company	Assn. J. Supp. Assn.	319/397 & 322/577
			Pensagil Products Company	Pennzell Exploration and Production Company	Assignment	363/384
			Penragil Exploration and Production Company	PerinzEnergy Exploration and Production, L.L.C.	Gert of Merger	12/177
9	1		Pernat nergy Exploration and Production, L.L.C.	Devon Energy Production Company, L.P.	Gert of Merger	12/278
			Devon Energy Production Company, L.P.	East Resources, Inc.	Assignment	370/580
			East Resources, Inc.	HG Energy, LLC	Assignment	115A/253
			East Resources, Inc. and HG Energy, LLC	American Energy - Marcellos, LLC	Assignment	153A/238
	1		American Energy - Marcellus, LLC	Ascent Resources - Marcellus, LLC	Cest, of Name Change	WV Sec. of State records
3	5-8-1	MARC02998-000 TR 20	W.V. Hoge, executor of the Isaac Hoge Estate	Urish Stackpole	Fee Interest	16/599
			Uriah Stackpole and A. B. Stackpole, his wife	South Penn Oil Company	Deed	25/211
			Unah Stackpole and A. B. Stackpole, his wife	L.R. Loams	Denc	30/205
			L. R. Loomis and Belle Looms, his wife	South Penn Oil Company	Depd	35/269
-			South Penn Oil Company	South Penn Natural Gas Company	Deed	114/1
	-		South-Penn Natural Gas Company	South Pann Oil Company	Deec	151/516
				Pennzoil Company	Cert of Name Change	WV Sec. of State records
_			South Penn Oil Company			
_			Pennzal Company	Pennizoil United, Inc.	Deed	178/221
_			Pennabil United, Inc.	Penozoli Company	Afficavit of Name Change	219/171
-			Pannzeil Company	Pennzeil Products Company	Deed	265/258 & 269/417
			Paradoli Producta Company	Fennzeil Exploration and Production Company	Assignment	325/178
			Pennzai Exploration and Production Company	PennzEnergy Exploration and Production, LLC.	Cert, of Merger	B/516
			PanraEnergy Exploration and Production, L.L.C.	Devon Energy Production Company, L P	Cert. of Merge:	B1576
			Devon Energy Production Company, L.P.	East Resources, Inc.	Deed	332/146
			East Resources, Inc.	HG Energy, LLC	Dead	379/419
-			East Resources, Inc. and HG Energy, LLC	American Energy - Marcellus, 1 . G	Deed	451/475
			American Energy - Marcellus, LLC	Ascent Resources - Marcellus, LLC	Cert, of Name Charge	WV Sec. of State records
4	5-25-13	MARC01131-001	Kormit McIntyre, et al	Pennacil Company	1/8	67A/87
			Pennzoii Company	Pennzul Products Company	Assn & Supp Assn.	319/397 & 322/577
			Pennzoll Products Company	Pennzoil Exploration and Production Company	Assignment	363/384
			Penagol Exploration and Production Company			
				PennzEnergy Exploration and Production, LLC.	Cert of Merger	12/177
	-		PannzEnergy Exploration and Production L.L.C.	PennzEnergy Exploration and Production, L.L.D.  Devon Energy Production Company, L.P.	Cert of Merger	12/177
_			PennzEnergy Exploration and Production, L.L.C.	Devon Energy Production Company, L.P.	Cert of Merger	12/278
			Devon Energy Production Company, L.P.	Deven Energy Production Company, L.P. East Resources, Inc.	Cert. of Merger Assignment	12/276 370/580
			Oevon Energy Production Company, L.P. East Resources, Inc.	Devon Energy Production Company, L.P. East Resources, Inc. HG Energy, LLC	Assignment Assignment	12/278 370/580 115A/253
			Devon Energy Production Company, L.P. East Resources. Inc. East Resources. Inc. and HG Energy, LLC	Deven Energy Production Company, L.P. East Resources, Inc. HS Energy LLC American Energy - Marcellus, LLC	Cert. of Merger Assignment Assignment Assignment	02/276 370/580 118A/253 153A/238
		MARCONTY	Devon Energy Production Company, L.P. East Resources, Inc. East Resources inc. and HG Energy, LLC American Energy - Marce las, LLC	Devon Energy Production Company, L.P. East Resources, Inc. HG Energy, LLC American Energy - Marcellus, LLC Ascent Resources - Marcellus, LLC	Cert. of Merger Assignment Assignment Assignment Cect. of Name Change	12/276 370/580 118A/253 153A/238 WV Sec. of State record
5	5-8-4 /	MARC00727-001	Devon Energy Production Company, L.P. East Resources, Inic East Resources inc and HG Energy, LLC Amenden Energy - Marcelas, LLC James H, Dawson and MA. Dawson, husband and wife	Devon Energy Production Company, L.P. East Resources, Inc. HG Energy LLC American Energy - Marcellus, LLC Ascent Resources - Marcellus, LLC W.R. McIntyre	Cert. of Merger Assignment Assignment Assignment Cert. of Name Change	12/276 370/580 118A/253 153A/238 WV Sec. of State record 23/526
5	5-8-4	MARC00727-001	Devon Energy Production Company, L.P. East Resources. Inc. East Resources. Inc. and HG Energy, LLC American Energy - Marcellas, LLC James H. Dawson and M.A. Dawson, husband and wife W. R. McIntyre	Deven Energy Production Company, L.P. East Resources, Inc. HS Energy LLC American Energy - Marcellus, LLC Ascerd Resources - Marcellus, LLC W.R. McIntyre South Penc Oil Company	Cert. of Merger Assignment Assignment Assignment Cect. of Name Change 1/8 Assignment	12/278 370/580 118A/253 155A/238 WV Sec. of State record 23/565
5	5-8-4	MARC00727-001	Oevon Energy Production Company, L.P. East Resources, Inc. East Resources, Inc. East Resources, Inc. American Energy - Marce las, LLC James H. Dawson and M.A. Dawson, husband and wife W. R. McIntyre South Penn Oil Company.	Devon Energy Production Company, L.P. East Resources, Inc. HG Energy LLC American Energy - Marcellus, LLC Ascent Resources - Marcellus, LLC W.R. Mointyre South Penn Of Company South Pann Natural Gas Company	Cert. of Merger Assignment Assignment Assignment Assignment Dect. of Name Change 1/8 Assignment Assignment	32/278 370/980 118A/253 159A/236 WV Sec. of State record 20/958 23/953 114/16
5	5-8-4 /	MARCD0727-001	Devon Energy Production Company, L.P. East Recourses. Inc. East Recourses in and HG Energy, LLC American Energy - Marce las, LLC James H. Dawson and M.A. Dawson, husband and wife W. R. McIntyre South Penn Oil Company, South Penn Natural Gas Dompany	Devon Energy Production Company, L. P. East Resources, Inc. HIS Energy, LLC American Energy - Marcellus, LLC Ascert Resources - Marcellus, LLC W.R. McIntyre South Penn Oil Company South Penn Oil Company South Penn Oil Company South Penn Oil Company	Cert. of Merger Assignment Assignment Assignment Cert. of Name Change 1/8 Assignment Assignment Assignment	12/278 370/580 118A/253 153A/230 WV Sec. of State record 20/566 23/563 11/4/16 151/518
5	5.8.4	MARC00727-001	Devon Energy Production Company, L.P. East Resources, Inic East Resources in and HG Energy, LLC American Energy - Marce las, LLC James H. Davison and M.A. Davison, husband and wife W.R. McIndyre South Penn Oil Company, South Penn Natural Cas Dompany South Penn Oil Company	Deven Energy Production Company, L.P. East Resources, Inc. HS Energy LLC American Energy - Marcellus, LLC Ascerd Resources - Marcellus, LLC W.R. McIntyre South Penn Oil Company South Penn Oil Company South Penn Oil Company Pennsol Company Pennsol Company	Cert of Merger Assignment Assignment Assignment Cert of Name Change 1/8 Assignment Assignment Assignment Cert of Name Change	12/276 370/580 118A/253 150A/230 WV Sec. of State record 20/563 21/476 151/518 WV Sec. of State record
5	5.8.4 /	MARC00727-001	Oevon Energy Production Company, L.P. East Resources, Inc. East Resources, Inc. East Resources, Inc. Dames H. Dawson and M.A. Dawson, husband and wife W. R. McIstyre South Penn Oil Company, South Penn Natural Cas Company South Penn Oil Company Perrezed Company Perrezed Company	Devan Energy Production Company, L.P. East Resources, Inc. HS Energy LLC American Energy - Marcellus, LLC Ascent Resources - Marcellus, LLC W.R. Mointyre South Penn Oil Company South Penn Oil Company South Penn Oil Company Pennacil Company Pennacil Company Pennacil Company Pennacil Company	Cert of Merger Assignment Assignment Assignment Assignment Cert of Name Change 1/8 Assignment Assignment Assignment Assignment Assignment Assignment Assignment Assignment	12/278 370/580 118A/253 153A/238 WV Sec. of State record 20/576 23/593 114/16 151/510 WV Sec. of State record
8	5-8-4 /	MARCD0727-001	Devon Energy Production Company, L.P. East Reacuress. Inc. East Rescurees. Inc. East Rescurees. Inc. and HG Energy, LLC American Energy - Marce last, LLC James H, Dawson and M.A. Dawson, husband and wife W. R. McIntyre South Penn Oil Company, South Penn Natural Cas Dompany, South Penn Oil Company Pernozal Company Percozal United, Inc.	Devon Energy Production Company, L.P. East Resources, Inc. HS Energy LLC American Energy - Marcellus, LLC Ascent Resources - Marcellus, LLC W.R. Mointyre South Peno Od Company South Penn Oil Company Pennos Company Pennos Company Pennos I Company	Cert. of Merger Assignment Assignment Assignment Assignment Ged. of Name Change 1/8 Assignment Assignment Assignment Cert. of Name Change  Example Change Assignment Cert. of Name Change Cert. of Name Change	12/278 370/580 118A/253 153A/236 WV Sec. of State record 20/563 23/563 114/16 151/518 WV Sec. of State record 178/221
5	584 /	MARC00727-001	Devon Energy Production Company, L.P. East Recourses, Inc. East Recourses in and HG Energy, LLC Amendon Energy - Marce las, LLC James H. Dawson and M.A. Dawson, husband and wife W.R. McIntyre South Penn Oil Company, South Penn Natural Cas Dompany South Penn Oil Company Pennsol Company Pennsol Company Pennsol Company	Deven Energy Production Company, L.P. East Resources, Inc. HS Energy LLC American Energy - Marcellus, LLC Ascerd Resources - Marcellus, LLC W.R. McIntyre South Penn Oil Company South Penn Oil Company Pennaci Company Pennaci United, Inc. Pennaci United, Inc. Pennaci Ormany	Cert of Merger Assignment Assignment Assignment Cert of Name Change 1/8 Assignment Assignment Assignment Assignment Cert of Name Change Assignment Cert of Name Change Assignment Cert of Name Change Assignment	32/276 370/880 118A/253 150A/230 WV Sec. of State record 20/953 11/4/16 151/51B WV Sec. of State record 178/221 WV Sec. of State record 260/258 & 269/417
