

#### west virginia department of environmental protection

Office of Oil and Gas 601 57th Street SE Charleston, WV 25304 (304) 926-0450 (304) 926-0452 fax Earl Ray Tomblin, Governor Randy C. Huffman, Cabinet Secretary www.dep.wv.gov

November 20, 2015

#### WELL WORK PERMIT

#### Horizontal 6A Well

This permit, API Well Number: 47-9502310, issued to ASCENT RESOURCES-MARCELLUS, LLC, 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 all 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 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.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-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) 926-0499 ext. 1654.

James Martin

CA: C

Operator's Well No: GURRELL N MCY TY 7H

Farm Name: JONES, JOHN H.

API Well Number: 47-9502310

Permit Type: Horizontal 6A Well

Date Issued: 11/20/2015

API Number: 95-02310

#### **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. 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.
- 8. 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.
- 9. 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.

API NO. 47-095-03870

OPERATOR WELL NO. Gurrell N MCY TY 7M

Well Pad Name: Gurrell MCY TY

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

1) Well Operator:	Ascent Re	sources-M	arcell		Tyler	McElroy	Center Point
				Operator ID	County	District	Quadrangle
2) Operator's Well Number: Gurrell N MCY TY 7H Well Pad Name: Gurrell MCY TY							
3) Farm Name/Surf	face Owner:	John W. J	ones	Public Road	d Access:	•	
4) Elevation, curren	nt ground:	1280'	Ele	evation, proposed p	oost-construction	on: 1243.8	3'
5) Well Type (a)	Gas X	(	Dil X	Unde	rground Storag	e	
Oth	ner						
(b)		allow X		Dеер			
05:4 - 4:		rizontal X		· .	7	SWH !	1/20/15
6) Existing Pad: Ye	***************************************		····	··			
7) Proposed Target Marcellus, Approx				pated Thickness ar hickness 50', +/- 46		ressure(s):	
8) Proposed Total V	ertical Dept	h: 7261'			<del></del>		
9) Formation at Tot	al Vertical D	epth: Ma	rcellus			<del></del>	
10) Proposed Total	Measured D	epth: 112	:00'				
11) Proposed Horiza	ontal Leg Le	ngth: 345	9'				
12) Approximate Fr	resh Water S	trata Depths	s: .	500'			
13) Method to Deter	rmine Fresh	Water Dept	hs: B	ased on drilling h	istory in neart	y wells	
14) Approximate Sa	altwater Dep	ths: 1563'					
15) Approximate Co	oal Seam De	pths: 1100	)'				
16) Approximate De	epth to Possi	ble Void (c	oal min	e, karst, other): 🖊	lone anticipat	∋d	
17) Does Proposed of directly overlying or				s Yes	No	X	
(a) If Yes, provide	Mine Info:	Name:					
-		Depth:			·		
		Seam:					
		Owner:					

API NO. 47- 95 - 0 2210

OPERATOR WELL NO. Gurrell NMCY TY 7H

Well Pad Name: Gurrell MCY TY

#### 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#	1210'	1210'	320, CTS
Coal							, , , , , , , , , , , , , , , , , , , ,
Intermediate	9-5/8°	New	J-55	40#	3350'	3350'	1400, CTS
Production	5-1/2"	New	P-110	20#	11200'	11200'	1970
Tubing	2-7/8°	New	N-80	4.7#			
Liners				· · · · · · · · · · · · · · · · · · ·			

DMH 11/20/15

TYPE	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"	24"	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				·			<u> </u>
Intermediate	9-5/8"	12-1/4"	0.395	3520	1500	Proposer HCO-30 Poz N	Tail 1.27, Lead 1.51
Production	5-1/2"	8-3/4"	0.361	12640	5000	Processor NODAGO Plaze pt	Tall 1.27, Lead 1.51
Tubing	2-7/8"	4.778"	0.19	11100			
Liners							

#### **PACKERS**

Kind:		·	
Sizes:			
Depths Set:			

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 set freshwater casing. We will then continue drilling vertically and setting casing per the attached casing program to TD.

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.

DMH 11/20/15

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 34.9
- 22) Area to be disturbed for well pad only, less access road (acres): 15.5
- 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: Premium H/50-50 Poz H 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 to hole section.

<sup>\*</sup>Note: Attach additional sheets as needed.

500'

AFE #:



#### **GURRELL N MCY TY 7H**

Township: Location: Fermation: Marcellus

Tyler, West Virginia McElroy Marcellus

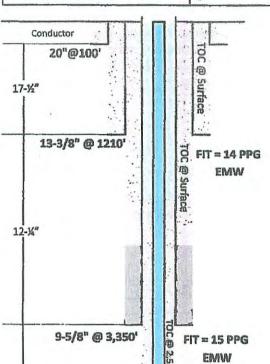
Coordinates: SNL Lot/Long: 39.452870 N, 80.691195 W RKB / Elevation: AFE DC/CWC:

NAD 27

BHL Lat/Long: Property R:

7,261' TVD @ 0' VS, 90.5 Inc, 330 Azi

Target Line:



			Casi	ng Des	Ign				
Interval	Hole size	Size (m)	Weight #/ft	Grade	Conn.	Collapse (PSI)	Burst (PSI)	Depth (ft)	Cost \$/ft
Conductor	26"	20"	-	-	-	- /		100	
Surface	17-1/2"	13-3/8"	54.5	1-55	BTC	1,130	2,740	1,210	36
Intermediate	12-1/4"	9-5/8"	36	J-55	LTC	2,020	3,520	3,350	22
Production	8-3/4"	5-1/2"	20	P-110	ULT-DQX	11,110	12,640	11,200	22

		C	ement I	Design		
Interval	Slurry	Weight	Ft <sup>3</sup>	Yetld	Excess	Cement Top
Conducor	Tall	15.6 ppg	330	1,20 cuft/sk	50%	Surface
Surface	Tall	15.6 ppg	315	1.20 cuft/sk	50%	Surface
Intermediate	Lead	13.5 ppg	250	1.51 cuft/sk	30%	Surface
intermediate	Tall	15.3 ppg	1150	1.27 cuft/sk	30%	700
Production	Lead	13.5 ppg	630	1.51 cuft/sk	10%	2500
Production	Tall	15,3 ppg	1340	1.27 cuft/sk	10%	6300

The state of the s	-	
Formation	TVD	Sub Sea
Freshwater	500	780'
Pittsburgh Coal	1100	180'
Saltwater	1563	200
BigInjun	2450	4.470
Big Injun Base	2650	-1,3701
Berea	3000	1,720
Gordon	3175	-1,8951
Gordon Base	3250	1970
Middlesex	6961	-5,681'
Geneseo	7100	5,676
Tully	7130	-5,850'
Hamilton	7156	5,876
Marcellus	77226	-75,946'
Purcell	7242	4,962
Lower Marcellus	7244	-5,964'
Basal Marcellus	7267	5,987
Onondaga	7276	-5.996'

Oriskany

Geological Information

DMH 11/20/15

8-3/4" Curve and Lateral

5-15"Casing @ 11,200':

7,261' TVD @ 0' VS, 90.5° Inc, 330° Azi

Mud up @ 6,710'

Kick Off Point

					Drifff	ng Fluids Info	mation							
	AIRINT	ERVALS					5Y	NTHERIC OF	L BASED MUI	INTERVAL			PTO TAP STATEMENT	
Interval	Depth (MD)	Rate (cfpm)	Water (bbl/hr)	Foamer (gal/hr)	Interval	Depth (MD)	Weight (#/gal)	Viscosity: (sec/qt)	HTHP (ml/30min)	PV (cps)	<b>VP</b> (π/100 ft²)	6 RPM	WPS	GWR % by voi
Surface	0'-1210'	>5000	30-50	1/2-3/4	Curve	6,7101-7,6101	10.5-13.5	50-60	4-6	18-24	10-12	6-9	150K -	75:25 -
Intermediate	1210'-3350'	>5000	30-50	1/2-3/4	Lateral	7,610'-11,200'	13.5 - 13.7	50-60	4-6	18-24	10-12	6-9	180K	70:30
Vert/Nudge	3,350'-6,710'	>5000	40-60	3/4-1									/20/2	

#### **Cement Additives for WW-6B**

Class A – Neat + 2% BWOC Calcium + Chloride + .25% BWOC Flo-Seal Additives are Polyflake LCM

Class H Premium + 0.75% FI 17 + 0.1% C41P + 0.15%C45 +3pps gilsonite + 0.2% C20 Additives are FL-17, C41-P, C-45, Gilsoite, and C-20

50/50 Poz H + 0.5 %FL 17 +5% Gyp + 0.1%C41P + 0.15% C51 + 0.1% C20 Additives are FL-17, Gypsum, C41-P, C-51, and C-20

### 09502310

API Number 47 - \_\_\_\_ - \_\_\_\_ Operator's Well No. Gurrell N MCY TY 7H

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

#### FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name_Ascent Resou	rces - Marcellus, LLC	OP	Code 494514693	
Watershed (HUC 10) Outlet	Middle Island Creek	QuadrangleCente	er Point	
Elevation 1280'	County_Tyler	D	istrict McElroy	
Will a pit be used? Yes	than 5,000 bbls of water to comple			No
	e anticipated pit waste: Closed lo			
		No If so, wh	at ml.?	- Michael 15
Proposed Disposal N	Method For Treated Pit Wastes:			10,31
U <sub>1</sub> Re	nd Application Inderground Injection (UIC Permit) Insection (UIC Permit) Insection (UIC Permit) Insection (Insection of the Insection of the I	vell		
Will closed loop system be us	sed? If so, describe:yes; see attache	ed sheet titled Closed loo	p typical description	on
Drilling medium anticipated	for this well (vertical and horizontal	)? Air, freshwater, oil l	based, etc. Air, Freswi	ater mist, and Synthetic based oil
	rpe? Synthetic, petroleum, etc.Synthe			
	g medium? see attached sheet titled dri			
	d? Leave in pit, landfill, removed o	E a la College Char		
			16	
	n to solidify what medium will be u		7	
-Landfill or offsite n	ame/permit number?see attached she	et titled OIC Wells and Land	atilis	
on August 1, 2005, by the Of provisions of the permit are law or regulation can lead to I certify under pena application form and all att obtaining the information, I	stand and agree to the terms and co fice of Oil and Gas of the West Virg enforceable by law. Violations of a enforcement action. Ity of law that I have personally a achments thereto and that, based believe that the information is tru information, including the possibili	ginia Department of Envany term or condition of examined and am fami on my inquiry of tho te, accurate, and comp	vironmental Prote of the general per dilar with the info se individuals in lete. I am aware	ction. I understand that the mit and/or other applicable ormation submitted on this namediately responsible for
7	American Energy - Marcellus,	LLC		SEP 1 0 2015
	ulatory Technician			
Subscribed and sworn before  My commission expires	me this 26 day of	August	, 20_15 Notary Public	# 14000742 # 14000742 # 20/20/20/20/20/20/20/20/20/20/20/20/20/2

## 09502310

Form WW-9

Operator's Well No. Gurrell N MCY TY 7H

Ascent Resources - Marcellus, LLC				
Proposed Revegetation Treatment: Acres Disturbed		н		
Lime Tons/acre or to correct to p	<sub>pH</sub> 6.5			
Fertilizer type				
Fertilizer amount 500	bs/acre			
Mulch minimum of 2-3	s/acre			
<u>S</u>	eed Mixtures			
Temporary	Perma	nnent		
Seed Type lbs/acre See attached	Seed Type See attached	lbs/acre		
Orawing(s) of road, location, pit and proposed area for land a provided)  Photocopied section of involved 7.5' topographic sheet.	application (unless engineered plans inc	cluding this info have been		
Attach: Drawing(s) of road, location, pit and proposed area for land a provided) Photocopied section of involved 7.5' topographic sheet.				
Drawing(s) of road, location, pit and proposed area for land a provided)  Photocopied section of involved 7.5' topographic sheet.  Plan Approved by: Mehael Hoff  Comments: Preseed & Mulch any	disturbed areas per	WVDEP		
Orawing(s) of road, location, pit and proposed area for land a provided)  Photocopied section of involved 7.5' topographic sheet.	disturbed areas per	WVDEP		
Photocopied section of involved 7.5' topographic sheet.  Plan Approved by:  Present 4 Mulch any	disturbed areas per	WVDEP		
Photocopied section of involved 7.5' topographic sheet.  Plan Approved by:  Present 4 Mulch any	disturbed areas per	Received		
Photocopied section of involved 7.5' topographic sheet.  Plan Approved by:  Present 4 Mulch any	disturbed areas per	WVDEP Sary		

#### **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.

#### **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:

#### **ANCO Gel**

Cottonseed Hulls	Base Oil	Anco Thunder Plug
D294	Anco Mud Mod	Calcium Carbonate M
Anco Bar	Anco Mul OW	Cedar Fiber
Clayton	Anco Mul P	LCF Blend
Lime	Anco Mul S	Walnut Shell Med
Calcium Chloride	Anco Mul Thin	Anco Drill A
Anco Trol		RECEIVED Office of Oil and Gas
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WV Department of Environmental 1/20/2015

## 09502310

#### **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**

Winter – 3 ton per acre

Summer - 2 ton per acre

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WV Department of Environmental Pro/20/2015

## Gurrell N MCY TY 7H



ASCENT

RESOURCES

Received
Office of Oil & Gas

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9.	Ex	xhibits <sub></sub>	Attached
	A.	Exhibit "A": Site Plan	
	B.	Exhibit "B": Topographic Site Map	
	C.	Exhibit "C": Sign-In Sheet	
	D.	Exhibit "D": Drilling Prog / List of Anticipated Freshwater, Saltwater, Oi	il and Gas,
		Hydrogen Sulfide, Thief Zones and High Pressure and Volume Zones an Depths	
	E.	Exhibit "E": Detailed Casing & Cementing Program Schematic	
	F.	Exhibit "F": Daily Drilling Report	
	G.	Exhibit "G": H <sub>2</sub> S Monitoring Placement Schematic	
	Н.	Exhibit "H": Survey Verification Sign-In Sheet	

Ascent Resources – Marcellus, LLC.

