

west virginia department of environmental protection

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

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

Friday, June 5, 2020 WELL WORK PERMIT Horizontal 6A / New Drill

ANTERO RESOURCES CORPORATION 1615 WYNKOOP STREET DENVER, CO 80202

Permit approval for PROSPER 2H Re:

47-095-02700-00-00

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

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

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

> James A. Martin Chief

Operator's Well Number: PROSPER 2H

Farm Name: RICHARD D. PYLES U.S. WELL NUMBER: 47-095-02700-00-00

Horizontal 6A New Drill Date Issued: 6/5/2020

API Number:	
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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. <u>Failure to adhere to the specified permit conditions may result in enforcement action.</u>

CONDITIONS

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

API Number:	

PERMIT CONDITIONS

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

API NO. 47-095 -	02700
OPERATOR WELL	NO. Prosper Unit 2H
Well Pad Name:	Pyles Pad

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

 Well Operate 	or: Antero	Resources	Corporat	494507062	095 - Tyler	Ellsworth	Porter Falls 7.5'
				Operator ID	County	District	Quadrangle
2) Operator's V	Vell Number	r: Prosper U	Init 2H	Well P	ad Name: Pyles	s Pad	
3) Farm Name/	Surface Ow	ner: Richard	d D. Pyles	Public Ro	ad Access: US	Route 34	
4) Elevation, cu	irrent groun	d: 1113'	Ele	evation, propose	d post-construct	ion: ~1081	
5) Well Type	(a) Gas Other	X	_ Oil	Un	derground Stora	ge	
	(b)If Gas	Shallow Horizontal	X	Deep			
6) Existing Pad	: Yes or No	No					
				ipated Thickness ss- 55 feet, Assoc	And the second s		
8) Proposed To	tal Vertical	Depth: 710	0' TVD				
9) Formation at			Marcellus				
10) B			11100' M	D /			
(U) Proposed T	otal Measur	ed Depth:	TITOU WI	U			
10) Proposed T11) Proposed H		ou Dopui.	1763'	B V			
	Iorizontal Lo	eg Length:	1763'	61' √			Offic RECEIVED
11) Proposed H	Iorizontal Le te Fresh Wa	eg Length:	1763' epths:				Office of Oil and Gas
11) Proposed H	Iorizontal Lo te Fresh Wa Determine F	eg Length: hter Strata De Fresh Water I	1763' epths:	61' √			MAY - 1 2020
11) Proposed H 12) Approxima 13) Method to 1 14) Approxima	Iorizontal Le te Fresh Wa Determine F te Saltwater	eg Length: ater Strata De Fresh Water I Depths: 22	1763' epths: Depths: 4	61' √ 7-095-01958 √			MAY - 1 2020
11) Proposed H 12) Approxima 13) Method to 1 14) Approxima 15) Approxima	Iorizontal Lote Fresh Wa Determine F te Saltwater te Coal Sear	eg Length: Iter Strata De Fresh Water I Depths: 22 m Depths: N	1763' epths: Depths: 4 200'	61' √ 7-095-01958 √ / tified		Envi	May
11) Proposed H 12) Approxima 13) Method to 1 14) Approxima 15) Approxima	te Fresh Wa Determine F te Saltwater te Coal Sear te Depth to	eg Length: ater Strata De Tresh Water I Depths: 22 m Depths: N Possible Voiceation contain	epths: 4200' None Iden d (coal mi	61' \ 7-095-01958 \ \text{tified} ne, karst, other):	None Anticipa	Envi	MAY - 1 2020
11) Proposed H 12) Approxima 13) Method to 1 14) Approxima 15) Approxima 16) Approxima 17) Does Propo	te Fresh Wa Determine F te Saltwater te Coal Sear te Depth to osed well loong or adjace	eg Length: ater Strata De Fresh Water I Depths: 22 Depths: N Possible Voi cation containent to an active	200' None Iden d (coal min coal sear	61' \ 7-095-01958 \ / tified ne, karst, other):	None Anticipa	Envi	MAY - 1 2020
11) Proposed H 12) Approxima 13) Method to I 14) Approxima 15) Approxima 16) Approxima 17) Does Propodirectly overlyi	te Fresh Wa Determine F te Saltwater te Coal Sear te Depth to osed well loong or adjace	eg Length: ater Strata De Fresh Water I Depths: 22 Depths: N Possible Voi cation containent to an active	epths: 4200' None Iden d (coal min coal sear	61' \ 7-095-01958 \ / tified ne, karst, other):	None Anticipa	Envi	MAY - 1 2020
11) Proposed H 12) Approxima 13) Method to I 14) Approxima 15) Approxima 16) Approxima 17) Does Propodirectly overlyi	te Fresh Wa Determine F te Saltwater te Coal Sear te Depth to osed well loong or adjace	eg Length: ater Strata De Fresh Water I Depths: 22 m Depths: N Possible Voi cation containent to an activ	epths: 4200' None Iden d (coal min coal sear	61' \ 7-095-01958 \ / tified ne, karst, other):	None Anticipa	Envi	MAY - 1 2020

John Cragin Blevins Digitally signed by John Cragin
Blevins
Date: 2020,04.29 08:30:39 -04'00' 4/129/2020

WW-6B	
(04/15)	

API NO. 47- 095

OPERATOR WELL NO. Prosper Unit 2H Well Pad Name: Pyles Pad

18)