5	5-8-4 /	MARC00727-001	Oevon Energy Production Company, E.P. East Resources, Inc. James H. Dawson and M.A. Dawson, husband and wife W.R. M.Mistyre South Penn Oil Company, South Penn Oil Company, South Penn Natural Cas Company South Penn Oil Company Perrezal Onland, Inc. Pennsol Company Pennsol Company Pennsol Company Pennsol Company Pennsol Company	Deven Energy Production Company, L.P. East Resources, Inc. HS Energy LLC American Energy - Marcellus, LLC Ascent Resources - Marcellus, LLC W.R. Mointyre South Peno Oil Company South Penn Oil Company South Penn Oil Company Pennacel Exploration and Production Company Pennacel Exploration and Production Company	Cert. of Merger Assignment Assignment Assignment Cert. of Namo Change 1/8 Assignment Assignment Assignment Assignment Cert. of Namo Change Assignment Assignment Assignment Assignment Assignment	32/278 370/580 118A/253 153A/236 WV Sec. of State record 20/526 20/593 11/40/16 151/518 WV Sec. of State record 178/221 WV Sec. of State record 265/258 & 269/417
5	5-8-4 /	MARCD0727-001	Devon Energy Production Company, L.P. East Resources. Inc James H. Dawson and M.A. Dawson, husband and wife W. R. Molistyne South Penn Oil Company. South Penn Natural Cas Dompany. South Penn Natural Cas Dompany Pennsol Company Pennsol Company Pennsol Company Pennsol Dowlets Company Pennsol Products Company Pennsol Products Company Pennsol Penducts Company	Devon Energy Production Company, L.P. East Resources, Inc. HG Energy, LLC American Energy - Marcellus, LLC Ascent Resources - Marcellus, LLC W.R. Mointyre South Penn Oil Company South Penn Oil Company Pennsol Company Pennsol United, Inc. Pennsol United, Inc. Pennsol United, Inc. Pennsol Sompany Pennsol English Sompany Pennsol English Sompany Pennsol English Sompany Pennsol Exploration and Production Company Pennsol Exploration and Production LL.C.	Cert of Merger Assignment Assignment Assignment Assignment Cert of Name Change 1/8 Assignment Assignment Assignment Cert of Name Change	12/278 370/980 118A/253 153A/238 WV Sec. of State record 20/958 114/16 151/519 WV Sec. of State record 178/221 WV Sec. of State record 265/258 8 269/417 325/728 8516
5	5-8-4 /	MARC00727-001	Devon Energy Production Company, L.P. East Recourses. Inc. East Recourses. Inc. East Recourses. Inc. East Recourses. Inc. American Energy - Marce last, LLC James H. Dawson and M.A. Dawson, husband and wife W. R. McIntyre South Penn Oil Company. South Penn Oil Company. South Penn Natural Gas Dompany. South Penn Natural Gas Dompany. Pennsal Company. Pennsal Company. Pennsal Company. Pennsal Company. Pennsal Company. Pennsal Energy Exploration and Production Company. Pennsal Energy Exploration and Production, LLC.	Deven Energy Production Company, L.P. East Resources, Inc. HS Energy LLC American Energy - Marcellus, LLC Ascerd Resources - Marcellus, LLC W.R. McIntyre South Penn Oil Company South Penn Oil Company Pennosi Company Pennosi Company Pennosi Company Pennosi Company Pennosi Company Pennosi Epistosia and Production Company Pennosi Epistosian and Production Company Pennosia Epistosian and Production LLC Devon Energy Excitoriston and Production LLC Devon Energy Production Company, L.P.	Cert. of Merger Assignment Assignment Assignment Cert. of Name Change 1/8 Assignment Assignment Assignment Assignment Cert. of Name Change Assignment Cert. of Merger Cert. of Merger Cert. of Merger	12/278 370/580 370/580 118A/253 150A/230 WV Sec. of State record 20/566 23/563 11/4/16 151/519 WV Sec. of State record 178/221 WV Sec. of State record 265/258 & 269/417 325/178 05/16 85/78
5	5-8-4	MARC00727-001	Devon Energy Production Company, L.P. East Resources. Inc James H. Dawson and M.A. Dawson, husband and wife W. R. Molistyne South Penn Oil Company. South Penn Natural Cas Dompany. South Penn Natural Cas Dompany Pennsol Company Pennsol Company Pennsol Company Pennsol Dowlets Company Pennsol Products Company Pennsol Products Company Pennsol Penducts Company	Deven Energy Production Company, L.P. East Resources, Inc. HS Energy LLC American Energy - Marcellus, LLC Ascent Resources - Marcellus, LLC W.R. Mointyre South Penn Oil Company South Penn Oil Company South Penn Oil Company Pennaci Company Pennaci Company Pennaci Company Pennaci Company Pennaci Company Pennaci Exploration and Production Company Pennaci Exploration and Production LL.C. Deven Energy Production Company, L.P. East Resources, Inc.	Gert of Merger Assignment Assignment Assignment Assignment Assignment Assignment Assignment Assignment Assignment Cert of Name Change Assignment Cert of Name Change Assignment Cert of Name Change Assignment Cert of Mame Change Assignment Cert of Merger Cert of Merger Cert of Merger Assignment	12/278 370/580 118A/253 155A/230 WV Sec. of State record 23/526 23/503 11/4/16 151/518 WV Sec. of State record 178/221 WV Sec. of State record 256/258 256/417 256/258 256/417 8516 8558 332/146
5	5-8-4 /	MARC00727-001	Devon Energy Production Company, L.P. East Recourses. Inc. East Recourses. Inc. East Recourses. Inc. East Recourses. Inc. American Energy - Marce last, LLC James H. Dawson and M.A. Dawson, husband and wife W. R. McIntyre South Penn Oil Company. South Penn Oil Company. South Penn Natural Gas Dompany. South Penn Natural Gas Dompany. Pennsal Company. Pennsal Company. Pennsal Company. Pennsal Company. Pennsal Company. Pennsal Energy Exploration and Production Company. Pennsal Energy Exploration and Production, LLC.	Devon Energy Production Company, L.P. East Resources, Inc. HIS Energy, LLC American Energy - Marcellus, LLC Ascent Resources - Marcellus, LLC W.R. Mointyre South Penn Oil Company South Penn Oil Company Pennaci Products Company Pennaci Exploration and Production Company Pennacing Products Company Pennacing Products Company Pennacing Production and Production LL.C. Devon Energy Production Company, L.P. East Resources, Inc. HIS Energy LLC	Gert of Merger Assignment Assignment Assignment Assignment Use of Name Change Use Assignment Assignment Assignment Assignment Assignment Cert of Name Change Assignment Cert of Name Change Assignment Cert of Mare Change Assignment Cert of Mare Change Assignment Cert of Merger Cert of Merger Assignment Assignment Assignment	12/278 370/580 118A/253 115A/233 115A/233 155A/238 WV Sec. of State record 23/556 23/563 114/16 151/516 WV Sec. of State record 178/221 WV Sec. of State record 26/528 & 269/417 26/528 & 269/417 32/51/8 8/578 32/51/8 32/51/8 33/51/8
5	5.8.4 /	MARC00727-001	Oevon Energy Production Company, L.P. East Recoveroes, Inc. American Energy - Marce lus, LLC James H. Dawson and M.A. Dawson, husband and wife W. R. Michalyne South Penn Oil Company South Penn Oil Company South Penn Oil Company Pernoad Company Pernoad Company Pernoad Company Pernoad Company Pennoad Products Company Pennoad Exploration and Freduction Company Pennoad Exploration and Production, L.L.C. Devon Energy Productor Company, L.P.	Deven Energy Production Company, L.P. East Resources, Inc. HS Energy LLC American Energy - Marcellus, LLC Ascent Resources - Marcellus, LLC W.R. Mointyre South Penn Oil Company South Penn Oil Company South Penn Oil Company Pennaci Company Pennaci Company Pennaci Company Pennaci Company Pennaci Company Pennaci Exploration and Production Company Pennaci Exploration and Production LL.C. Deven Energy Production Company, L.P. East Resources, Inc.	Gert of Merger Assignment Assignment Assignment Assignment Assignment Assignment Assignment Assignment Assignment Cert of Name Change Assignment Cert of Name Change Assignment Cert of Name Change Assignment Cert of Mame Change Assignment Cert of Merger Cert of Merger Cert of Merger Assignment	12/278 370/580 118A/253 155A/250 WV Sec. of State record 23/526 23/563 11/4/16 151/518 WV Sec. of State record 178/221 WV Sec. of State record 256/528 256/417 256/528 256/417 855/6 332/146
5	5.8.4	MARC00727-001	Devon Energy Production Company, L.P. East Resources. Inc. East Resources. Inc. East Resources. Inc. East Resources. Inc. American Energy - Marce las, LLC James H. Dawson and M.A. Dawson, husband and wife W. R. McIntyre South Penn Oil Company South Penn Natural Gas Dompany South Penn Oil Company Pernoal Company Pernoal Company Pernoal Company Pernoal Essistant Company Pennoal Ess	Devon Energy Production Company, L.P. East Resources, Inc. HIS Energy, LLC American Energy - Marcellus, LLC Ascent Resources - Marcellus, LLC W.R. Mointyre South Penn Oil Company South Penn Oil Company Pennaci Products Company Pennaci Exploration and Production Company Pennacing Products Company Pennacing Products Company Pennacing Production and Production LL.C. Devon Energy Production Company, L.P. East Resources, Inc. HIS Energy LLC	Gert of Merger Assignment Assignment Assignment Assignment Use of Name Change Use Assignment Assignment Assignment Assignment Assignment Cert of Name Change Assignment Cert of Name Change Assignment Cert of Mare Change Assignment Cert of Mare Change Assignment Cert of Merger Cert of Merger Assignment Assignment Assignment	12/278 370/880 118A/253 150A/230 WV Sec. of State record 23/963 114/16 151/519 WV Sec. of State record 178/221 WV Sec. of State record 269/258 & 269/417 325/178 8518 8578 332/146 379/480