Main Office Address

3501 NW 63<sup>rd</sup> Street, Suite 600

Oklahoma City, OK 73116

Office Phone: 405-607-5529

Fax: 405-607-5859

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### 1. Contacts, Schedules and Meetings

CONTACT	OFFICE	MOBILE	
Ascent Resources Emergency Call # (24/7)	1-866-402-8767		
John Cogar, Operations Manager	(740) 432-9009	(614) 896-0258	
Bob Adams, EH&S Field Manager	(740) 432-9008	(614-) 896-0270	
Rich Weber, EH&S Emergency Response Coordinator	(740) 432-9041	(614) 817-2310	
Eric Gillespie, Senior EH&S Specialist	(405) 607-5429	(405) 255-3617	
John Melville, Drilling Superintendent Consultant	(814) 573-6692	(614) 374-3684	
Stan Cherry, Drilling Superintendent Consultant	(740) 342-9027	(614) 915-6398	
Richard Thompson, Drilling Superintendent Consultant	(740) 342-9027	(405) 902-1776	
Jim Tully, Manager - Drilling	(405) 608-5692	(479) 790-5053	
Tim Cummings, Director - Operations	(405) 608-5491	(405) 902-0277	

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#### **WVDEP Inspector Emergency Reporting:**

DEP Emergency Reporting: 1-800-642-3074

NAME	COUNTY	CELL PHONE	EMAIL ADDRESS
David Cowan	Ritchie	304-389-3509	David.W.Cowan@wv.gov
Derek Haught	Wetzel	304-206-7613	Derek.M.Haught@wv.gov
Joe Taylor	Tyler	304-380-7469	Joseph.D.Taylor@wv.gov
David Scranage	Doddridge	304-380-3749	David.K.Scranage@wv.gov
Tristan Jenkins	Marion	304-552-3874	Tristan.A.Jenkins@wv.gov
Tristan Jenkins	Monongalia	304-552-3874	Tristan.A.Jenkins@wv.gov
Joe McCourt	Gilmer	304-380-2467	Joseph.A.McCourt@wv.gov
Joe Taylor	Wirt	304-380-7469	Joseph.D.Taylor@wv.gov
Bryan Harris	Lewis	304-553-6087	Bryan.O.Harris@wv.gov
Ed Gainer	Roane	304-389-7582	Edward.N.Gainer@wv.gov
Terry Urban	Kanawha	304-549-5915	Terry.W.Urban@wv.gov
Ralph Triplett	Lincoln	304-389-0350	Ralph.D.Triplett@wv.gov
Tristan Jenkins	Harrison	304-552-3874	Tristan.A.Jenkins@wv.gov

# Needs

#### County EMS - EMERGENCY CALL 911

NAME	COUNTY	PHONE
Grandview Ambulance		304-455-5737
Hundred Ambulance		304-775-7455
New Martinsville Ambulance	Wetzel	304-455-5931
Paden City Ambulance		304-337-2281
Pine Grove Ambulance		304-889-3393

#### **County Health Departments**

NAME	COUNTY	PHONE
Wetzel/Tyler Health Department	Wetzel	304-337-2001
Wetzel/Tyler Health Department	Tyler	304-337-2001
Harrison/Clarksburg Health Department	Harrison	304-623-9308

#### National Response Center (USEPA and Coast Guard): 800-424-8802

	Emerg	gency Contact List		
	911 for Primary Call for	or Immediate Emergency Respon	se	
	Spill Response Con	ntractor Emergency Call Order		
Name	Phone	Responding Address	Notes	
СТЕН	866-869-2834			
				Possive
		Dispatch		Office of Oil
				Office of Oil

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Name	Phone	Address	Notes
Wetzel County Dispatch	304-455-6730	New Martinsville	
	E'-	P	
Name	Phone	Departments	N. Parkers
Wyleyville	304-889-2442	Address	Notes
Pine Grove	304-889-3353	HC 68, Wyleyville, WV Joliff St, RR 20, Pine Grove, WV	
Hundred	304-775-7455	Pennsylvania Ave, Hundred, WV	
Silver Hill	304-775-2925	Route 89, Hundred, WV	
Jacksonburg 304-889-2400		Buffalo Road, Pine Grove, WV	
Smithfield	304-334-3642 Manning Road, Smithfield, WV		
New Martinsville	304-455-9115	400 Ohio St, New Martinsville, WV	
Grandview	304-455-1317	RR1, Proctor, WV	
Reader	304-386-4666	Route 20, Reader, WV	
0.000	Läw	Enforcement	
Name	Phone	Responding Address	Notes
Wetzel County Sheriff	304-455-8200	New Martinsville, WV	
WV State Police	304-775-4488	Hundred, WV	
WV State Police	304-455-0913	New Martinsville, WV	
MILEON NEW YORK	Emergency	/ Management/LEPC	
Wetzel County EMA/911/LEPC	304-455-6960	New Martinsville, WV	

There are no schools or public facilities within 1 mile of the location.

#### C. H<sub>2</sub>S Notification

Any residential notification will be made verbally after travelling to each residence. Emergency responders will be notified via cell phone or radio communications. Protection zones will be established through coordination with local emergency responders.

#### D. Pre-spud Meeting

A Pre-Spud meeting will be held with rig crews, directional company, closed loop crew, solids control crew, and mud engineer(s). The following will be completed as part of the pre-spud meeting:

- o Include all personnel to be employed and directly involved in the drilling operations and include the district oil and gas inspector and/or other designated Office of Oil and Gas representative.
- All attending personnel must sign Pre-Spud Meeting Sign-In sheet. The Sign-In sheet is pre-bedded as Exhibit "C".

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#### E. Weekly Site Safety Meetings

A weekly site safety meeting will be held with drilling, completion and work-over crews during operations. The following will be completed as part of the weekly meeting:

- o Include all personnel to be employed and directly involved in the operations and include the district oil and gas inspector and/or other designated Office of Oil and Gas representative.
- All attending personnel must sign Meeting Sign-In sheet. The Sign-In sheet is included as Exhibit "C".

#### 2. Maps and Diagram

#### A. Map of Location

Exhibit "A" illustrates the location of the access road, evacuation route, drilling pad, prevailing winds and a topographic map of the area. Ascent Resources – Marcellus, LLC is not constructing any pits for these operations. There are no nearby dwellings in the vicinity of our drilling location.

#### B. Topographic map

Exhibit "B" illustrations the topographic map of the well location, including well locations and UTM NAD 83 coordinates of the surface location.

#### C. Evacuation Plan

All personnel who are on location will be instructed as to the location of a primary muster point to be utilized in the event of an emergency. The primary muster point at the well site will most always be off of the location along the access road. Evacuation routes will be identified for each muster point, but will primarily be in the direction of and along the access road.

In the event that evacuation of residents in the surrounding area is required, an immediate phone call to 911 will be made by the person in charge at the location. The caller will inform authorities of the nature of the problem at the drill site. If required, the drill site supervisor will request assistance from local authorities if the evacuation of nearby residents is required. Muster points and evacuation routes are depicted on the Site Plan included as Exhibit "A".

#### 3. Well Work

#### A. Procedure and schedule

- 1. Wells Each well is equipped with a pumping unit, wellhead assembly, and flowlines to transfer natural gas and/or oil. The following operations typically occur at each well site during the life of the well:
- Pad construction Prior to drilling the wells, a sufficient well pad must be constructed to
  manage the drilling and supporting equipment necessary to make the well site operational.
  Erosion and sediment (E&S) controls are installed to limit the effects of the disturbance and to
  provide limited secondary containment of site operations.
- 3. Drilling\_— Following construction of the well pads, wells are drilled to access the target formations. Typically, a conductor casing is installed, followed by tophole well installation (surface and intermediate strings) and horizontal well installation. Once the well(s) are drilled, ecceived casing is installed prior to stimulation and final production.

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- 4. Stimulation ("fracturing") Once the well has been drilled, it must be stimulated ("fractured") to obtain optimum performance of the well. The well casings are perforated; then water and other materials are injected under high pressure to fracture the rock of formation providing the natural gas. The majority of the water and materials "flows back" following stimulation and prior to production. The water utilized to stimulate the well is transported either utilizing tank trucks or dedicated pipelines. Produced water is stored on-site in tanks.
- 5. Pad restoration Within 9 months after the well has been stimulated and begins producing, the size of the well pad is reduced, the disturbed areas are restored, and the scale of E&S controls is reduced.

#### **B.** Supporting Structures

- 1. Flowlines Flowlines transfer natural gas to the central production facility. Buried flowlines transporting water, flowback fluids, and brine are constructed of steel. Low pressure natural gas lines are constructed of polyethylene, high pressure natural gas lines are constructed of steel.
- 2. Separators Separators are utilized to remove naturally occurring water and brine from the natural gas.
- 3. Storage Bulk storage tanks are utilized to store produced fluids are provided with secondary containment.

#### C. Notifications

Notifications via telephone and/or email to the WV DEP inspectors will be made in accordance with the existing regulations and include the following:

- 1) Contact the State Inspector at least 24 hrs prior to spudding the well.
- 2) Call WV-DEP O&G Inspector prior to spud, rig moves, cement jobs (24 hr. notices)
- 3) A Copy of the Site Safety Plan will be submitted to the County Emergency Services office within 7 days from land disturbance or well work.

#### 4. Chemical Inventory & MSDS

#### A. Material Safety Data Sheets

Material safety data sheets will be readily available onsite at the well location, and will be kept up-to-date by the drilling superintendent. All MSDS are included on the attached CD.

#### B. Inventory of Materials

An inventory of drill mud is included below. Material Safety Data Sheets will be located on site within the doghouse and are attached on the CD:

		Bicarbonate of	
ExWate	Citric Acid	Soda	Graphite
		Salt (Sodium	
Evolube DPE II	Pollmer Beads	Chloride)	Newzan D
Newpack R Newpack		DynaLose CM	Sodium Hydroxide
Soda Ash	Diald 25	Nofoam A	Nofoam X
NewArmor Newplug		Cotton Sead Hulls	Magma Fiber
Newcarh Fine	Newcarb Medium	60/40 blend	Rec

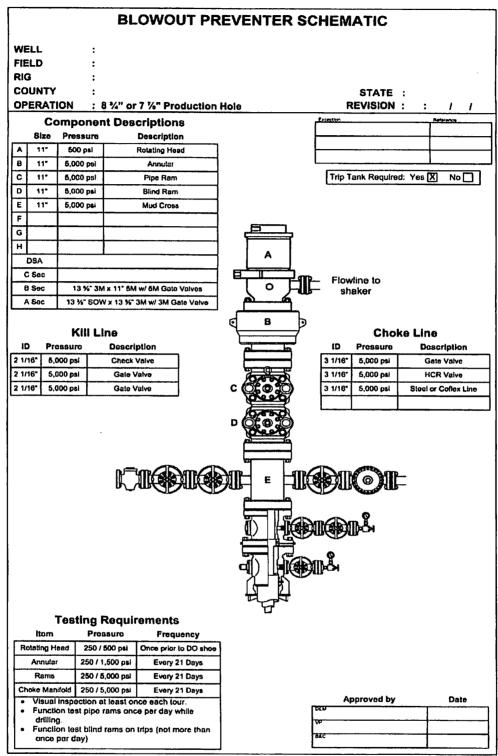
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#### 5. BOP and Well Control

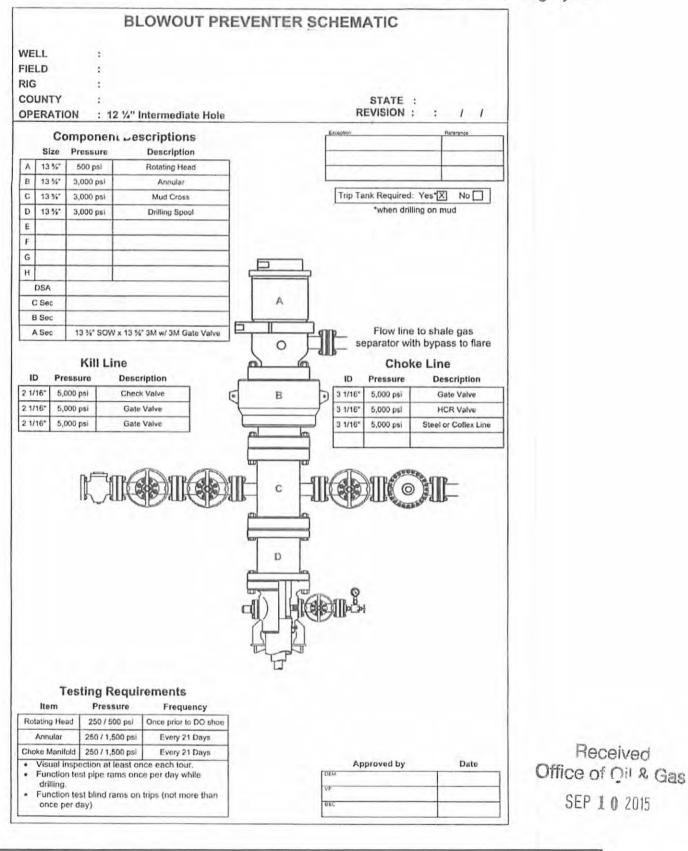
#### A. List of BOP Equipment

The BOP equipment required for Ascent's well drilling activities is detailed in the schematic below:

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	ВІ	LOWOUT PRI	EVENTER SCHEMATIC
WELL			
FIELD	1		
RIG	:		
COUNTY	1		STATE :
OPERATION	: 17 1/2"	Surface Hole	REVISION: : / /
Com	ponent De	scriptions	Exception Reference
	ressure	Description	
A 20"	500 psi	Rotating Head	
В			
С			Trip Tank Required: Yes No X
D			
E			
F			
G			6-7
Н			
DSA			A
C Sec			^
A Sec			Flow line to shale gas
			O separator with bypass to flare
	Kill Line		Choke Line
ID Press		ription	ID Pressure Description
			un jun
Tes	ting Requi	rements	
Item	Pressure	Frequency	
Rotating Head	250 / 500 psi	Once prior to DO shoe	
. John M. Linder	Eso, ovo par	Since prior to DO sinos	
			Approved by Date
			Page Market
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			SEP 1 (1) 71115

#### B. Procedure and Testing of BOP Equipment

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The following summarizes the BOP testing standard operating procedures:

- Precede all high-pressure tests with a 250-psi low-pressure test.
- BOP Pressure test frequency:
  - o At nipple-up;
  - o Every 21 days;
  - o After changing out any rams;
  - o Following any BOP repairs;
  - o Prior to drilling out cementing plug in casing strings.
- In addition to the pressure tests outlined above, the following tests will also be conducted:
  - o The pipe rams will be function tested and documented at least once per day.
  - o A visual inspection of the BOP, surface lines and the accumulator/ closing unit will be conducted and documented every rig tour.
  - The blind rams will be function tested and visually inspected upon every complete trip out of the hole with the drill string.
  - All tests, both visual and function tests will be recorded in the IADC log, they will be noted as to type and time in the daily drilling report and they will be listed under the appropriate well in the BOP Test Log Book kept in the Company Man's trailer.
- ANY BOP NOT PASSING A PRESSURE (HIGH OR LOW), FUNCTION OR VISUAL TEST WILL IMMEDIATELY BE PLACED OUT-OF-SERVICE.

## C. List of BOP Trained and Actively Certified Personnel Involved in Drilling Operations and Recording of Significant Drilling Events

There will be a BOP trained person or persons on site during the drilling operations at all times. BOP trained personnel will include Ascent Resources' Company Man who will be present during drilling operations. All daily information from the drilling activities will be included on the "Daily Drilling Report" included as **Exhibit "F"**. The Daily Drilling Report will be available at the well site for inspection by authorized personnel. The Office of Oil and Gas will be notified via telephone immediately following large shows of oil, gas, and/or H<sub>2</sub>S that occur during drilling operations. Ascent Resources' company man will be responsible for this notification.

#### D. Maintaining Records

All records will be maintained in Ascent Resources' WellView data base system. The well site supervisors and/or drilling superintendent will be responsible for ensuring all records are up-to-date. In the case of loss of circulation, hydrogen sulfide gas, fluid entry, abnormal pressure, or any other drilling emergency, the drilling superintendent will notify the Emergency responders and the inspector via cell phone or radio communications as soon as possible if an unusual drilling event occurs.

#### E. Notification

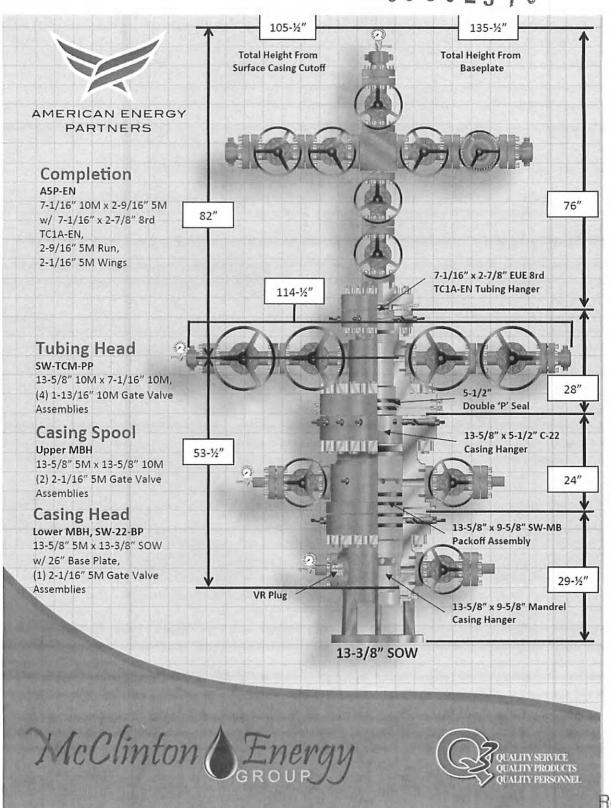
Ascent Resources will notify the Emergency responders and the inspector via cell phone or radio communications as soon as possible if an unusual drilling event occurs, hydrogen sulfide gas monitors alarm or any large kick that occurred during drilling operations.

#### F. Wellhead Assembly Schematic

Please see below for the entire wellhead assembly schematic.

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#### G. Well Killing Operations for Drilling Hazards and Preparations

- Directional / Anti-Collision:
  - Survey / gyro vertical hole as necessary. Anti-collision reports must be run to ensure no inferred issues or problems are present prior to commencing drilling operations
  - A directional plan must be up to date and approved by Drilling Engineer
- Wellbore Stability:
  - Adequate mud weight shall be maintained at all times to help maintain mechanical strength of the rock, wellbore stability, and for well control
- Hole Cleaning:
  - o The supervisor will note any problems that occur while drilling (i.e. drag, torque, tight hole, and lost returns) on IADC form and on the Ascent Resources Morning Report.
  - o Build and pump sweeps as needed and monitor sweep returns at the shaker, adjusting the sweep frequency and volume accordingly.
  - o Replace shaker screens with fine mesh as flow rate and solids loading allow
  - Proper mud properties such as viscosity must be maintained as per the mud program to ensure drill cuttings are being properly transported out of the wellbore.
  - Optimum pump rates/flow rates must be maintained at all times while drilling ahead to ensure drill cuttings are being properly transported out of the wellbore.
  - Run and maintain all solids control equipment available at all times to ensure LGS are being removed from the mud system.
- Differential Sticking:
  - o There is not a history of differential sticking in this field to date.
- Lost Returns:
  - There is limited history of lost returns in this field to date; however, Ascent Resources always uses standard drilling and tripping practices to minimize ECD's and surge pressures on the wellbore.
  - o If losses occur, the Drilling Superintendent will be immediately notified.
  - The mud company will have on hand approved amount of LCM in the event of fluid losses or a loss of returns
  - Maintain adequate amount of base fluid for building new mud in the event of fluid losses.
- Abnormal Pressure:
  - o The entire well is expected to be normally pressured.
  - o The field does not have a history of well control situations.
  - If a well control situation occurs, the Drilling Manager, EHS Manager, and the Office of Oil and Gas Inspector will be immediately notified via telephone.
- In the event that a well is required to be "killed", proper well control methods will be employed.
   Mud weight additives, such as barite, will be on-site and can be added to increase mud weight sufficient enough to "kill" and control the well.

#### 6. Hydrogen Sulfide (H<sub>2</sub>S)

#### A. H<sub>2</sub>S Monitoring Equipment Schematic

Please refer to Exhibit "G" illustrating the H<sub>2</sub>S monitoring equipment placement.

#### B. Statement of Personnel Training

Heceived Office of Oil & Gas SEP 1 0 2015 A safety training program shall be given to all personnel who may be required to work in a known or suspected H2S environment. This training must be given prior to working in an H2S environment. The following areas must be covered in the program.

- · Hazards, properties and characterizes of H2S and sulfur dioxide (SO2) gases
- Sources of H2S and SO2
- Use of H2S detection devices
- Description of H2S and/or SO2 detection systems used at the workplace
- Symptoms of exposure
- Respiratory protection requirements
- First aid procedures and equipment including location of safety equipment
- Use of the "buddy system"
- Wind direction awareness and routes of egress (exits)
- Confined space and enclosed space entry procedures
- Contingency plans including gauging procedures
- Ascent Resources requirements for H2S locations. This should include a discussion of safe workplace practices and procedures

All personnel who work in or may be required to work in an H2S area (employees and contractors) shall complete a refresher course in H2S safety annually.

All training shall be documented. Contractors shall document and provide verification of such training of their employees upon request.

#### C. Notification Method and Access Control

A visual and audio alarm system will be utilized on the rig floor to alert all persons on location of the presence of H<sub>2</sub>S. Audio alarms will activate on the monitoring equipment in the event H2S is detected. Visual hand signals and voice commands will be utilized immediately following a meter detection of H2S.

In the event hazardous concentrations of H2S gas are encountered while drilling, a responsible person will be positioned at the muster point (lease road entrance) to prevent any and all unauthorized persons from coming on to the drill site. Any residential notification will be made verbally after travelling to each residence. Emergency responders will be notified via cell phone or radio communications.

#### D. Monitoring/Protection Equipment

The following details precautions and equipment that will be utilized during drilling operations:

Shallow Gas and/or H2S:

- O Use a rotating head to divert shallow gas if encountered.
- o If H<sub>2</sub>S is encountered, it is mandatory to immediately contact the Drilling Superintendent, EHS Manager, and the Office of Oil and Gas Inspector via telephone.
- o There is not a history of H<sub>2</sub>S in this field to date.
- o A H2S trained and qualified individual will be on site to setup H2S monitoring agriculties

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In addition to the above, portable meters will be placed at the possum belly at the shaker to warn of any potential H<sub>2</sub>S encounters. Please refer to **Exhibit "G"** illustrating the H<sub>2</sub>S monitoring equipment placement.

#### E. Personal Protective Equipment

Personal Protection Equipment (PPE) - All employees and contractors are required to wear the appropriate PPE including Fire-Resistant Clothing (FR), Hard Hats, Hearing Protection, Safety Glasses, Steel Toe Boots, and any other PPE equipment as required for operation specific jobs including gloves, respirators, etc.

#### F. Flaring

Ascent Resources does not intend to flare during drilling operations or following completion activities. In the event well flaring operations (other than tank vapor gas flaring during flowback and production) are warranted, this plan will be modified and the DEP will be notified and updated with the modifications.

#### G. Collision Avoidance

8-31-15

#### A. Anti-Collision General Policy

- All wells whose planned well path has potential collision risk with existing wells will be actively
  monitored for collision.
- No drilling will occur on pads with actively producing wells within 200'. Refer to SimOps Section in the BMP (Best Management Practice) manual.
- Separation factors (SF) will be planned for and maintained above 2.0 unless specific requirements outlined in the following sections are met.
- If SF falls below 2.0 or magnetic interference occurs on an unplanned basis, drilling will stop until an adequate procedure is in place to mitigate risk.
- SF factors between 2.0 and 1.5 may be permitted if risk can be reduced through sound
  engineering data and operational practice. Verbal approval from Drilling Manager is required to
  proceed.
- SF factors between 1.0 and 1.5 will only be permitted under certain scenarios provided full
  consideration is given to the risks and associated consequences. These must be appropriately
  mitigated with sound engineering data and operational practices and a written procedure must be
  approved by the Drilling Manager.
- The Pedal Curve method will be utilized to calculate a Separation Factor (SF) between ellipses
- Survey calculations shall be the Minimum Radius of Curvature method.

#### B. Survey Requirements

- General Requirements
  - All survey data shall be required to have azimuths pre-corrected to Grid North. The values for convergence and declinations and depth datum details used shall be reported

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- on all definitive surveys. Additionally, survey tool accuracy should be specified on all definitive survey reports presented to Ascent Resources.
- All survey plats will be checked for accuracy by the Ascent Resources' Field and Water management group and also by the Ascent Resources' drilling engineer before sending plats to directional company for well planning.
- All directional plans will be checked to verify proper grid correction; the plan must be approved by the drilling engineer before proceeding ahead. Exhibit "H" illustrates the sign-in sheet to ensure verification of the coordinates.
- NAD 27 will be the geodetic reference system unless regulatory requirements dictate otherwise.
- o In all wells where MWD surveys are not run, a regularly spaced Gyro Multi-Shot (GMS) survey shall be obtained at a frequency not to exceed 100'.
- While directional drilling, MWD survey frequency shall not exceed 90'. Approval from engineer must be obtained to exceed 90' surveys but will be limited to a maximum of 180' in the lateral portion of the well.
- o All definitive surveys will contain the following data:
  - Well Name
  - Rig Floor Elevation
  - Local Coordinates
  - Section Plane
  - Declination Applied
  - Grid Convergence Applied
  - Any other correction applied
  - UTM Model
  - Survey History Depths and Dates
  - Survey Tool Errors
- O Deviation calculations shall be performed by the directional drilling contractor. The directional drilling contractor is responsible for the accurate reporting of all wellbore positioning data. The directional drilling contractor will present the definitive surveys utilizing data from any of Ascent Resources' surveying contractors.
- The quality of the surveys taken shall be checked independently by the directional driller using the surveying contractor's approved survey acceptance criteria.
- The Ascent Resources' representative will check tie-in data before drilling out of each hole section. Projected surveys will never be used to tie-in subsequent surveys.
- Magnetic Survey Requirements
  - The directional drilling contractor will calculate the following before each directional BHA is run:
    - Sufficient non-magnetic spacing is in place at both MWD and MMS positions to deliver < 1 degree azimuth error due to drill string interference.</li>
    - BHA SAG correction for MWD and MMS positions. If SAG corrections is >=
       0.1 degree inclination it must be applied.
- Gyro Survey Requirements

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- o GMS surveys shall be run in all surface and intermediate casing strings on all pad drilling projects unless an MWD survey was run while drilling to casing point.
- o Gyro Single Shot (GSS) shall be used in place of magnetic survey instruments in all cases where magnetic interference from nearby wells is experienced until adequate separation is achieved and magnetic interference is eliminated.
- o Gyro Single Shot Surveys shall be taken when drilling surface hole sections whenever magnetic interference is detected.
- o Gyro Multi Shot Surveys shall be taken to decrease positional uncertainty prior to drilling critical hole sections (i.e. high pressure sections, critical wellbore proximity hole sections, etc.). In this instance the requirements for the GMS shall be clearly stated in the drilling program.