	5-8-4	MARCO0727-001  MARCO0727-001	Oevon Energy Production Company, L.P. East Resources, Inc. American Energy - Marce lus, LLC James H. Dawson and M.A. Dawson, husband and wife W. R. Michalyse South Penn Oil Company South Penn Oil Company South Penn Oil Company Pernoad Company Pernoad Company Pernoad Company Pernoad Company Pernoad Company Pennoad Exploration and Froduction Company Pennoad Exploration and Froduction Company Pennoad Exploration and Production, L.L.C. Devon Energy Production Company, L.P. East Resources, Inc.	Deven Energy Production Company, L.P. East Resources, Inc. HS Energy LLC American Energy - Marcellus, LLC Ascerd Resources - Marcellus, LLC W.R. McIntyre South Penn Oil Company South Penn Oil Company South Penn Oil Company Pennosi Company Pennosi Company Pennosi Company Pennosi Company Pennosi Energy - Marcellus - Company Pennosi Energy - Marcellus - Company Pennosi Energy Excloration and Production Company Pennosi Energy Excloration Company - Pennosi Energy Production Company Pennosi Energy Production Company - Pennosi Energy - Marcellus - LLC American Energy - Marcellus - LLC American Energy - Marcellus - LLC	Cert of Merger Assignment Assignment Assignment Cert of Name Chance 1/8 Assignment Assignment Assignment Assignment Assignment Cert of Name Change Assignment Cert of Name Change Assignment Cert of Name Change Assignment Cert of Merger Assignment Cert of Merger Cert of Merger Assignment Assignment Assignment Assignment Assignment Assignment	12/278 370/880 370/880 118A/253 150A/230 WV Sec. of State record 15/15/16 WV Sec. of State record 15/15/16 WV Sec. of State record 178/221 WV Sec. of State record 265/258 & 269/417 325/178 85/18 85/18 332/146 379/480 45/1004
5			Devon Energy Production Company, L.P. East Resources. Inc. East Resources. Inc. East Resources. Inc. East Resources. Inc. American Energy - Marcelas, L.C. James H. Dawson and M.A. Dawson, husband and wife W. R. McIntyre South Penn Oil Company. South Penn Natural Gas Dompany. South Penn Natural Gas Dompany. Penntal Company Penntal Company Penntal Company Penntal Products Company Penntal Products Company Penntal Exploration and Freduction Company. Penntal Exploration and Production. L.L.C. Devon Energy Productor Company. L.P. East Resources. Inc. And HG Energy, L.D.	Deven Energy Production Company, L.P. East Resources, Inc. HS Energy LLC American Energy - Marcellus, LLC Ascent Resources - Marcellus, LLC  W.R. Meintyre South Penn Oil Company South Penn Oil Company South Penn Oil Company Pennaci Company Pennaci Company Pennaci Company Pennaci Company Pennaci Company Pennaci Exploration and Production Company Pennaci Exploration and Production Company Pennaci Exploration and Production LL.C. Deven Energy Paduction Company, L.P. East Resources, Inc. HIS Emergy LLC American Energy - Marcellus, LLC Ascont Resources - Marcellus, LLC Ascont Resources - Marcellus, LLC Ascont Resources - Marcellus, LLC	Cert. of Merger Assignment Assignment Assignment Cert. of Name Change 1/8 Assignment Assignment Assignment Cert. of Name Change Assignment Cert. of Name Change Assignment Cert. of Name Change Assignment Cert. of Merger Cert. of Merger Assignment Assignment Assignment Cert. of Merger	12/278 370/580 118A/253 1150A/230 118A/253 150A/230 WV Sec. of State record 15/518 WV Sec. of State record 15/518 WV Sec. of State record 25/528 & 259/417 255/258 & 259/417 35/16 8/578 332/146 379/450 45/1/041 WV Sec. of State record
			Devon Energy Production Company, L.P. East Resources. Inc. East Resources. Inc. East Resources. Inc. and HG Energy, LLC Amenon Energy - Marcelus, LLC James H. Dawson and M.A. Dawson, husband and wife W. R. Molistyne South Penn Oil Company South Penn Oil Company Penned Company Penned Company Penned Company Penned Company Penned Excloration and Production Company Penned Excloration and Production Company Penned Products Company Pennesser Excloration and Production, L.L.C. Devon Energy Production Company, L.P. East Resources, Inc. and HG Energy, LLC Amenon Energy - Marcelus, LLC James H. Dawson and M.A. Dawson, husband and wife W. R. Meintyre	Deven Energy Production Company, L.P. East Resources, Inc. HS Energy LLC American Energy - Marcellus, LLC Ascerd Resources - Marcellus, LLC W.R. McIntyre South Penn Oil Company South Penn Oil Company Pennosi Company Pennosi Company Pennosi Company Pennosi Company Pennosi Company Pennosi Energy - Marcellus - Company Pennosi Englished - Company U.C. Ascent Resources - Marcellus, LLC W.R. McIntyre South Penn Oil Company	Cert of Merger Assignment Assignment Assignment Cert of Name Change 1/8 Assignment Assignment Assignment Assignment Assignment Cert of Name Change Assignment Cert of Name Change Assignment Cert of Name Change Assignment Cert of Merger Cert of Merger Cert of Merger Cert of Merger Assignment Assignment Assignment Assignment Assignment Cert of Name Change	12/278 370/580 118A/253 115A/253 115A/253 155A/258 WV Sec. of State record 20/526 20/593 114/16 151/516 WV Sec. of State record 26/528 & 269/417 26/528 & 269/417 325/128 8516 8578 332/146 379/480 45/1404 WV Sec. of State record
			Oevon Energy Production Company, L.P. East Resources, Inc. American Energy - Marcellus, LLC James H. Dawson and M.A. Dawson, husband and wife W. R. Michalyse South Penn Oil Company South Penn Oil Company South Penn Oil Company Pernoad Company Pernoad Company Pernoad Company Pernoad Company Pernoad Company Pennoad Exploration and Froduction Company Pennoad Exploration and Froduction Company Pennoad Exploration and Froduction, L.L.C. Devon Energy Production Company L.P. East Resources, Inc. East Resources, Inc. East Resources, Inc. Lames H. Dawson and M.A. Dawson, husband and wife W. R. McIntyre South Penn Oil Company South Penn Oil Company	Deven Energy Production Company, L.P. East Resources, Inc. HIS Energy LLC American Energy - Marcellus, LLC Ascent Resources - Marcellus, LLC W.R. McIntyre South Penn Oil Company South Penn Oil Company South Penn Oil Company Pennosi United, Inc. Pennosi United, Inc. Pennosi United, Inc. Pennosi Company Pennosi Products Company Pennosi Exploration and Production Company Pennosi Exploration and Production LLC. Deven Energy Exploration Company, L.P. East Resources, Inc. HIS Energy LLC American Energy - Marcellus, LLC Ascent Resources - Marcellus, LLC W.R. McIntyre South Penn Natural Sas Company South Penn Natural Sas Company	Cert. of Merger Assignment Assignment Assignment Cert. of Name Change 1/8 Assignment Assignment Assignment Cert of Name Change Assignment Cert of Name Change Assignment Cert. of Name Change Assignment Cert. of Merger Assignment Cert. of Merger Assignment Cert. of Merger Assignment Cert. of Merger Assignment Assignment Assignment Cert. of Name Change 1/8 Assignment Assignment Assignment	12/278 370/580 118A/253 1150A/230 118A/253 150A/230 WV Sec. of State record 1551/518 WV Sec. of State record 178/221 WV Sec. of State record 255/258 & 259/417 255/258 & 259/417 332/146 379/450 451/404 WV Sec. of State record 28/528 & 259/417
			Devon Energy Production Company, L.P. East Resources, Inc. East Resources, Inc. East Resources, Inc. East Resources, Inc. American Energy - Marcellas, LLC James H. Dawson and M.A. Dawson, husband and wife W. R. Mchabye South Penn Oil Company South Penn Oil Company South Penn Oil Company Pernoal Company Pernoal Company Pernoal Company Pernoal Company Pennoal Exploration and Production Company Pennoal Exploration and Production Company Pennoal Exploration and Production LLC Devon Energy Production Company, L.P. East Resources, Inc. East Resources, Inc. and HG Energy, LEC American Energy - Marcellas LLC James H. Dawson and M.A. Dawson, husband and wife VI. R. Mcintyre South Penn Oil Company South Penn Oil Company South Penn Oil Company	Deven Energy Production Company, L.P. East Resources, Inc. HS Energy LLC American Energy - Marcellus, LLC Ascent Resources - Marcellus, LLC W.R. Mointyre South Penn Oil Company South Penn Oil Company South Penn Oil Company Pennsol Company Pennsol Company Pennsol Company Pennsol Company Pennsol Company Pennsol Exploration and Production Company Pennsol Exploration and Production LLC Deven Energy Excloration and Production LLC Deven Energy Production Company, L.P. East Resources, Inc. HS Energy LLC American Energy - Marcellus, LLC Ascent Resources - Marcellus, LLC Ascent Resources - Marcellus, LLC South Penn Oil Company South Penn Oil Company South Penn Natural Sas Company South Penn Natural Sas Company South Penn Natural Sas Company	Cert of Merger Assignment Assignment Assignment Cert of Name Change 1/8 Assignment Assignment Assignment Assignment Assignment Cert of Name Change Assignment Cert of Name Change Assignment Cert of Name Change Assignment Cert of Merger Cert of Merger Cert of Merger Cert of Merger Assignment Assignment Assignment Assignment Assignment Cert of Name Change	12/278 370/580 118A/253 155A/238 WV Sec. of State record 20/526 20/503 114/16 151/518 WV Sec. of State record 255/258 269/47 255/258 269/47 255/258 269/47 325/46 379/450 457/404 WV Sec. of State record 255/258 269/47 325/46 379/450 332/146 379/450 457/404 WV Sec. of State record 255/258 269/404 14/46 151/516
			Devon Energy Production Company, L.P. East Recourses. Inc. East Recourses. Inc. Bast Recourses. Inc. and HG Energy, LLC American Energy - Marcelas, LLC James H. Dawson and M.A. Dawson, husband and wife W. R. McIntyre South Penn Oil Company South Penn Natural Cast Dompany South Penn Oil Company Pennsol Company Pennsol United, Inc. Pennsol Company Pennsol Company Pennsol Exclaration and Production Company Pennsol Pennsol Company Pennsol Pennsol Company Pennsol Pennsol Company Pennsol Exclaration and Production Company Pennsol Exclaration and Production, L.L.C. Devon Energy Exponation and Production, L.L.C. East Resources, Inc. and HG Energy, LLD American Energy - Marcelas, LLC James H. Dawson and M.A. Dawson, husband and wife W. R. McIntyre South Penn Oil Company	Deven Energy Production Company, L.P. East Resources, Inc. HS Energy LLC American Energy - Marcellus, LLC Ascerd Resources - Marcellus, LLC Ascerd Resources - Marcellus, LLC W.R. McIntyre South Penn Oil Company South Penn Oil Company Pennacel Unided, Inc. Pennacel Company Pennacel Unided, Inc. Pennacel Company Pennacel Exploration and Production Company Pennacel Exploration and Production Company Pennacel Exploration on the Production LLLC. Devon Energy Production Company, L.P. East Resources, Inc. HISE Energy LLC American Energy - Marcellus, LLC Ascent Resources - Marcellus, LLC W.R. McIntyre South Penn Oil Company South Penn Natural Sas Company Ponnacel Company Ponnacel Company Ponnacel Company Ponnacel Company	Cert of Merger Assignment Assignment Assignment Cert of Name Change 1/8 Assignment Assignment Assignment Assignment Assignment Assignment Cert of Name Change Assignment Cert of Name Change Assignment Cert of Name Change Assignment Cert of Merger Cert of Merger Cert of Merger Assignment Cert of Name Change	12/278 370/880 118A/253 150A/230 WV Sec. of State record 155/15/16 WV Sec. of State record 178/221 WV Sec. of State record 178/221 WV Sec. of State record 269/258 & 269/417 325/178 85/18 85/18 332/146 379/480 45/10/4 WV Sec. of State record 289/258 & 269/417 325/178 332/146 379/480 45/10/4 WV Sec. of State record 289/268 114/16 15/15/16 WV Sec. of State record
			Oevon Energy Production Company, L.P. East Resources, Inc. American Energy - Marce lus, LLC James H. Dawson and M.A. Dawson, husband and wife W. R. Michighe South Penn Oil Company South Penn Oil Company South Penn Oil Company Pennical Company Pennical Company Pennical Company Pennical Englands and Freduction LLC Devon Energy Production Company, L.P. East Resources, Inc. East Resources, I	Deven Energy Production Company, L.P. East Resources, Inc. HS Energy LLC American Energy - Marcellus, LLC Ascent Resources - Marcellus, LLC Ascent Resources - Marcellus, LLC W.R. McIntyre South Penn Oil Company South Penn Oil Company South Penn Oil Company Pennosi United, Inc. Pentroli Company Pennosi United, Inc. Pentroli Company Pennosi United, Inc. Pentroli Company Pennosi Exploration and Production Company Pennosi Exploration and Production LL.C. Deven Energy Poduction Company, L.P. East Resources, Inc. HIS Emergy LLC American Energy - Marcellus, LLC Ascent Resources - Marcellus, LLC Ascent Resources - Marcellus, LLC South Penn Oil Company South Penn Oil Company South Penn Oil Company Pennosi United, Inc.	Cert. of Merger Assignment Assignment Assignment Cert. of Name Change 1/8 Assignment Assignment Assignment Assignment Cert. of Name Change Assignment Cert. of Name Change Assignment Cert. of Name Change Assignment Cert. of Merger Cert. of Merger Assignment Assignment Cert. of Merger Assignment	12/278 370/580 118A/253 1150A/230 WV Sec. of State record 12/356 23/593 11/47/6 151/51B WV Sec. of State record 256/258 \$ 259/417 325/478 8516 8578 332/146 379/450 45/404 WV Sec. of State record 28/358 11/47/6 151/51B WV Sec. of State record 28/358 11/47/6 151/516 WV Sec. of State record
			Devon Energy Production Company, L.P. East Resources, Inc. East Resources, Inc. East Resources, Inc. and HG Energy, LLC American Energy - Marcellas, LLC James H. Dawson and M.A. Dawson, husband and wife W. R. Mchalye South Penn Oil Company South Penn Oil Company South Penn Oil Company Pernoal Company Pernoal Company Pernoal Company Pernoal Company Pennoal Company Pennoal Exploration and Production Company Pennoal Exploration and Production Company Pennoal Exploration and Production LLC Devon Energy Production Company L.P. East Resources, Inc. East Resources, Inc. and HG Energy, LEC American Energy - Marcellas LLC James H. Dawson and M.A. Dawson, husband and wife W. R. Mcintyre South Pern Oil Company South Pern Oil Company South Pern Oil Company Pennoal Company Pennoal Company Pennoal United, Inc.	Desen Energy Production Company, L.P. East Resources, Inc. HS Energy LLC American Energy - Marcellus, LLC Accord Resources - Marcellus, LLC Accord Resources - Marcellus, LLC W.R. McIntyre South Penn Oil Company South Penn Oil Company Pennack United, Inc. Pennack Company Pennack United, Inc. Pennack Company Pennack Exploration and Production Company Pennack Exploration and Production LLC. Desen Energy Production Company, L.P. East Resources, Inc. HSS Energy LLC American Energy - Marcellus, LLC Ascord Resources - Marcellus, LLC W.R. McIntyre South Penn Natural Gas Company South Penn Natural Gas Company Pennack Oil Company Pennack Oil Company Pennack Company Pennac	Cert. of Merger Assignment Assignment Assignment Cert. of Name Change 1/8 Assignment Assignment Assignment Assignment Assignment Assignment Cert. of Name Change Assignment Assignment Cert. of Name Change Assignment Cert. of Merger Cert. of Merger Cert. of Merger Assignment	32/278 370/980 118A/253 153A/230 WV Sec. of State record 20/526 20/993 114/16 151/518 WV Sec. of State record 26/528 26/94/17 26/528 26/94/17 8/516 8/576 332/146 379/450 45/1404 WV Sec. of State record 26/528 16/60/17 8/576 332/146 379/450 45/1404 WV Sec. of State record 178/221 WV Sec. of State record
			Oevon Energy Production Company, L.P. East Readwoods. Inc. East Readwoods. Inc. East Readwoods. Inc. and HG Energy, LLC Amenden Energy - Marce Res, LLC James H. Dawson and M.A. Dawson, husband and wife W. R. Michighe South Penn Oil Company. South Penn Oil Company. South Penn Oil Company Pernoal Company Pernoal Company Pernoal Company Pernoal Company Pennoal Company Pennoal Excitation and Froduction L.L.C. Devon Energy Production Company, L.P. East Resources, Inc. East Resources, Inc. Lams H. Dawson and HG Energy, LLC Amendan Energy - Marcellis, LLC James H. Dawson and M.A. Dawson, husband and wife W. R. Meintyre South Pern Oil Company South Pern Oil Company Pennoal Company Pennoa	Deven Energy Production Company, L.P. East Resources, Inc. HS Energy LLC American Energy - Marcellus, LLC Accord Resources - Marcellus, LLC Accord Resources - Marcellus, LLC W.R. McIntyre South Penn Oil Company South Penn Oil Company Pennacel Unided, Inc. Pennacel Company Pennacel Unided, Inc. Pennacel Company Pennacel Exploration and Production Company Pennacel Exploration and Production Company Pennacel Exploration and Production LLLC. Devon Energy Production Company, L.P. East Resources, Inc. HISE Energy, LLC American Energy - Marcellus, LLC Ascont Resources - Marcellus, LLC W.R. McIntyre South Penn Natural Sas Company Ponnacel Company Ponnacel Company Pennacel Products Company Pennacel Product	Cert of Merger Assignment Cert of Name Change Assignment Cert of Name Change Assignment Cert of Name Change Assignment Cert of Merger Cert of Merger Cert of Merger Assignment Cert of Name Change  1/8 Assignment Cert of Name Change	12/278 370/880 118A/253 150A/230 WV Sec. of State record 158/256 23/963 114/16 151/510 WV Sec. of State record 178/221 WV Sec. of State record 269/256 & 269/417 325/178 332/146 379/450 457/404 WV Sec. of State record 2805/26 & 269/417 31/978 32/978 332/9
			Devon Energy Production Company, L.P. East Resources, Inc. East Resources, Inc. East Resources, Inc. and HG Energy, LLC American Energy - Marcellas, LLC James H. Dawson and M.A. Dawson, husband and wife W. R. Mchalye South Penn Oil Company South Penn Oil Company South Penn Oil Company Pernoal Company Pernoal Company Pernoal Company Pernoal Company Pennoal Company Pennoal Exploration and Production Company Pennoal Exploration and Production Company Pennoal Exploration and Production LLC Devon Energy Production Company L.P. East Resources, Inc. East Resources, Inc. and HG Energy, LEC American Energy - Marcellas LLC James H. Dawson and M.A. Dawson, husband and wife W. R. Mcintyre South Pern Oil Company South Pern Oil Company South Pern Oil Company Pennoal Company Pennoal Company Pennoal United, Inc.	Desen Energy Production Company, L.P. East Resources, Inc. HS Energy LLC American Energy - Marcellus, LLC Accord Resources - Marcellus, LLC Accord Resources - Marcellus, LLC W.R. McIntyre South Penn Oil Company South Penn Oil Company Pennack United, Inc. Pennack Company Pennack United, Inc. Pennack Company Pennack Exploration and Production Company Pennack Exploration and Production LLC. Desen Energy Production Company, L.P. East Resources, Inc. HSS Energy LLC American Energy - Marcellus, LLC Ascord Resources - Marcellus, LLC W.R. McIntyre South Penn Natural Gas Company South Penn Natural Gas Company Pennack Oil Company Pennack Oil Company Pennack Company Pennac	Cert. of Merger Assignment Assignment Assignment Cert. of Name Change 1/8 Assignment Assignment Assignment Assignment Assignment Assignment Cert. of Name Change Assignment Assignment Cert. of Name Change Assignment Cert. of Merger Cert. of Merger Cert. of Merger Assignment	12/278 370/580 118A/253 155A/238 WV Sec. of State record 23/526 23/593 11-0106 151/518 WV Sec. of State record 26/528 26/6417 26/528 26/6417 85/16 85/16 85/16 85/16 332/146 32/146 32/146 32/146 32/146 32/146 32/146 32/146 32/146 32/146 32/146 32/