#### C. Well Planning Requirements

- Prior to drilling, a preliminary directional plan for all wells on pad will be created and a
  preliminary closest approach 3D proximity scan will be made to verify adequate planned
  wellbore separation.
- During collision scans all offset well surveys will be evaluated for accuracy.
- Industry accepted error modeling tools (ISCWSA) will be applied at a minimum of 2.0 sigma confidence.
- NAD 27 will be the geodetic reference system unless regulatory requirements dictate otherwise.
- During the well planning process, the Directional Drilling Contractor shall calculate a Separation Factor for all potential collision risk wells identified in the clearance scan and will be verified by the drilling engineer.
- The Directional Drilling Contractor and Drilling Engineer shall make a reasonable effort to plan the well to maintain S.F. over 2.0.
- All wells planned with a S.F. of less than 2.0 require Drilling Manager approval.
- After completion of location and prior to setting the conductor the land survey company will resurvey the stakes for each surface location and drive a steel stake in the ground identifying each individual well. An as-built will be created and circulated to the Drilling Engineer and Drilling Superintendent identifying each well and the appropriate X and Y locations.
- The Drilling Superintendent will create a bubble plot of location to indicate well location and compare to the As-Built Survey Plat.

#### D. Well Execution Requirements

The Drilling Representative shall have overall responsibility for the maintenance of safe operations when drilling in close proximity to other wells. The lead directional driller is responsible for the accurate reporting of the wellbore positioning and projection and calculation of bit position and uncertainty at the bit. Ascent Resources' company representative on site will verify the directional driller's numbers. In any potential approach or crossing of any wellbore (planned or drilled), Ascent Resources' directional specialist will verify all surveys acceived projections.

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- First wells on pads may be drilled with inclination only surveys at intervals of no greater than 500' provided that no collision risks exist. A GMS must be run prior to picking up directional tools.
- Proper tool alignment and orientation MUST be verified by the Lead Directional Driller and the Ascent Resources company representative on site.
- For additional wells on pad, the surface hole section may be surveyed with Magnetic Single Shot (MSS) tools at a frequency no greater than 200', provided that a SF > 2.0 is maintained.
- If the section below surface casing is planned vertical, Magnetic Single Shot tools may be run at an interval no greater than 500' provided a center-center separation distance of 150' is maintained. If the C-C distance decreases below 150', a GMS or MWD survey must be run at an interval no greater than 90'.
- Prior to picking up directional MWD tools, a GMS survey will be run at intervals of no more than 100'.
- All directional plan tie-in points will be verified by the drilling engineer and the directional drilling contractor. If a projection is used for tie-in, this projection will be replaced with a survey once drilling commences.
- Offset well monitoring and reporting will be performed by the directional driller on location, if
  the Separation Factor falls below a 2.0, Anti-Collision software must be used to verify the SF and
  Center-Center distance of any potential well approach or collision.
- Suspension of Drilling Operation

The following rules shall apply at all times when the calculated Separation Factor for the drilling well falls below a SF of 2.0 on an unplanned basis:

- When the SF falls below a 2.0 on an unplanned basis, the Drilling Superintendent shall be informed and drilling shall immediately cease.
- A plan of action shall be formulated after considering the following options:
  - Re-survey the current well with a more accurate survey tool to reduce the radius of uncertainty and increase the projected S.F. to 2.0.
  - ❖ Make a trip to allow use of a steering BHA to alter the well path and increase the projection of S.F. to 2.0 or that specified by the wellplan.
  - Plug the well and side-track at a depth where the well can be safely redrilled.
  - ❖ If the Drilling Manager determines adequate risk mitigation procedures are in place, drilling may resume.
  - ❖ If the SF falls below a 1.5, a written procedure identifying risks and mitigation approved by Drilling Manager is required prior to resumption of drilling activity.
  - ❖ If the SF falls below a 1.0, the well will be plugged back and the sections of the well of concern will be sidetracked unless an exception and written procedure is approved by the Drilling Manager.
- Drilling fluid of an appropriate density will be utilized in any portion of the well with SF less than Received 2.0.

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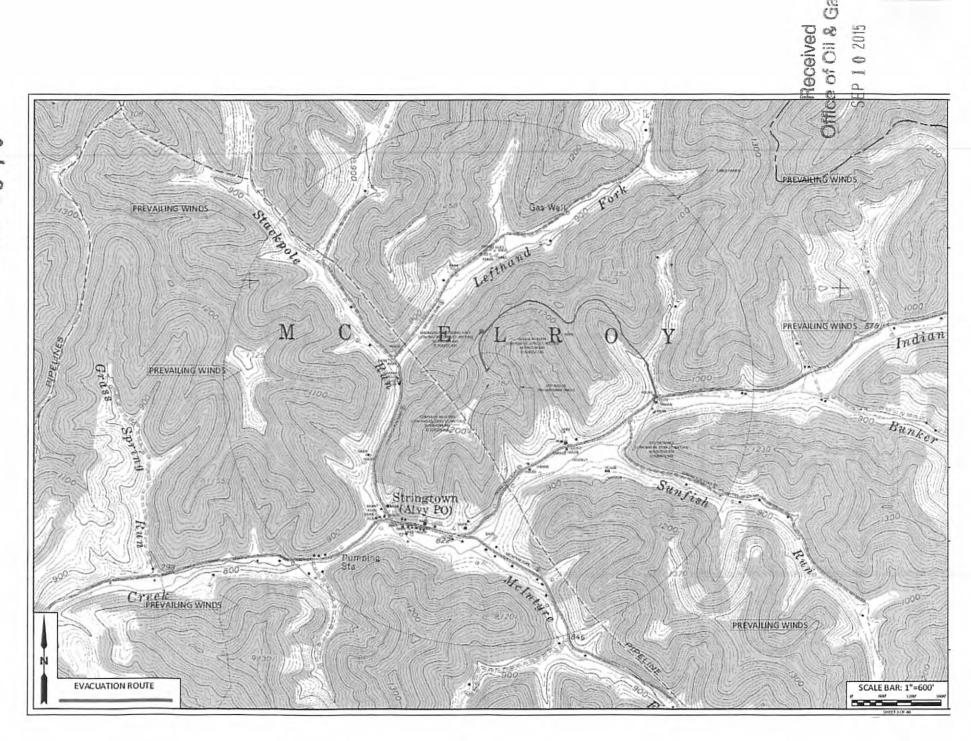
MICE OF CHAPTER

• For wells planned below a SF of 2.0, adequate risk mitigation and written drilling manager approval must be in place before drilling ahead.

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# Exhibit "A"

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# Exhibit "B"

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MPC 15

2015

# Exhibit "C"

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SEP 1 0 2015

26

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### **Ascent Resources Sign-In Log**

							CONTACT
0	DATE	LOCATION	OPS PHASE	NAME	TITLE	COMPANY	NUMBER
-							
-							
					_		7

# Exhibit "D"

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SEP 1 0 2015

Well name		N MCY TY 7	1						
API#	47-095-XXXX								
	Preliminary								
County	Tyler		Prepared by:						
Township	McElroy		Mark McLochlin	6/24/2015					
Section	McEndy		WALK WICE OCTION	0/24/2013					-
- 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7000								-
Ground Elevation	1280								
Derrick FloorEst	1300								
USDW									
Lat Long (NAD 27)	Lat	Long					1111		
Surface	39.452870	-80.691195							
KOP									
TP									
Bottom	39.470903	-80.704162							
Dilot Log	Hart A 20	~4 miles NE of the	no nad	-			-		-
Pilot Log	Wiley S GRN WZ 12HU	~4 miles N of the					-		
	WHEY S GRIV WZ IZHU	4 miles in the	pau						
Offset Distance (Est)	390								1
Lateral Length (Est)	7,107								
	7,10								
Hard Lines	See plat								
Target Depth KBTVD	7261								
Formation Dip	89.5								
Target Azimuth	150								
Total Depth	est								
Formations	KBTVD Depths	Subsea Est	Poss H2S	Gas					
	, instruction				FW value	comes fro	m analysis	of surface	water near
Freshwater	500	800					deeper th		
Pittsburgh Coal	1100	200			the party				
r ittsburgir oout	1100	200			SW analy	sis from P	Horner #13	(~3000° S	SW of pad
Saltwater	1563	-263					d back to E		
Big Injun	2450	-1150							
Big Injun Base	2650	-1350							
Berea	3000	-1700		•					
Gordon	3175	-1875		*					
Gordon Base	3250	-1950							
Middlesex	6961	-5661							
Geneseo	7100	-5800		*					
Tully	7130	-5830							
Hamilton	7156	-5856							
Marcellus	7226	-5926		*					
Purcell	7242	-5942							
Lower Marcellus	7244	-5944							
Basal Marcellus	7267	-5967		*				-	-
Onondaga	7276	-5976					-	-	-
Oriskany							-		
TD									-
Mud logging	TBD	-					-		
muu logging	100	-	-					-	-

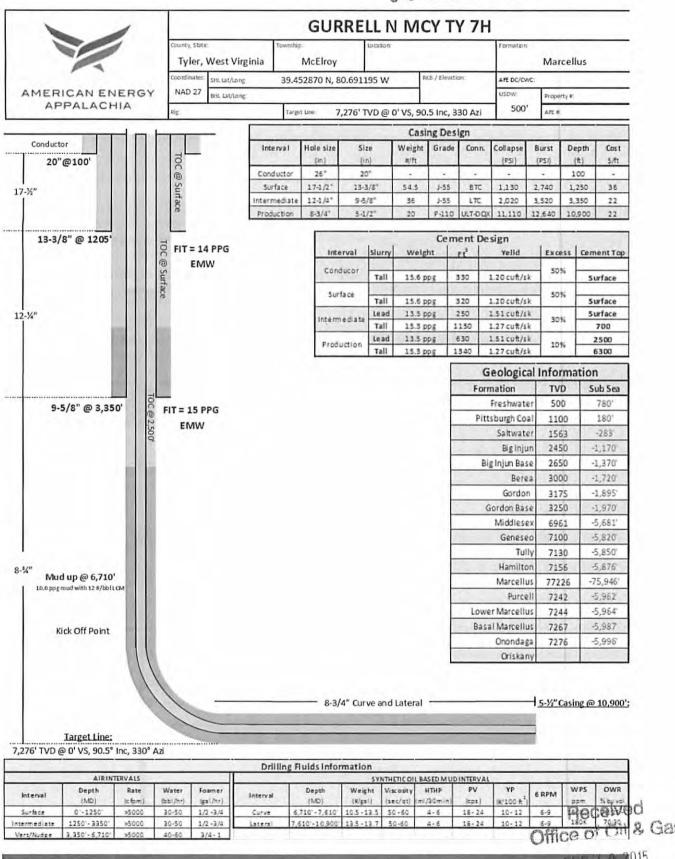
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SEP 1 0 2015

# Exhibit "E"

Office of Oil & Gas SEP 1 0 2015

### 09502310



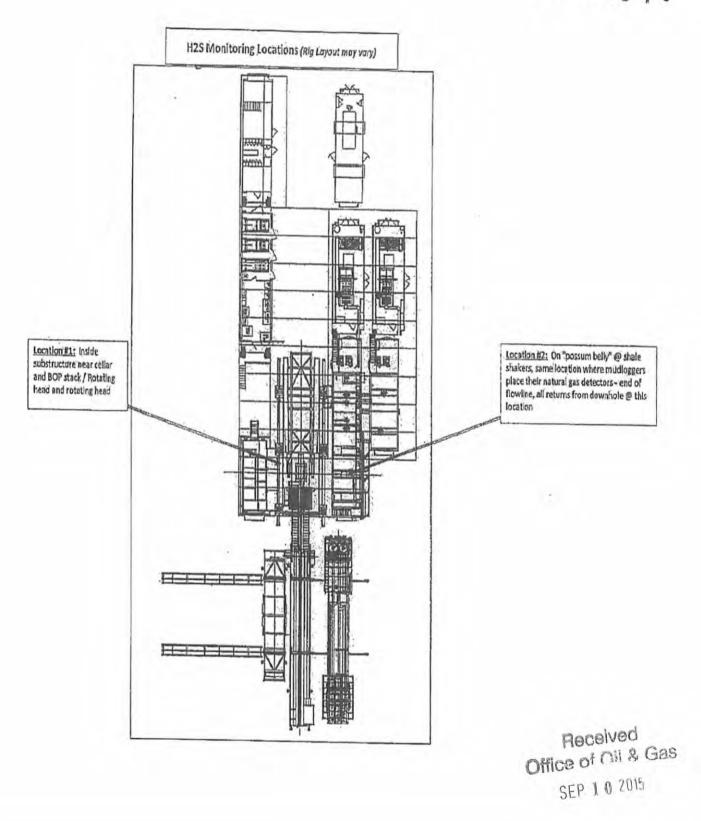
# Exhibit "F"