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			Devon Energy Production Company, L.P.	East Resources, Inc.	Assignment	332/146
			East Resources, Inc.	HG Energy, LLC	Assignment	379/480
			East Resources, Inc. and HG Energy, LLC	American Energy - Marcellus, LLC	Assignment	451/404
	7		American Energy - Marcellus, LLC	Ascent Resources - Mercellus, LLC	Cert. of Name Change	WV Sec. of State records
7	5-8-8	MARC00713-000	Jasper Lemasters and Mary Lemasters, his wife	South Penn Oil Company	1/8	23/6
			South Penn Oil Company	South Penn Natural Gas Company	Assignment	114/16
			South Penn Natural Gas Company	South Penn Oil Company	Assignment	151/516
			South Penn Oil Company	Pennzoil Company	Cert. of Name Change	WV Sec. of State records
			Pennzoii Company	Pennzoil United, Inc.	Assignment	178/221
			Pennzoil United, Inc.	Pennzoil Company	Cert. of Name Change	WV Sec. of State records
			Pennzoil Company	Pennzoil Products Company	Assn. & Supp. Assn.	265/258 & 269/417
			Pennzoil Products Company	Pennzoil Exploration and Production Company	Assignment	325/178
-			Penazoii Exploration and Production Company PenazEnergy Exploration and Production, L.L.C.	PennzEnergy Exploration and Production, L.L.C.	Cert. of Memer	8/516
			Devon Energy Production Company, L.P.	Devon Energy Production Company, L.P. East Resources, Inc.	Cert. of Merger	8/576
			East Resources, Inc.	HG Energy, LLC	Assignment Assignment	332/148 379/480
			East Resources, Inc. and HG Energy, LLC	American Energy - Marcellus, LLC	Assignment	451/404
			American Energy - Marcellus, LLC	Ascent Resources - Marcellus, LLC	Cert. of Name Change	WV Sec. of State records
8	5-8-22	MARC00717-001	A.D. Lemasters and Mary Lemasters, husband and wife	South Penn Oil Company	1/8	23/100
			South Penn Oil Company	South Penn Natural Gas Company	Assignment	114/16
			South Penn Natural Gas Company	South Penn Oil Company	Assignment	151/516
			South Penn Oil Company	Pennzoii Company	Cert. of Name Change	WV Sec. of State records
			Pennzoil Company	Pennzoil United, Inc.	Assignment	178/221
			Pennzoil United, Inc.	Pennzoil Company	Cert. of Name Change	WV Sec. of State records
			Pennzoil Company	Pennzoii Products Company	Assn. & Supp. Assn.	265/258 & 269/417
			Pennzoil Products Company	Pennzoil Exploration and Production Company	Assignment	325/178
			Pennzoil Exploration and Production Company PennzEnergy Exploration and Production, L.L.C.	PennzEnergy Exploration and Production, L.L.C.	Cert. of Merger	8/516 8/576
			Devon Energy Production Company, L.P.	Devon Energy Production Company, L.P. East Resources, Inc.	Cert. of Merger Assignment	332/146
		· · · · · · · · · · · · · · · · · · ·	East Resources, Inc.	HG Energy, LLC	Assignment	379/480
			East Resources, Inc. and HG Energy, LLC	American Energy - Marcellus, LLC	Assignment	451/404
			American Energy - Marcellus, LLC	Ascent Resources - Marcellus, LLC	Cart. of Name Change	WV Sec. of State records
9	5-8-34	MARC00765-000	Charles Clifton Penick and Mary H. Penick his wife	Brooke Gas Company	1/8	30/292
			Brooke Gas Company	Two Brothers Oil Company	Assignment	30/594
			Brooke Gas Company	South Penn Oil Company	Assignment	30/627
			Two Brothers Oil Company	South Penn Oil Company	Assignment	35/535
			South Penn Oil Company	South Penn Natural Gas Company	Assignment	114/16
			South Penn Natural Gas Company	South Penn Oil Company	Assignment	151/516
			South Penn Oil Company	Pennzoil United, Inc.	Cert. of Name Change Assignment	WV Sec. of State records 178/221
	_		Pennzoil United, Inc.	Pennzoii Company	Cert. of Name Change	WV Sec. of State records
			Pennzoil Company	Pennzoli Products Company	Assn. & Supp. Assn.	265/258 & 269/417
			Pennzoil Products Company	Pennzoil Exploration and Production Company	Assignment	325/178
			Pennzoil Exploration and Production Company	PennzEnergy Exploration and Production, L.L.C.	Cert. of Merger	8/516
			PennzEnergy Exploration and Production, L.L.C.	Devon Energy Production Company, L.P.	Cert, of Merger	8/576
			Devon Energy Production Company, L.P.	East Resources, Inc.	Assignment	332/146
			East Resources, Inc.	HG Energy, LLC	Assignment	379/480
			East Resources, Inc. and HG Energy, LLC	American Energy - Marcellus, LLC	Assignment	451/404
	/\		American Energy - Marcellus, LLC	Ascent Resources - Marcellus, LLC	Cert. of Name Change	WV Sec. of State records
10	5-8-36	MARC00738-001	F.R. Ball	South Penn Oil Company	1/8 Assignment	27/309 114/16
			South Penn Oil Company South Penn Natural Gas Company	South Penn Natural Gas Company South Penn Oil Company	Assignment Assignment	151/516
			South Penn Oil Company	Pennzoil Company	Cert. of Name Change	WV Sec. of State records
-+			Pennzoil Company	Pennzoil United, Inc.	Assignment	178/221
<del>- i</del>			Pennzoil United, Inc.	Pennzoil Company	Cert. of Name Change	WV Sec. of State records
			Pennzoil Company	Pennzoil Products Company	Assn, & Supp. Assn.	265/258 & 269/417
1			Pennzoii Products Company	Pennzoil Exploration and Production Company	Assignment	325/178
			Pennzoil Exploration and Production Company	PennzEnergy Exploration and Production, L.L.C.	Cert. of Merger	8/516
			PennzEnergy Exploration and Production, L.L.C.	Devon Energy Production Company, L.P.	Cert. of Merger	8/576
			Davon Energy Production Company, L.P.	East Resources, Inc.	Assignment	332/146
			East Resources, Inc.	HG Energy, LLC	Assignment	379/480 451/404
			East Resources, Inc. and HG Energy, LLC	American Energy - Marcellus, LLC	Assignment Cod of Name Change	WV Sec. of State records
			American Energy - Marcellus, LLC	Ascent Resources - Marcellus, LLC	Cert. of Name Change	11 V Sec. Of State records
اید		********	Melissa L Danko aka Melissa L. Lamb, a married woman dealing in	Ascent Resources - Marcellus, LLC	1/8	540/53
11	5-13-11.1 V	MARC03520-000	her sole and separate property  Melissa L Danko aka Melissa L. Lamb, a married woman dealing in		<del></del> -	
	5-13-11	MARC03520-000	her sole and separate property	Ascent Resources - Marcellus, LLC	1/8	540/53
		manyovookuuuu				T
12			Melissa L Danko aka Melissa L. Lamb, a married woman dealing in			540/53

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SEP 1 1 2017



September 7, 2017

West Virginia Department of Environmental Protect Chief, Office of Oil & Gas Attn: Mr. James Martin 601 57<sup>th</sup> Street Charleston, West Virginia 25304

Re: Application for a Permit to Drill Hoge S GRN WZ 2H

Dear Mr. Martin,

Ascent Resources – Marcellus, LLC has the right to drill, extract and produce the minerals from any roads crossed by the proposed laterals for the Hoge S GRN WZ 2H well by virtue of the lease identified on page WW-6A1 of the accompanying permit application.

No action on your part is required. If you have any questions or concerns, please feel free to contact me.

Best Regards,

Ariel Renken Regulatory Analyst

ariel.renken@ascentresources.com

Cell 405-403-4803 Office 405-252-7642

Office of Cil and Gas

SEP 1 1 2017

WW Department of Environmental Protection

Date of Notice Certification: 08/30/2017

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

API No. 47- 103 - 03208

		Оре	erator's Well No. Hoge	S GRN WZ 2H
		Wel	ll Pad Name: Hoge S	GRN WZ
	been given:			
Pursuant to the	he provisions in West Virginia Code	22-6A, the Operator has provided	I the required parties v	vith the Notice Forms listed
	e tract of land as follows:			
State:	West Virginia	UTM NAD 83	ting: <u>5261</u> 13.4	
County:	Wetzel	Nor	thing: 4370065.4	
District:	Green	Public Road Access:	CR 13/8	
Quadrangle:	Center Point	Generally used farm n	name:	
Watershed:	Fishing Creek		<del> </del>	
prescribed by it has provid information rof giving the requirements Virginia Cod	West Virginia Code § 22-6A-7(b), where the secretary, shall be verified and shed the owners of the surface describing the equired by subsections (b) and (c), see surface owner notice of entry to surface owner notice of entry to surface owner notice of subsection (b), section sixteen on the § 22-6A-11(b), the applicant shall the have been completed by the applicant	hall contain the following information of in subdivisions (1), (2) and (4) ction sixteen of this article; (ii) that rvey pursuant to subsection (a), so if this article were waived in writtender proof of and certify to the se	tion: (14) A certification (4), subsection (b), see at the requirement was section ten of this articing by the surface over the content of this articing by the surface over the content of the content o	on from the operator that (i) ction ten of this article, the deemed satisfied as a result cle six-a; or (iii) the notice wher; and Pursuant to West
that the Ope	West Virginia Code § 22-6A, the Operator has properly served the require		lotice Certification	OOG OFFICE USE
*PLEASE CH	ECK ALL THAT APPLY			ONLY
	TICE OF SEISMIC ACTIVITY or	NOTICE NOT REQUIRED	RECALISE NO	☐ RECEIVED/
LI I. NO	TICE OF SEISMIC ACTIVITY OF			"
		SEISMIC ACTIVITY WAS CO	INDUCTED	NOT REQUIRED
☐ 2. NO	TICE OF ENTRY FOR PLAT SURV	YEY or 🔳 NO PLAT SURVEY V	WAS CONDUCTED	☐ RECEIVED
■ 3. NO	OTICE OF INTENT TO DRILL or	NOTICE NOT REQUIRED NOTICE OF ENTRY FOR PLAY WAS CONDUCTED or		☐ RECEIVED/ NOT REQUIRED
		☐ WRITTEN WAIVER BY S (PLEASE ATTACH)	SURFACE OWNER	
■ 4. NC	TICE OF PLANNED OPERATION			☐ RECEIVED
■ 5. PU	BLIC NOTICE			☐ RECEIVED
1				I

**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. Pursuant to 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.