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SEP 1 0 2015

ASCENT RESOURCES	Daily Drilling Report WELL NO.	Report Date Report B Projected Days Drilling Days Current Depth Depth Progress Planned VS Current VS AFE # Total AFE	
AP) Surface Legal Location  Report Summary	Lattuce Longitude Ong KB E AKE (1)	County Otale WEST VIRGINIA	
West Spus TD Date RR Date Target Formation  District at Report Time  Operations Summary	Planned Operations    Planned Operations	AFE Daily Field Ett (Cost) Gure Field Est (Cost)	
	Progress (ft) Orling Time (tr) Avg ROF (fthr)	Time Since LTI (days) Time Since Ri (days)	
Contacts: Dially Time Log  Dari End Day Diad Depth End Depth			
Time Jime Jime (16/8) (16/8)  Distilling Parameters StatDeath End Death RotTime Side Time	Comments Hole Section in	rva Calegory Activity NPT	
Sit information	hir) TFO (1 dP (DPP) (ps) (1000 br) (gcm(cfe) SPP (ps)	RPM (rpm) (10039) (10009) Drix Tq	
	Depth in Depth Out Depth Out Dries This Job Drie Avy RCP (this) Job Chi. Here (this) (this)	Rot Time Office Time Rot ROP W/GE Max Max RPM (thr) (thr) (thor) (1000bh) wpm)	
EHA No Ben Description  Mud Motor Details	Make Madel OD (m)	Uts Length (ft) Top Thread	
	ch (t) Make Model Et to Bend (t)	Senal Number Tq Max (f1-10) Start Hrs (Ar) End Hrs (Ar)	
BOPE Testing Tree	Last Cate Nest Check Date	Days Unst Nest Check (days)	
Leak Off and Formation Integrity Tests Test type Test Date Desm (thus) Wellbore Design	Fluid Type Fluid Dens (ib/ Dts Press (ps)) MWE (bigs	) Comment	
Casing Description Survey Data	Run Date OD (m) Wt (8/%) Grade	Conn Set Depth (fix 8) Length (fix	
Mod Logging Information Linkey and these	TUD (MAB) (40 (6) N.D (6) N.D (6) (MATTYP Gas (Units)	EV Its DES (VISOR) BUR (VISOR)  Avg Dril Gas (units) Max Dril Gas (units)	
Geological Data Formation have	Prog Top TVD (MX8)	Del Top MD (1948) Del Top (TVD) (1948)	
EH&S Report 24 Hour Burnnary			
Type Time  Job Stapplies  Supply tem Description Received	Consumed Returned Note	Comments  Com On Loc   Com Consumed   Com Fiele Est (Cost)	
			Received
		0#	ice of Oil & Gas
		Oli	SEP 1 0 2015

# Exhibit "G"

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# Exhibit "H"

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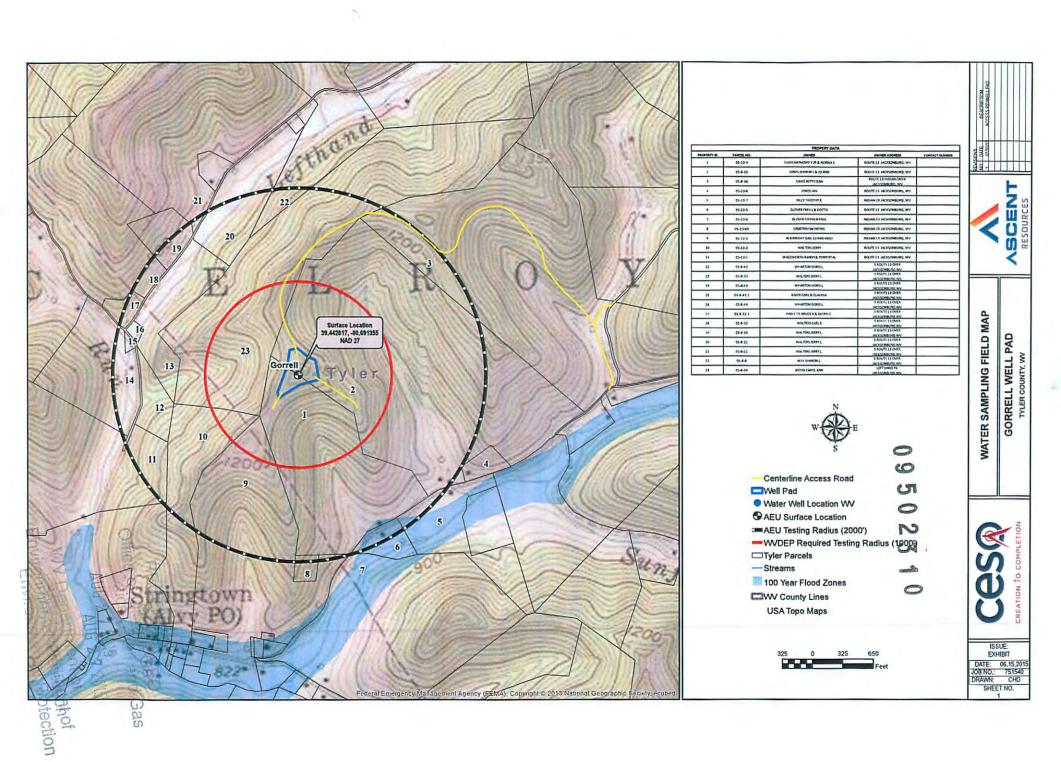
#### **Ascent Resources – Marcellus, LLC**

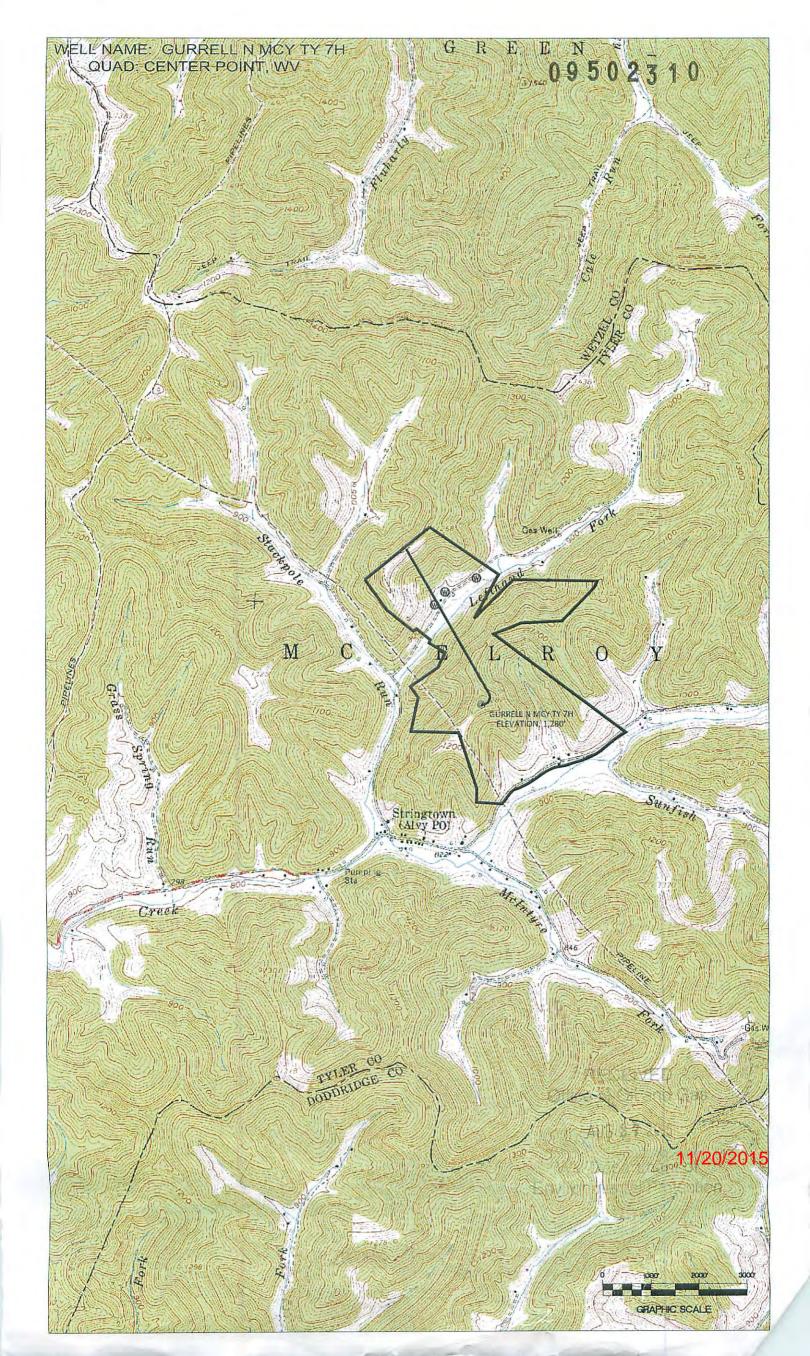
#### **Survey Verification**

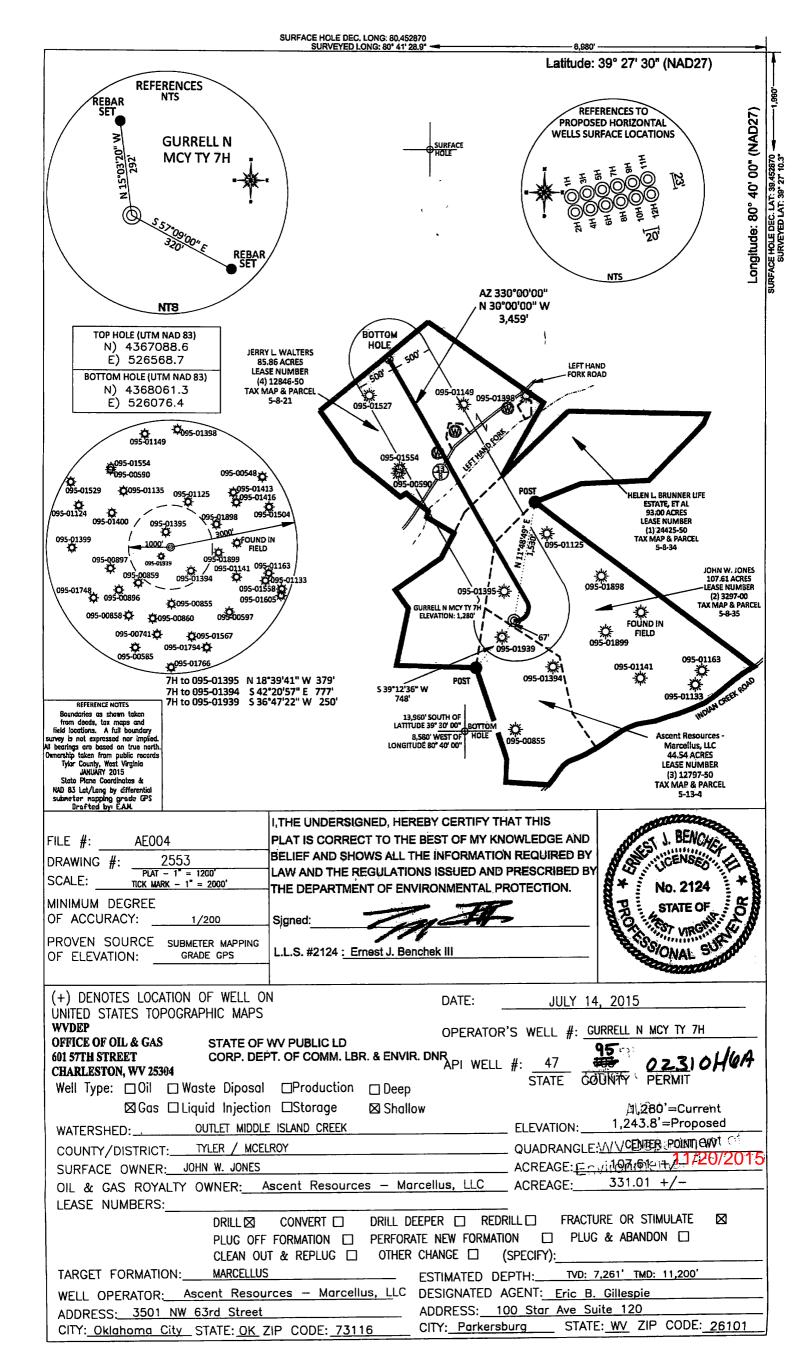
This form is to provide verification on multiple levels of well plats and azimuthal directional plans and slide adjustments when in critical areas. All survey plats will be checked for accuracy by Ascent Resources – Marcellus LLC's Field and Water Management team. Plats will then be reviewed by Ascent Resources drilling engineer before plats are released to directional drilling contractor for well planning. All directional plans will be reviewed and approved by Ascent Resources' drilling engineer before the commencement of drilling operations.

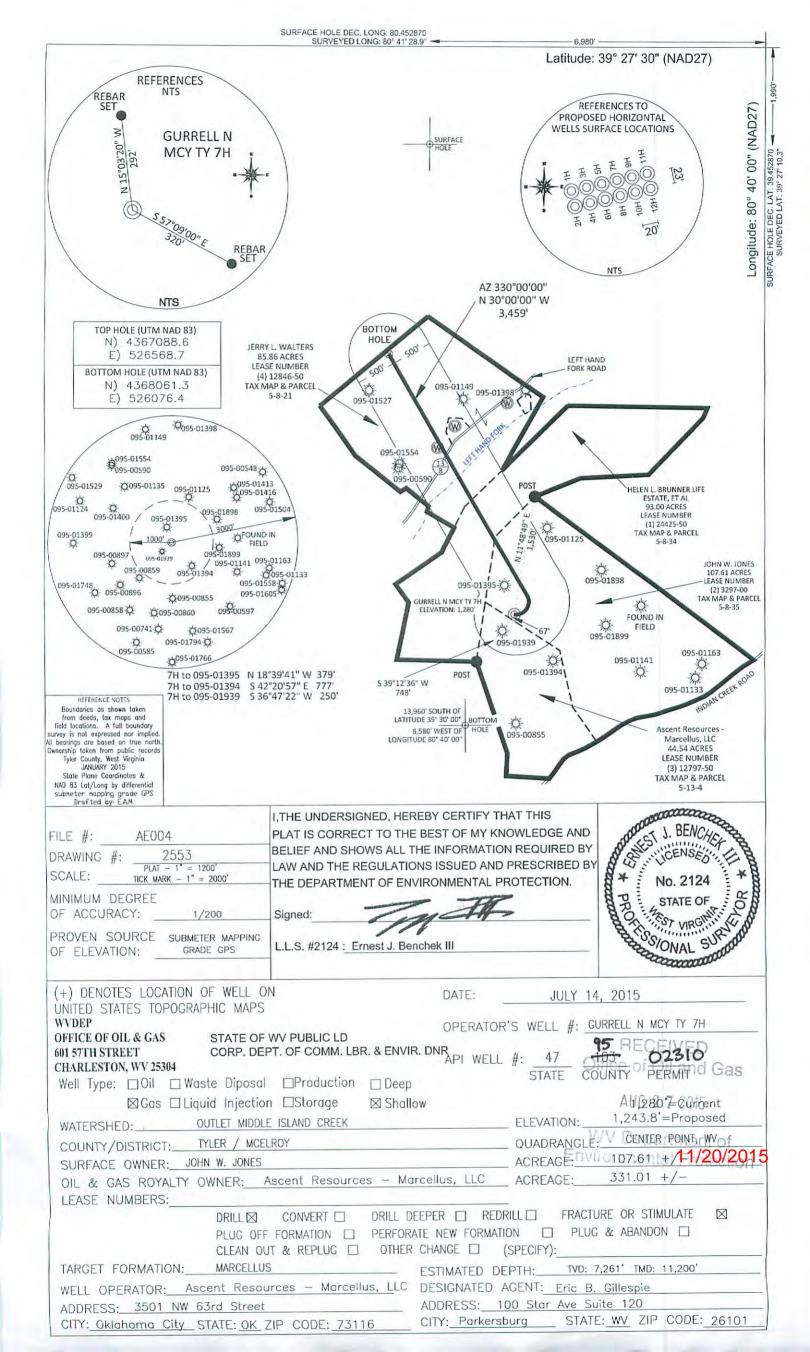
Visual Inspection by Field and Water Management
Date:
Directional Driller:
Azimuthal direction to slide
Date:
MWD Employee:
Date:
Company Man:
Date:

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WW-6A1 (5/13)

Operator's Well No. Gurrell N MCY TY 7H

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

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

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

Lease Name or				
Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page

Please see attached.

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

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

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

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

from the appropr	riate authority before the affect	ed activity is initially
		RECOIL and Gas
Well Operator:	Ascept Resources - Marce	ellused 6 Of O
By:	SHADS-	ellusting of Oil and Gas
Its:	Regulatory Technician	of ment
		WV Department of WV Department Protection
		Tayironmental

WW-6A1

Operator's Well No.

Gurrell N MCY TY 7H

#### 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 depoited 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:

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 was vested with title thereto. Please note, throughout the chain of title, various mergers and name changes occurred between the referenced companies. In several instances, no documentation was filled in the county records evidincing such a merger or name change. In those cases, we've directed your attention to the records of the West Virginia Secretary of State, where said documentation can be found.

Tract	Parcel No.	Fee/Lease No.	Lesser/Assignor	Lessee/Assignee	Royalty/Instrument	Book/Page
1	5-8-34	90813-00 TR1	Edward A Flahive, Executor of the Estate of Edith W McIntyre	Pennzoil Products Company	Deed	288/364
		20010 00 1111	Pennzoil Products Company	Pennzoil Exploration and Production Company	Assignment	325/178
			Pennzoil Exploration and Production Company	PennzEnergy Exploration and Production Company, LLC	Certificate of Merger	8/516
			PennzEnergy Exploration and Production Company, LLC	Devon Energy Produuction Company, LP	Certificate of Merger	8/576
			Devon Energy Production Company, LP	East Resources, Inc	Assignment	332/146
			East Resources, Inc.	HG Energy, LLC	Deed	379/410
			East Resources, Inc. and HG Energy, LLC	American Energy - Marcellus, LLC	Assignment	153A/238
			American Energy - Marcellus, LLC	Ascent Resources - Marcéllus, LLC	Cert. of Name Change	WV Sec. of State record
2	5-8-35	3297-00	Emeline Gorrell	South Penn Oil Company	Deed	33/61
			South Penn Oil Company	South Penn Natural Gas	Deed	114/1
			South Penn Natural Gas	South Penn Oil Company	Deed	137/216
			South Penn Natural Gas	South Penn Oil Company	Deed	151/516
			South Penn Oil Company	The Pennzoil Company	Cert. of Name Change	WV Sec. of State record
			Pennzoil Company	Pennzoil United, Inc	Assignment	178/221
			Pennzail United, Inc.	Pennzoil Company	Cert. of Name Change	219/171
			Pennzoil Company	Pennzoil Products Company	Assignment	265/258
			Pennzoil Company	Pennzoil Products Company	Assignment	269/417
			Pennzoil Products Company	Pennzoil Exploration and Production Company	Assignment	325/178
			Pennzoil Exploration and Production Company	PennzEnergy Exploration and Production Company, LLC	Certificate of Merger	8/516
			PennzEnergy Exploration and Production Company, LLC	Devon Energy Produuction Company, LP	Certificate of Merger	8/576
			Devon Energy Production Company, LP	East Resources, Inc	Assignment	332/146
			East Resources, Inc.	HG Energy, LLC	Deed	379/410
			East Resources, Inc. and HG Energy, LLC	American Energy - Marcellus, LLC	Assignment	153A/238
			American Energy - Marcellus, LLC	Ascent Resources - Marcellus, LLC	Cert. of Name Change	WV Sec. of State recon
3	5-13-4	12797-50	W E Ash and Emmaline Ash, his wife	South Penn Oil Co.	1/8	22/634
-			South Penn Oil Company	The Pennzoil Company	Cert. of Name Change	WV Sec. of State record
			Pennzoil Company	Pennzoil United, Inc	Assignment	178/221
			Pennzoil United, Inc.	Pennzoil Company	Cert. of Name Change	219/171
			Pennzoil Company	Pennzoil Products Company	Assignment	265/258
			Pennzoil Company	Pennzoil Products Company	Assignment	269/417
			Pennzoil Products Company	Pennzoil Exploration and Production Company	Assignment	325/178
			Pennzoil Exploration and Production Company	PennzEnergy Exploration and Production Company, LLC	Certificate of Merger	8/516
			PennzEnergy Exploration and Production Company, LLC	Devon Energy Produuction Company, LP	Certificate of Merger	8/576
			Devon Energy Production Company, LP	East Resources, Inc	Assignment	332/146
			East Resources, Inc.	HG Energy, LLC	Deed	379/410
			East Resources, Inc. and HG Energy, LLC	American Energy - Marcellus, LLC	Assignment	153A/238
-			American Energy - Marcellus, LLC	Ascent Resources - Marcellus, LLC	Cert. of Name Change	WV Sec. of State record
4	5-8-21	2171-00	Eric Lemasters	East Resources, Inc	Deed	348/337
			East Resources, Inc.	HG Energy, LLC	Deed	379/410
			East Resources, Inc. and HG Energy, LLC	American Energy - Marcellus, LLC	Assignment	153A/238
			American Energy - Marcellus, LLC	Ascent Resources - Marcellus, LLC	Cert. of Name Change	WV Sec. of State record

RECEIVED
Office of Oil and Gas

OCT 1 6 2015

WV Department of Environmental Protection



July 23, 2015

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 Gurrell N MCY TY 7H

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 Gurrell N MCY TY 7H 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 Bravo

Regulatory Technician ariel.bravo@aep-lp.com

Cell 405-403-4803 Office 405-607-5529

> RECEIVED Office of Oil and Gas

> > AUG 2 7 2015

WV Department of Environmental Protection

## STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE CERTIFICATION 0 9 5 0 2 3 1 0

SEISMIC ACTIVITY WAS CONDUCTED  1. NOTICE OF ENTRY FOR PLAT SURVEY or  NO PLAT SURVEY WAS CONDUCTED  2. NOTICE OF INTENT TO DRILL or  NOTICE NOT REQUIRED BECAUSE  1. RECEIVED	Date of Notic	e Certification: 0/122/2015	API No. 4/	
Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forn below for the tract of land as follows:  State:  Vest Virginia State: State:  Vest Virginia State: State:  Vest Virginia State: State: State: State: Stating: Northing:  Vest Virginia State owner notice of entry to survey pursuant to subsection (a), section shall be on a form as prescribed by the secretary, shall be on a form as prescribed by the secretary shall be on a form as prescribed by the secretary shall be on a form as prescribed by the secretary shall be on a form as prescribed by the secretary shall be on a form as prescribed by the secretary shall be on a form as prescribed by the secretary shall be on a form as prescribed by the secretary shall be on a form as prescribed by the secretary shall be on a form as prescribed by the secretary shall be on a form			Operator's Well No. Gui	rell N MCY TY 7H
Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Form below for the tract of land as follows:  State:  West Virginia County: Tyler District: McElroy Watershed: Outlet Middle Island Croek  Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article information required by subsections (b) and (c), section sixteen of this article (ii) that the requirement was deemed satisfied as of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of set of this article have been completed by the applicant.  Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:  Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:  Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:  Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:  Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operat			Well Pad Name: Gurrell	MCY TY
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below for the tract of land as follows:  State: West Virginia County: Tyler District: McElroy Quadrangle: Conter Point Watershed: Outlet Middle Island Creek  Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article were waived in writing by the surface owner; and Pursuant Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of set of this article have been completed by the applicant.  Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:  Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:  Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:  Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:  Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:  Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator h			§ 22-6A, the Operator has provided the required parties	with the Notice Forms listed
State: West Virginia County: Tyler			, and or a promote that promote the required promote promote the results of the r	
County: Tyler   District: MeEliroy   Public Road Access:   Public Road Access:   Generally used farm name:			Easting:	
District: MacEtroy	County:	Tyler		
Quadrangle:	-	<del></del>		· · · · · · · · · · · · · · · · · · ·
Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operato it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this artinformation required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of set of this article have been completed by the applicant.  Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:  Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:  Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:  Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:  Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:  Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:  Pursuant to West Vi				
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#### **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 required parties by affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

AUG 2 7 2015

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#### Certification of Notice is hereby given:

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THEREFORE, I Ariel Bravo have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification—and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information. I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator:	Ascent Rescurces - Marcellus, LLC	Address:	3501 NW 63rd, Suite 600	
By:	Ariel Bravo		Oklahoma City, OK 73113	
Its:	Regulatory Technician	 Facsimile:	405-607-5868	and the state of t
Telephone:	405-607-5529	 Email:	ariel.bravo@ascentresources.com	
	# 1400742 # 1400	 ribed and swo	orn before me this 22 day of spires 1/23/18	Notary Public

Oil and Gas Privacy Notice:

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

RECEIVED
Office of Oil and Gas

SEP 09 2015

WV Department of 2015 Environmental Protection

API NO 49 5 0 2 3 1 0
OPERATOR WELL NO. Gurrell N MCY TY 7H
Well Pad Name: Gurrell MCY TY

### 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: 10/07/2015 Date Permit Application Filed: 10/09/2015 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 ✓ REGISTERED ☑ METHOD OF DELIVERY THAT REQUIRES A **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: ☑ SURFACE OWNER(s) COAL OWNER OR LESSEE Name: Ascent Resources - Marcellus, LLC Name: Raymond & Norma Davis Address: PO Box 13678 Address: 410 Maple Ave. Apt 4 Oklahoma City, OK 73113 New Martinville, WV 26155 COAL OPERATOR Name: John Jones Address: 720 James Street Name: New Martinville, WV 26155 Address: ☐ SURFACE OWNER(s) (Road and/or Other Disturbance) IJ SURFACE OWNER OF WATER WELL Address: AND/OR WATER PURVEYOR(s) Name: Please see attached. Name: Address: Address: OPERATOR OF ANY NATURAL GASTOEN FILE Address: Office of Oil and Gas ☐ SURFACE OWNER(s) (Impoundments or Pits) Name: Address: \*Please attach additional forms if necessary OCT 1 6 2015

WV Department of Environmental Protection

WW-6A (8-13) API NO. 47-OPERATOR WELL NO. Gurrell N MCY TY 7H
Well Pad Name: Gurrell MCY TY

#### 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 granter, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of the secretary considers necessary. 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 many effective dates from the control of the state or within the many corps of Engineers within any waters of the state or within the many corps of Engineers within any waters of the state or within the many corps of Engineers within any waters of the state or within the many corps of Engineers within any waters of the state or within the many corps of Engineers within any waters of the state or within the many corps of Engineers within any waters of the state or within the many corps of Engineers within any waters of the state or within the many corps of Engineers within any waters of the state or within the many corps of Engineers within any waters of the state or within the many corps of Engineers within any waters of the state or within the many corps of Engineers within any waters of the state or within the many corps of Engineers within the corps of Engineers within the many corps of Engineers within the many corps of Engineers within the corps of Engineers w 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 was a line of the compounds. well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a Finding in the interest of the control of the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