SEP 1 1 2017

### Certification of Notice is hereby given:

THEREFORE,	I Allei Kelikeli , hav	e read and	d understand	the notice requirements within West Virginia Code § 22-
6A. I certify that	at as required under West Virginia Co	ode § 22-6	6Α, I have s	erved the attached copies of the Notice Forms, identified
above, to the re	equired parties through personal servi-	ce, by reg	gistered mail	or by any method of delivery that requires a receipt or
signature confir	mation. I certify under penalty of law	that I hav	e personally	examined and am familiar with the information submitted
in this Notice (	Certification and all attachments, an	d that bas	sed on my i	nquiry of those individuals immediately responsible for
obtaining the in	formation. I believe that the information	on is true.	accurate and	d complete. I am aware that there are significant penalties
for submitting fa	alse information, including the possibil	lity of fine	and impriso	nment.
J	у Р	,	р	
Well Operator:	Ascent Resources		Address:	3501 NW 63rd Street
By:	SKIL) I			Oklahoma City, Oklahoma 73116
Its:	Regulatory Analyst		Facsimile:	
Telephone:	405-252-7642		Email:	ariel.renken@ascentresources.com
		<u>-</u> _		
	MINIMINAN AND AND AND AND AND AND AND AND AND	1		
	109 The St. Au	Subscr	ibed and swo	orn before me this 7 day of Sept, 2017.
	# 14004768		d	· 1. 11
	(A) EXP. 05/28/18		COMPCI	M Krakt Notary Public
	The Constant			محرم مراري
	OF OKLAMA	My Co	mmission Ex	xpires 05/08/18
1		1		• •

### 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>.

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SEP 1 1 2017

WW-6A (9-13)

API NO. 47-103 - 0320 P
OPERATOR WELL NO. Hoge S GRN WZ 2H
Well Pad Name: Hoge GRN WZ

# 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 than the filing date of permit application. Date of Notice: 8/7/2017 Date Permit Application Filed: 9/7/2017 Notice of: PERMIT FOR ANY ☐ CERTIFICATE OF APPROVAL FOR THE WELL WORK CONSTRUCTION OF AN IMPOUNDMENT OR PIT Delivery method pursuant to West Virginia Code § 22-6A-10(b) ☐ PERSONAL ☑ METHOD OF DELIVERY THAT REQUIRES A ✓ REGISTERED **SERVICE** MAIL RECEIPT OR SIGNATURE CONFIRMATION Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") 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. ☑ Application Notice ☑ WSSP Notice ☑ E&S Plan Notice ☑ Well Plat Notice is hereby provided to: COAL OWNER OR LESSEE ☐ SURFACE OWNER(s) Name: Please see attached. Name: State of WV Public Land Corp., Dept of Comm, Labor, & Environ Address: Capitol Complex, Bldg 6, Room 525 Address: Charleston, WV 25301 Name: WV Dept of Natural Resources Commerce Division COAL OPERATOR Name: Office of Oil and Gas Address: Capitol Complex, Bldg 6, Room 525 Charleston, WV 25301 Address: SEP 1 1 2017 ☐ SURFACE OWNER(s) (Road and/or Other Disturbance) M SURFACE OWNER OF WATER WELL Name: WV Department of Environmental Protection AND/OR WATER PURVEYOR(s) Address: Name: Please see attached. Address: Name: Address: **OPERATOR OF ANY NATURAL GAS STORAGE FIELD** ☐ SURFACE OWNER(s) (Impoundments or Pits) Name: Address: Name: Address: \*Please attach additional forms if necessary

WW-6A (8-13) RECEIVED
Office of Oil and Gas

SEP 1 1 2017

API NO. 47-103 - 03208

OPERATOR WELL NO. Hoge S GRN WZ 2H

Well Pad Name: Hoge GRN WZ

WV Department of Environmental Protection

### 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="https://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 that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

12/22/2017

API NO. 47-103 - 03-08

OPERATOR WELL NO. Hoge S GRN WZ 2H

Well Pad Name: Hoge GRN WZ

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:

Office of Oil and Gas

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

SEP 1 1 2017

WV Department of Environmental Protection

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. NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.

WW-6A (8-13) API NO. 47-103 - 03208

OPERATOR WELL NO. Hoge S GRN WZ 2H

Well Pad Name: Hoge GRN WZ

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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WW-6A (8-13) API NO. 47-103 - 0320 8

OPERATOR WELL NO. Hoge S GRN WZ 2H

Well Pad Name: Hoge GRN WZ

Notice is hereby given by:

Well Operator: Ascent Resources - Marcellus, LLC

Telephone: 405-252-7642

Email: ariel.renken@ascentresources.com

Address: 3501 NW 63rd Street

Oklahoma City, OK 73116

Facsimile:

My Commission Expires 81/23/2018

### 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>.

Stitt )R

# 14004768 EDP. 05/28/18

Subscribed and sworn before me this 30 day of Aug , 2017

Carolin fraft Notary Public

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### WW-6A Notice of Application Hoge S GRN WZ 2H, 4H and 6H

Surface Ownership						
Name	Address	City	ST	ZIP		
State of WV Public Land Corp. Dept. Of Comm. LBR. &						
Envir. DNR	Capitol Complex, Bldg. 6, Room 525	Charleston	w∨	25301		
WV Dept. of Natural Resources Commerce Division	Capitol Complex, Bldg. 6, Room 525	Charleston	w∨	25301		

	Coal Ownership			
Name	Address	City	ST	ZIP
Helen M. Dallison	28907 Shortline Hwy	Folsom	wv	26348
The State of West Virginia, Public Land Corporation, for the use and benefit of the Department of Commerce, Labor and Environmental Resources, Division of Natural				
Resources	Capitol Comlpex, Bldg 6, Room 525	Charleston	wv	25301

Water Ownership					
Name	Address	City	ST	ZIP	
Richard Heimbrod	PO Box 25	Clarington	ОН	43915	
Russel, Paul & Carol Stackpole	PO Box 423 Dodd St	Middlebourne	wv	26149	
Coastal Forest Resources	PO Box 709	Buckhannon	WV	26201	
Willaim Carl Thompson	3412 S. Weymouth Road	Medina	ОН	44256	
WV Division of Natural Resources	324 4th Ave	S. Charleston	WV	25303	
Yellow House Sportsman Club	1522 Main St	Wellsburg	WV	26070	

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Office of Oil and Gas

SEP 1 1 2017

# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF INTENT TO DRILL

Pursuant to W. Va. Code § 22-6A-16(b), the Notice of Intent to Drill is only required if the notice requirements of W. Va. Code § 22-6A-10(a) have NOT been met or if the Notice of Intent to Drill requirement has NOT been waived in writing by the surface owner.

Notice Time Date of Notic	Requirement: Notice shall be provided ce: 08/07/2017 Date Po	at least TEN (10) days prior to filing a ermit Application Filed: 09/07/2017	permit application.
Delivery me	thod pursuant to West Virginia Code §	§ 22-6A-16(b)	
☐ HAND	■ CERTIFIED MAIL		
DELIVE		EQUESTED	
receipt request drilling a hore of this subsection m	sted or hand delivery, give the surface over izontal well: <i>Provided</i> , That notice give stion as of the date the notice was provide	when notice of its intent to enter upon the pursuant to subsection (a), section to ed to the surface owner: <i>Provided, how</i> when. The notice, if required, shall incl	an operator shall, by certified mail return ne surface owner's land for the purpose of en of this article satisfies the requirements wever. That the notice requirements of this ude the name, address, telephone number, or's authorized representative.
	reby provided to the SURFACE O		/
	W Public Land Corp. Dept. Of Comm. LBR. & Envir. DNR	Name: WV Dept. of Natural I	
Address: Capitol Complex, Bldg. 6, Room 525		Address: Capitol Complex, B	ldg. 6, Room 525
Charleston, WV	25301	Charleston, WV 25301	
State: County: District: Quadrangle: Watershed:	West Virginia  Wetzel  Green  Center Point  Fishing Creek	UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name:	526113.4 4370065.4 CR 13/8
This Notice Pursuant to 'facsimile nur	Shall Include: West Virginia Code § 22-6A-16(b), thinber and electronic mail address of the rizontal drilling may be obtained from the	e operator and the operator's authorize he Secretary, at the WV Department o	ress, telephone number, and if available, ed representative. Additional information f Environmental Protection headquarters, ep.wv.gov/oil-and-gas/pages/default.aspx.
Notice is he	reby given by:		
Well Operato	r: Ascent Resources - Marcellus, LLC	Authorized Representative:	Ariel Renken
Address:	3501 NW 63rd Street	Address:	3501 NW 63rd Street
Oklahoma City, 0	OK 73116	Oklahoma City, OK 73116	
Telephone:	405-608-5544	Telephone:	405-252-7642
Email:	info@ascentresources.com	Email:	ariel.renken@ascentresources.com
Facsimile:	Total Children of the Artifactory	Facsimile:	<u></u>
	-		,
01 10	n		

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 of the properties 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.