Well Pad Name: Gurrell MCY TY

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

#### Water Well Testing:

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

#### Water Testing Laboratories:

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

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

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

#### Written Comment:

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

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

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Office of Oil and Gas

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

Environmental Protection



#### 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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Office of Oil and Gas

OCT 16 2015

WV Department of Environmental Protection WW-6A (8-13) APINO 45 0 2 3 1 0
OPERATOR WELL NO. GUITEII N MCY TY 7H

Notary Public

Well Pad Name: Gurrell MCY TY

Notice is hereby given by:

Well Operator: Ascent Resources - Marcellus, LLC

Telephone: 405-607-5454

Email: ariel.bravo@ascentresources.com

Address: PO Box 13678

Oklahoma City, OK 73113

Facsimile: 405-607-5868

#### 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:deprivacyofficer@wv.gov">deprivacyofficer@wv.gov</a>.

HUMER KOLLOWIE	
# 14000742	
OF OKLANIA	
The same of the sa	

Subscribed and sworn before me this 6 day of Oct ,2015

My Commission Expires 01/23/2015

Ascent Resources - Marcellus, LLC
Certified Mail Receipts
Gurrell N MCY TY 7H
WW-6A Notice of Application
Notice to Surface Owners

09502310

קטר	CERTIFIED MAIL® RECI	
ח	For delivery information, visit our website of	USE
בשבר בשטט	Certified Mail Fee  \$ Extra Services & Fees (check box, edd fee as appropriate)  Return Receipt (hectronic)  Certified Mail Restricted Delivery  Adult Signature Required  Adult Signature Restricted Delivery \$	Postmark Here
7015 UBYD UUUS	Postage \$ Total Postage and F  \$	26155

	Domestic Mail Only	
	For delivery information, visit our website	at www.usps.com ,
7	UFFICIAL	USE
1	Certified Mail Fee	TART A
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	\$	GRS VIIE
	Raymond & Norma Davis	0 11
	5260 DuPond Road	
	Parkersburg, WV 26101	
- 1		

- RECEIVED
Office of Oil and Gas

OCT 1 6 2015

WV Department of Environmental Protection 11/20/2015

		Surface O	wners		
		Gurrell N MCY TY 1H, 3H,	5H, 7H, 9H and 11H		-
		Gurrell S MCY TY 2H, 4H,	6H, 8H, 10H and 12H		
Name		Address	City	State	Zip
John W. Jones	Ţ	720 James Street	New Martinsville	w	26155
Raymon and Norma David	7	5260 DuPond Rpad	Parkersburg	w	26101

	Coal Owners				
	 Gurrell N MCY TY 1H, 3H, 5H, 7H, 9H and 1	1H			
	 Gurrell S MCY TY 2H, 4H, 6H, 8H, 10H and 1	12H	-		
Name	Address	City	State	Zip	
Ascent Resources - Marcellus, LLC	3501 NW 63rd Street	Oklahoma City	OK	73	3116

	Water Owners			
	Gurrell N MCY TY 1H, 3H, 5H, 7	H, 9H and 11H		
	Gurrell S MCY TY 2H, 4H, 6H, 8H	I, 10H and 12H		
Name /	Address	City	State	Zip
Betty Jean Hayes 🗸 /	10240 Indian Creek Road	Jacksonburg	wv	26377
Carl & Claudia Baker	575 Stackpole Run Road	Alvy	wv	26377
Carl Walters	3709 Shadey Grove Road	Providence	NC	27315
Carol Ann Aston	1212 Courtland Road	Weirton	wv	26062
Doris L. Wharton	313 Fourth Avenue	Paden City	wv	26159
Fred L. and Dottie Glover	162 McIntyre Fork Road	Jacksonburg	wv	26377
Gail, Esther & Heidi Waybright	HC 62 Boc 65	Jacksonburg	W	26377
Jan Jones	584 Bennetts Mill Road Street	Jacksonburg	NJ	08527
Jerry Walters	17 Stackpole Run Road	Jacksonburg	wv	26377
John W. and Jo Ann Jones	720 James Street	New Martinsville	wv	26155
Joseph Dudley	31 Lefthand Fork Road	Jacksonburg	wv	26377
Randy and Terry Wadsworth	1108 McIntyre Fork Run Road	Alvy	wv	26377
Raymon and Norma Davis	5260 DuPond Rpad	Parkersburg	wv	26101
Stephen Paul Glover	129 McIntyre Fork Road	Jacksonburg	wv	26377
Timothy Reily	2887 Thomas Avenue	Huntington	w∨	25705
WV Dept. of Natural Resources	Capitol Complex, Bldg 3, Rm 643	Charleston	W۷	25305

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Office of Oil and Gas

OCT 1 6 2015

WV Department of Environmental Protection 15

95-02310 Operator Well No. Gurrell N MCY TY 7H

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

Charleston, W obtained from	reby given by:	s - Marcellus, LLC	Okla	o1 NW 63rd, Suite 600 klahoma City, OK 73113 5-607-5868  RECEIVED  Office of Oil and Gas
Charleston, W obtained from  Notice is her Well Operator Telephone:	reby given by:  Ascent Resource		Okla	
Charleston, W obtained from Notice is her Well Operator	reby given by:		Address: 350	01 NW 63rd, Suite 600
Charleston, W obtained from Notice is her	reby given by:		20.92	
Charleston, W	the Secretary b			
	ed from the Sec V 25304 (304-	retary, at the WV D 926-0450). Copies	Department of Environmental Pro	les related to oil and gas exploration and production rotection headquarters, located at 601 57 <sup>th</sup> Street, SE, al information related to horizontal drilling may be <u>uult.aspx</u> .
District: Quadrangle:			Watershed: Generally used far	Outlet Middle Island Creek
County:	Tyler			174 m 1
State:	West Virginia	nu as follows.		& Longitude: N 4367090.1/ E 526574.6
			notice is hereby given that the und	ndersigned well operator is planning entry to conduct
			*please attach addi	ditional forms if necessary
Address:				
Name:			Address:	ee attached.
New Martinsville, W				ee attached.
	d Davis & Norma S. Maple Avenue, Apt. 4	*	MINED AT	AL OWNER(s)
New Martinsville, W	7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1	Oklahoma City, OK 7	73113
Address: 720 J				NW 63rd Street, Suite 600
Name: John Jon	ies		-	Resources - Marcellus, LLC
■ SURFAC	E OWNER(s)	/	■ COAL OV	WNER OR LESSEE
Notice is here	eby provided to	:		
on to the surfa but no more the beneath such to owner of mine and Sediment Secretary, whi	nce tract to cond nan forty-five data tract that has file erals underlying Control Manua ich statement sh	uct any plat surveys ys prior to such enter ed a declaration pur such tract in the co I and the statutes an	s required pursuant to this article try to: (1) The surface owner of s suant to section thirty-six, article unty tax records. The notice sha d rules related to oil and gas exp information, including the addres	e. Such notice shall be provided at least seven days such tract; (2) to any owner or lessee of coal seams le six, chapter twenty-two of this code; and (3) any hall include a statement that copies of the state Erosio ploration and production may be obtained from the less for a web page on the Secretary's web site, to
				on, the operator shall provide notice of planned entry
☐ PERSON SERVICE		REGISTERED MAIL	METHOD OF DELIVE RECEIPT OR SIGNATURE	ERY THAT REQUIRES A FURE CONFIRMATION
		o West Virginia C		
	S 4 5 W 1 5 5		nned Entry:	-
	e: 6/15/2015	Deta of Di-	and Fature	

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

11/20/201

### Mineral Owners Gurrell N MCY TY 7H

Helen Brunner Life Estate 1646 22<sup>nd</sup> Avenue San Francisco, CA 94122

John Jones 720 James Street New Martinsville, WV 26155

Jerry Walters 17 Stackpole Run Road Jacksonburg, WV 26377 WW-6A5 (1/12) 95-02310 Operator Well No. Gurrell MCY TY

## STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS $\frac{\text{NOTICE OF PLANNED OPERATION}}{\text{NOTICE OF PLANNED OPERATION}}$

Deliv	ery meth	od pursuant to West Virginia	Code §	22-6A-16(c)		
	CERTIFI	ED MAIL		HAND		
		N RECEIPT REQUESTED		DELIVERY		
return the p required drillind dama (d) The of not	n receipt re lanned op red to be p ng of a ho ges to the he notices tice.	equested or hand delivery, give the creation. The notice required by provided by subsection (b), section rizontal well; and (3) A proposition of the creation of the creation shall be required by this section shall be	the surf y this s on ten c sed surf operation e given	ace owner whose land subsection shall inclused this article to a surface use and compensons to the extent the date to the surface owner a	d will be used for de: (1) A copy ace owner whos sation agreement amages are com	cation, an operator shall, by certified mail or the drilling of a horizontal well notice of of this code section; (2) The information se land will be used in conjunction with the nt containing an offer of compensation for pensable under article six-b of this chapter, sted in the records of the sheriff at the time
		by provided to the SURFACE listed in the records of the sherif				
		/. Davis Jr. & Norma S.	5 917 110 E		John Jones	
Addr	ess. 410 Ma	ple Ave, Apt. 4	1	Addres	S: 720 James Street	
Addi						
Notic Pursu opera	e is hereb ant to We	y given: st Virginia Code § 22-6A-16(c), te surface owner's land for the p		is hereby given that the	al well on the tra	
Notic Pursu opera State: Coun Distri	e is herebeant to We tion on the ty:	v 26155 <b>vy given:</b> st Virginia Code § 22-6A-16(c),		is hereby given that the control of drilling a horizonta of the UTM NAD to the control of the co	he undersigned al well on the tra Easting: Northing:	
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needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact

DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

AUG 2 7 2015

Office of Oil and Gas

WV Department of Environmental Pro14/20/2015

#### STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS **NOTICE CERTIFICATION** 09502310

Notice has been given:  Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Form below for the tract of land as follows:  State: West Virginia UTM NAD 83 Easting: Northing:  District: McEtroy Public Road Access: Indian Creek Road Quadrangle: Center Point Generally used farm name:  Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this artinformation required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article were waived in writing by the surface owner; and Pursuant Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of second that the Operator has properly served the required parties with the following:  Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:  Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:  Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification  In NOTICE OF SEISMIC ACTIVITY or NOTICE NOT REQUIRED BECAUSE NO RECEIVED/	-
Notice has been given:  Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Form below for the tract of land as follows:  State: West Virginia UTM NAD 83 Easting: 526568.7  County: Tyler UTM NAD 83 Easting: Northing: 4367088.6  District: McEtroy Public Road Access: Indian Creek Road  Quadrangle: Center Point Generally used farm name: Outlet Middle Island Creek  Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this artiformation required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of second this article have been completed by the applicant.  Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:  *PLEASE CHECK ALL THAT APPLY  OOC OFFICE UNIVERSE.	i
Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Form below for the tract of land as follows:  State: West Virginia UTM NAD 83 Easting: 526568.7  County: Tyler	
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Quadrangle:	***********
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that the Operator has properly served the required parties with the following:  *PLEASE CHECK ALL THAT APPLY  ONLY  ONLY	that (i) cle, the a result of the control of the co
*PLFASE CHECK ALL THAT APPLY ONLY	SE
☐ I. NOTICE OF SEISMIC ACTIVITY OF ■ NOTICE NOT REQUIRED BECAUSE NO ☐ RECEIVED/	
SEISMIC ACTIVITY WAS CONDUCTED NOT REQUIR	ED
■ 2. NOTICE OF ENTRY FOR PLAT SURVEY or □ NO PLAT SURVEY WAS CONDUCTED □ RECEIVED	
☐ 3. NOTICE OF INTENT TO DRILL or NOTICE NOT REQUIRED BECAUSE  NOTICE OF ENTRY FOR PLAT SURVEY  WAS CONDUCTED or  RECEIVED/  NOT REQUIRED	ED
☐ WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)	es de La del Marca
■ 4. NOTICE OF PLANNED OPERATION □ RECEIVED	
■ 5. PUBLIC NOTICE □ RECEIVED	
■ 6. NOTICE OF APPLICATION	

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 affi the return receipt card or other postal receipt for certified mailing. Office of Oil and Gas

SEP 0 9 2015

WW-6AC	
(1/12)	

09502310

#### Certification of Notice is hereby given:

THEREFORE, I Ariel Bravo , have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator:Ascent Resources - Marcellus, LLCAddress:3501 NW 63rd, Suite 600By:Ariel BravoOklahoma City, OK 73113Its:Regulatory TechnicianFacsimile:405-607-5868Telephone:405-607-5529Email:ariel.bravo@aep-lp.com

NOTABLE ROLL # 14000742 # 14000742 W 1EXP. 01/23/18

Subscribed and sworn before me this 22 day of July, 2015

Notary Public

My Commission Expires 1/23/18

#### Oil and Gas Privacy Notice:

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

Office of Oil and Gas

AUG 2 7 2015

WV Department of Environmental 11/20/2015



#### WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

### Division of Highways 1900 Kanawha Boulevard East • Building Five • Room 110

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

September 18, 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 Gurrell Pad, Tyler County

**GURRELL N MCY TY 7H** 

Dear Mr. Martin.

Earl Ray Tomblin

Governor

This well site will be accessed from a DOH permit 06-2015-0424 which has been issued to Ascent Resources - Marcellus for access to the State Road. The well site is located off of Tyler County Route 13 SLS.

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.

Regional Maintenance Engineer Central Office O&G Coordinator

Cc: Eric Bruckman

American Energy Marcellus

CH, OM, D-6

File

**CFLI S WITH RI	A1:G521/E R	ACKGROUND	ARE THE ONLY	CELLS TO RE EDITED

Fracture Start Date/Time:	
Fracture End Date/Time:	
State: WV	100
County: Tyler	
API Number:	
Operator Number:	
Well Name: Gurrell MCY TY	
Federal Well: No	
Longitude:	
Latitude:	
Long/Lat Projection: NAD27	
True Vertical Depth (TVD):	100
Total Clean Fluid Volume* (gal): 8,553,174	



Alliance

Additive	Specific Gravity	Additive Quantity	Mass (llis)
Water	1.00	8,553,174	71,376,237
Sand (Proppant)	2.65	8,135,700	8,135,700
Hydrochloric Acid (15%)	1.07	43,500	388,418
Hydrochloric Acid (7.5%)	1.04	0	
PROHIB II	0.97	44	356
FRA 407	1.05	9,505	83,523
BIO CLEAR 2000	1.24	0	0
PRO SCALE CLEAR 112	1.19	0	0
PRO FLO 102 M	0.94	3,695	28,985
PRO GEL 4.0L	1.02	6,716	37,166
PRO BREAKER 4	1.26	30	312
BXL-10C	1.27	0	0
PRO DRB-LT	1.81	0	0
BUFFERI	2.13	0	0.
POLY BREAK	1.20	0	0
	The Part of the Part of		
	M. S. ST.		
			Total Slurry Mass (Lbs)

Ingredients Section: 80,070,697 Maximum Ingredient Maximum Ingredient Concentration in Mass per Concentration in HF Trade Name Comments Purpose Ingredients Fluid Number (CAS#) Component (LBS) Additive (% by mass) ee (% by mass)\*\* Carrier/Base Fluid 7732-18-5 71,376,237 lydrochloric Acid (15%) Producers Service Corp Acidizing 40.00% 67-56-1 0.00007% Propargyl Alcohol 107-19-7 15.003 Coco alkyldimethy SVALUE! 33,489 0.03129% Proprietary 7647-14-5 Sodium Chloride 4.176 4.176 Proprietary Proprietary Ethoxylate Alcohol 1,670 Proprietary Ingredient 835 0.00104% 7732-18-5 67-56-1 #VALUE #WALLE 17,391 1,449 Proprieta "VALUE #VALUE! Ethoxylate Alcohol Proprietary #VALUE #VALUE Producers Service Cosp Breaker 40.00% 0.000000% Polyether Polyol 8.000000% 0.00000% Proprietary Ingredient Proprietary Proprietary Ingred 0.00000% Proprietary Proprietary Ingredient #VALUE. #VALUE! Producers Service Corp Gelling Agen Distillates (Petroleam), hydrotreated light Nonylphenol, Ethoxylate 0.04641% PRO GEL 4.0L 9016-45-9 0.00357% Guar Gum 28,583 0.03570% Nonionic Surfactant

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

Gas

Environme

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

All component information listed was obtained from the supplier's Material Safety Data Sheets (MSDS). As such, the Operator is not responsible for inaccurate and/or incomplete 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.

#### GURRELL MCY TY WELL PAD McELROY DISTRICT, TYLER COUNTY, WV **JULY 2015**



TWO WORKING DAYS PRIOR TO EXCAVATION, THE CONTRACTOR MUST CONTACT THE WV ONE CALL SYSTEM, INC., 1-800-245-4848 TICKET NUMBER: 1510521664

#### OWNER





ASCENT RESOURCES - MARCELLUS, LLC 1000 UTICA WAY CAMBRIDGE, OH 43725

WYDMIN

MCDOWELL

MERCER

#### SHEET INDEX 1. TITLE SHEET

2-3. EVACUATION ROUTE/PREVAILING WIND 4. E&S CONTROL LAYOUT OVERVIEW 5-9. E&S CONTROL LAYOUT 10. E&S CONTROL AND SITE PLAN OVERVIEW

11-15. E&S CONTROL AND SITE PLAN 16. WELL PAD CROSS-SECTIONS 17. PROFILES C-C' AND D-D'

18. PRIMARY ACCESS ROAD PROFILE 19. PRIMARY ACCESS ROAD, ACCESS ROADS #1,#2,#3,#4 AND #5 PROFILES

20-22. PRIMARY ACCESS ROAD CROSS-SECTIONS 23. PRIMARY AND ACCESS ROAD #4 CROSS-SECTIONS 24. ACCESS ROAD #1, #4 AND #5 CROSS-SECTIONS 25. STREAM CROSSINGS #1 AND #2 CROSS-SECTIONS AND

PROFILES 26-29. DETAIL SHEETS 30. TEST BORE CROSS-SECTIONS 31-32. EXISTING SITE FEATURES 33. RECLAMATION PLAN OVERVIEW 34-38, RECLAMATION PLAN 39. GRADING & VOLUME PLAN 40. QUANTITY SUMMARY

TOTAL PROJECT AREA: 34.9 AC. ACCESS ROAD PROJECT AREA: 19.4 AC. WELL PAD PROJECT AREA: 15.5 AC.

#### PLANS PREPARED BY:

#### BOORD BENCHEK & ASSOCIATES, INC.

ENGINEERING, SURVEYING, CONSTRUCTION AND MINING SERVICES SOUTHPOINTE, PA 15317 PHONE: 724-746-1055



1-th- 7-22-15

ANDREW BENCHEK

#### HANCOCK BROOKE **PROJECT** LOCATION MONONGALIA MARION PLEASANTS TYLER MINERA DODD S HARRISO RITCHIE GRANT TUCKER CAL- GILMER SHUR RANDOLPH BRAXTON PENDELTON THE FOLLOWING EROSION & SEDIMENT CONTROL PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES CLAY ESTABLISHED BY THE CHIEF AND PROVIDED IN THE OFFICE'S EROSION AND NICHOLAS POCAHONTAS SEDIMENT CONTROL FIELD MANUAL. A GENERAL CONSTRUCTION SEQUENCE, DESCRIPTION OF STABILIZATION METHODS, AND DETAILS & SPECIFICATIONS FOR EROSION & SEDIMENT BEST MANAGEMENT GREEN BRIER PRACTICES HAVE BEEN INCLUDED IN THE PROVIDED DETAIL SHEETS.

PROPERTY OWNER	PARCEL#	ACRES
HG ENERGY LLC.	5-8-38	0.2
BETTY JEAN HAYES	5-8-36	9.9
HELEN L. BRUNNER	5-8-34	2.9
JOHN W. JONES	5-8-35	16.0
RAYMON V. & NORMA S. DAVIS	5-13-4	5.9

IN ACCORDANCE WITH WV 35 CSR 8

TITLE SHEET

GURRELL MCY TY WELL PAD

McELROY DISTRICT, TYLER COUNTY, WV

CENTER OF WELLS (NAD 83) LAT: 39.452919° LONG: 80.691221°

(NAD 27) LAT: 39.452836° LONG: 80.691398\*

(NAD 83) LAT: 39.452257° LONG: 80.679549° (NAD 27) LAT: 39.452174° LONG: 80.679726°

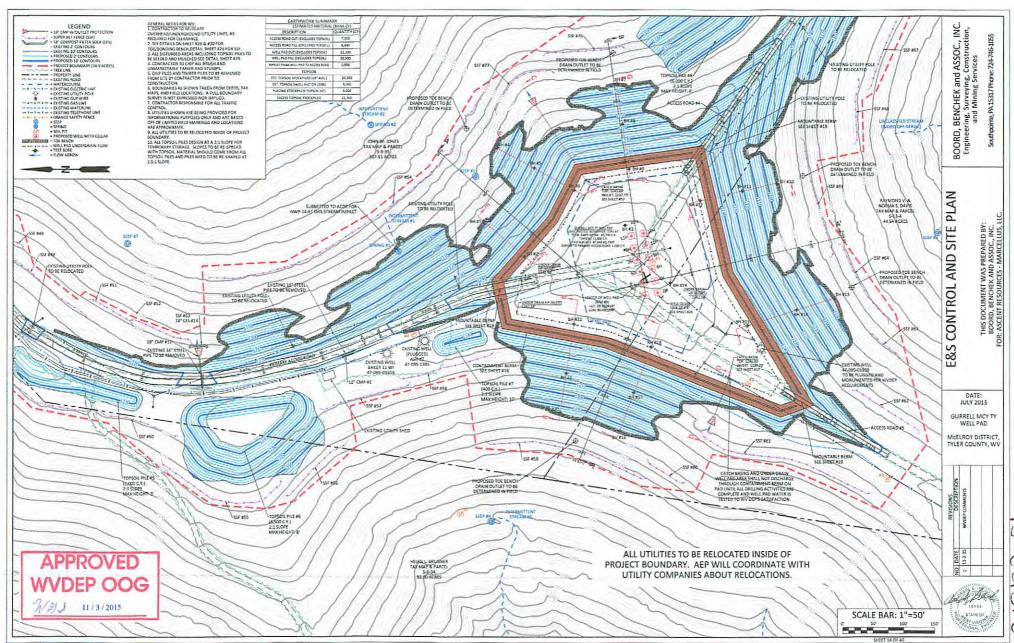
#### COORDINATES

SITE ENTRANCE

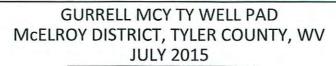
OF 40

SHEET

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TWO WORKING DAYS PRIOR TO EXCAVATION, THE CONTRACTOR MUST CONTACT THE WV ONE CALL SYSTEM, INC., 1-800-245-4848 TICKET NUMBER: 1510521664

#### OWNER



ASCENT RESOURCES - MARCELLUS, LLC 1000 UTICA WAY CAMBRIDGE, OH 43725

CLAY

MERCER

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ANDREW BENCHEK



RANDOLPH

POCAHONTAS

PROPERTY OWNER PROJECT BOUNDARY ACREAGE

PROPERTY OWNER	PARCEL#	ACRES
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BETTY JEAN HAYES	5-8-36	9.9
HELEN L. BRUNNER	5-8-34	2.9
JOHN W. JONES	5-8-35	16.0
RAYMON V. & NORMA S. DAVIS	5-13-4	5.9

#### COORDINATES

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SITE ENTRANCE (NAD 83) LAT: 39.452257\* LONG: 80.679549\* (NAD 27) LAT: 39.452174° LONG: 80.679726°

#### TITLE SHEET

GURRELL MCY TY WELL PAD McELROY DISTRICT, TYLER COUNTY, WV

IN ACCORDANCE WITH WV 35 CSR 8

DESIGNED IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES
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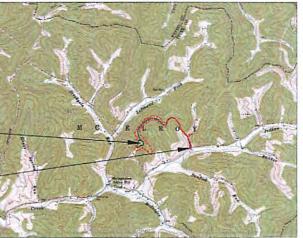
THE FOLLOWING EROSION & SEDIMENT CONTROL PLAN HAS BEEN

SPECIFICATIONS FOR EROSION & SEDIMENT BEST MANAGEMENT

PRACTICES HAVE BEEN INCLUDED IN THE PROVIDED DETAIL SHEETS.

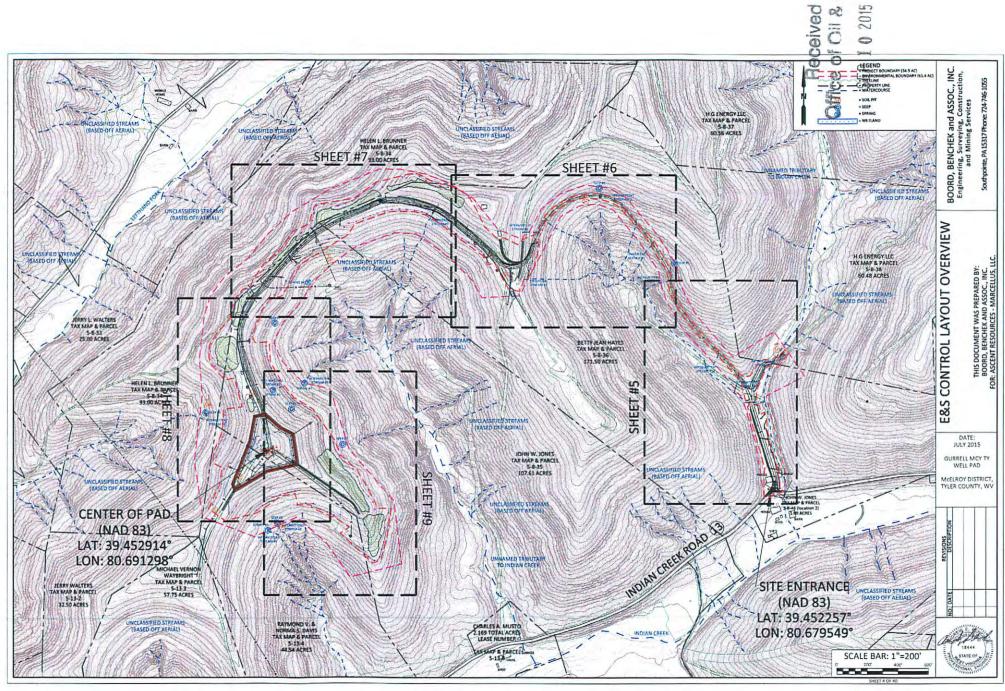
#### SHEET

OF 40



1"=2000





MDG 8-31-15

Gas