SEP 1 1 2017



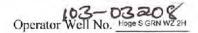
### WW-6A4 Notice of Intent to Drill Hoge S GRN WZ 2H, 4H and 6H

Surface Ownership						
Name	Address	City	ST	ZIP		
State of WV Public Land Corp. Dept. Of						
Comm. LBR. & Envir. DNR	Capitol Complex, Bldg. 6, Room 525	Charleston	WV	25301		
WV Dept. of Natural Resources Comme	Capitol Complex, Bldg. 6, Room 525	Charleston	WV	25301		

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WW-6A5 (1/12)



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

IFIED MAIL RN RECEIPT REQUESTED		22-6A-16(c)		
	П	HAND		
KIN KECEILI KEOGESTED		DELIVERY		
And the second second		DELIVERI		
t requested or hand delivery, give operation. The notice required be e provided by subsection (b), sect horizontal well; and (3) A propo- he surface affected by oil and gas	the surfa by this si ion ten o sed surfa operation	ace owner whose land absection shall inclu f this article to a surf- ace use and compen- ns to the extent the da	I will be used for de: (1) A copy ace owner whos sation agreemen amages are comp	cation, an operator shall, by certified mains the drilling of a horizontal well notice of this code section; (2) The information are land will be used in conjunction with the transfer of compensation for pensable under article six-b of this chapter sted in the records of the sheriff at the time.
reby provided to the SURFACE	OWNE	R(s)		
ss listed in the records of the sheri				/
WV Public Land Corp. Dept. Of Comm. LBR. & Envir. DI	NR /			esources Commerce Division
itol Complex, Bldg. 6, Room 525			Capitol Complex, E	3ldg. 6, Room 525
25301		Charleste	on, WV 25301	
Green Center Point		Public Road Generally us	ed farm name:	CR 13/8
Center Point Fishing Creek		Generally us	ed farm name:	
ed by W. Va. Code § 22-6A-10( ell; and (3) A proposed surface us sted by oil and gas operations to related to horizontal drilling may	b) to a see and co the exter be obta	surface owner whose impensation agreement the damages are coined from the Secre-	e land will be un nt containing an ompensable und ary, at the WV	code section; (2) The information require used in conjunction with the drilling of a offer of compensation for damages to the article six-b of this chapter. Additional Department of Environmental Protection or by visiting

Way Department or 12/22/20119

103-03208

### WW-6A5 Notice of Planned Operations Hoge S GRN WZ 2H, 4H and 6H

Surface Ownership						
Name	Address	City	ST	ZIP		
State of WV Public Land Corp. Dept. Of Comm. LBR. & Envir.						
DNR	Capitol Complex, Bldg. 6, Room 525	Charleston	w∨	25301		
WV Dept. of Natural Resources Commerce Division	Capitol Complex, Bldg. 6, Room 525	Charleston	wv	25301		

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WV Department of 12/22/20017



### WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

**Division of Highways** 

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

Paul A. Mattox, Jr., P. E. Secretary of Transportation/ Commissioner of Highways

Earl Ray Tomblin Governor

September 23, 2015

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 site Hoge South (503) Pad, Tyler County

47-103-03208 Hoge S GRN WZ 2H Hoge S GRN WZ 8H

Hoge S GRN WZ 4H Hoge S GRN WZ 10H Hoge S GRN WZ 6H RECEIVED Office of Oil and Gas

Chart & Sign

SEP 1 1 2017

WV Department of Environmental Protection

Dear Mr. Martin,

This well site will be accessed from a DOH permit 06-2014-0571 which has been transferred to Ascent Resources – Marcellus, LLC for access to the State Road. The well site is located off of Tyler County Route 13/8.

This operator has signed a Statewide Oil and Gas Road Maintenance Bonding Agreement 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, P.E.

Day K. Clayton

Regional Maintenance Engineer Central Office O&G Coordinator

Cc: Eric Bruckman

Ascent Resources - Marcellus, LLC.

CH, OM, D-6

File

Additiv

Water

FRA 407 BIO CLEAR 2000 124 PRO SCALE CLEAR 112 1.19 3,695 PRO GEL 4 0L PRO BREAKER 4 1.26 BXL-10C 1.27

1.00

71,376,237

8.135,700

388,418

356

Total Slurry Mass (Lbs)

80,070,597

2,858

0.00357%

28,985 BUFFERI 2.13 POLY BREAK 1.20

Ingredients Section:

Trade Name Water and (Proppant)

Maximum Ingredient Maximum Ingredient Chemical Abstract Service Ingredients Comments omponent (LBS) (% by mass) Carrier/Base Fluid Water 100.00% 77.376,237 89.74152% Company 1 Silica Substrate R 135.700 Proppant 100.00% 70.16065% Hydrochloric Acid (15%) Producers Service Corp Acidizing 7647-01-0 10 00% 38.842 0.04851% PROHIB II Producers Service Corp Inhibitor Dimethylcocoamine, bis(chloroethyl) ether, 68607-28-3 40.00% 142 0.00018% 111-76-2 0.00009% 20.00% 0.00009% Methyl Alcohol 67-56-1 20.00% 0.00009% Nonyl Phenol Ethoxylate, Branches 127087-87-4 15.00% 53 0.00007% Propargyl Alcohol 0.00007% Coco alkyidimethylamine 61788-93-0 2.50% 0.00001% #VALUE #VALUE FRA 407 Producers Service Corp Friction Reducer Petroleum Distillate 64742-47-8 40.00% 0.04172% 33,409 0.03129% Polyacrylamide salt Proprietary 30.00% 7647-14-5 0.0052230 Sodium Chloride 5.00% 4.176 Ammonium Chloride 12125-02-9 4,176 0.00522% 5.00% Ethoxylate Alcohol Proprietary J.176 0.00522% Tall oil Proprietary 2.00% 1.670 0.002093 Proprietary Ingredient Proprietary 1.00% 258 0.00104% 2732-18-5 #VALUE! #IVALUE! Methyl Alcohol PRO FLO 102 M Producers Service Corp Surfactant 67-56-1 60.00% 17 397 0.02172% N-dodecyl-2-pyrrolidone 2687-96-9 5.00% 1,449 0.00181% 7732-18-5 #PALUE! #VALUE! Ethoxylate Alcohol #VALUE: #VALUES Producers Service Corp Breaker 125 0.00016% 0.00016% 9003-11-6 Polyether Polyol 1.00% 0.000000 0.00000% Sodium Bicarbonate 1.00% Hexamethylenetetran 100-97-0 1.00% 0.00000% Proprietary 1.00% Proprietary Ingredient 0.0000000 Proprietary Ingredient Proprietary 1.00% 0.000000 0.00000% Proprietary Ingredient 1.00% 7732,18,4 #VALUE #WALUE! PRO GEL 4.0L Producers Service Corp Gelling Agent Distillates (Potroleum), Indrotreated light 64747.47.8 65.00% 37 138 0.04641% Nonylphenol, Ethoxylate 9016 45 9 5.00% 2,858 0.00357% 9000-30-0 50.00% 28,583 0.03570%

60828-78-6

\*Total Water Volume sources may include fresh water, produced water, and/or recycled water

\*\* Information is based on the maximum potential for concentration and thus the total may be over 100%

\*\*CELLS WITH BLUE BACKGROUND ARE THE ONLY CELLS TO BE EDITED\*\*

Well Name: Wiley GRN WZ

State

County

API Number

Federal Well:

Longitude

Long'Lat Projection: NAD27

Latitude:

Operator Number:

Fracture Start Date/Time

Fracture End Date/Time

True Vertical Depth (TVD):

Total Clean Fluid Volume\* (gal): 8,553,174

All component information listed was obtained from the supplier's Material Safety Data Sheets (MSDS). As such, the Operator is not responsible for insecurate and/or mecomplete information. Any questions regarding the content of the MSDS should be directed to the supplier who provided it. The Occupational Safety and Health Administration's (OSHA) regulations govern the criteria for the disclosure of this information. Please note that Federal Law protects "proprietary", "trade secret", and "confidential business information" and the criteria for how this information is reported on an MSDS is subject to 29 CFR 1910.1200(i) and Appendix D.

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