CASING AND TUBING PROGRAM

ТҮРЕ	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	H-40	94#	80	80 /	CTS, 77 Cu. Ft.
Fresh Water	13-3/8"	New	J-55	54.5#	300	300	CTS, 417 Cu. Ft.
Coal	9-5/8"	New	J-55	36#	2500	2500	CTS, 1018 Cu. Ft.
Intermediate							
Production	5-1/2"	New	P-110	23#	11100	11100 🗸	2645 Cu. Ft
Tubing	2-3/8"	New	N-80	4.7#			
Liners							



TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20"	24"	0.438"	1530	50	Class A	~1.18
Fresh Water	13-3/8"	17-1/2"	0.38"	2730	1000	Class A	~1.18
Coal	9-5/8"	12-1/4"	0.352"	3520	1500	Class A	~1.18
Intermediate							
Production	5-1/2"	8-3/4" & 8-1/2"	0.415"	12,630	2500	Lead-H/POZ & Tell - H	H/POZ-1.44 & H-1.8
Tubing	2-3/8"	4.778"	0.19"	11,200			
Liners							Office of Oil an

MAY - 1 2020

PACKERS

		PACKERS	WV Department of Environmental Protection
Kind:	N/A		
Sizes:	N/A		
Depths Set:	N/A		

API NO. 47- 095 OPERATOR WELL NO. Prosper Unit 2H
Well Pad Name: Pyles Pad

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

Drill, perforate, fracture a new horizontal shallow well and complete Marcellus Shale.

9*C8* 4129/2020

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

Antero plans to pump Slickwater into the Marcellus Shale formation in order to ready the well for production. The fluid will be comprised of approximately 99 percent water and sand, with less than 1 percent special-purpose additives as shown in the attached "List of Anticipated Additives Used for Fracturing or Stimulating Well."

Anticipated Max Pressure - 9300 lbs Anticipated Max Rate - 80 bpm

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 23.71 acres
- 22) Area to be disturbed for well pad only, less access road (acres): 10.00 acres
- 23) Describe centralizer placement for each casing string:

Conductor: no centralizers

Surface Casing: one centralizer 10' above the float shoe, one on the insert float collar and one every 4th joint spaced up the hole to surface.

Intermediate Casing: one centralizer above float joint, one centralizer 5' above float collar and one every 4th collar to surface.

Production Casing: one centralizer at shoe joint and one every 3 joints to top of cement in intermediate casing.

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

Conductor: no additives, Class A cement.

Surface: Class A cement with 2-3% calcium chloride and 1/4 lb of flake Intermediate: Class A cement with 1/4 lb of flake, 5 gallons of clay treat

Production: Lead cement- 50/50 Class H/Poz + 1.5% salt + 1% C-45 + 0.5% C-16a + 0.2% C-12 + 0.45% C-20 + 0.05% C-51

Production: Tail cement- Class H + 45 PPS Calcium Carbonate + 1.0% FL-160 + 0.2% ACGB-47 + 0.05% ACSA-51 + 0.2% ACR-20

Office of Oil and Gas

MAY - 1 2020

WV Department of Environmental Protection

25) Proposed borehole conditioning procedures:

Conductor: blowhole clean with air, run casing, 10 bbls fresh water.

Surface: blowhole clean with air, trip to conductor shoe, trip to bottom, blowhole clean with air, trip out, run casing, circulate pipe capacity + 40 bbls fresh water followed by 25 bbls bentonite mud, 10 bbls fresh water spacer.

Intermediate: blowhole clean with air, trip to surface casing shoe, trip to bottom, blowhole clean with air, trip out, run casing, circulate 40 bbls brine water followed by 10 bbls fresh water and 25 bbls bentonite mud, pump 10 bbls fresh water.

Production: circulate with 14 lb/gal NaCl mud, trip to middle of lateral, circulate, pump high viscosity sweep, trip to base of curve, pump high viscosity sweep, trip to top of curve, trip to bottom, circulate, pump high viscosity sweep, trip out, run casing, circulate 10 bbls fresh water, pump 48 bbls barite pill, pump 10 bbls fresh water followed by 48 bbls mud flush and 10 bbls water.

*Note: Attach additional sheets as needed.

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PROSPER UNIT 2H (PYLES PAD) - AREA OF REVIEW 35-8-5.11 PAGE 1

Office of Oil and Gas

APR 2 9 2020

WV Department of Environmental Protection

Antero Resources Corporation

Prosper Unit 2H - AOR

0 2,500

FEET

No Wells of Interest REMARKS

April 14, 2020

API	Number	47 -	095
ALL	1-9 EASTED COL	4/-	UUU

Operator's Well No. Prosper Unit 2H

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Antero Resources Corporation	OP Code 494507062
Watershed (HUC 10) Outlet Middle Island Creek	Quadrangle Porter Falls 7.5'
Do you anticipate using more than 5,000 bbls of water to comp	plete the proposed well work? Yes / No
Will a pit be used? Yes No V	
If so, please describe anticipated pit waste: No pat will be	used at this site (Drilling and Flowback Fluids will be stored in tanks: Cuttings will be tenked and trauled off site.)
Will a synthetic liner be used in the pit? Yes	No ✓ If so, what ml.? N/A
Proposed Disposal Method For Treated Pit Wastes:	
Land Application	4/29/2020
	nit Number *UIC Permit # will be provided on Form WR-34 led well locations when applicable. AP# will be provided on Form WR-34
	W-9 for disposal location) (Meadowfill Landfill Permit #SWF-1032-98)
Other (Explain_	Northwestern Landfill Permit #SWF-1025
Will closed loop system be used? If so, describe: Yes, fluids s	stored in tanks, cuttings removed offsite and taken to landfill
	Surface - Aie/Freshwater, kitermediate -
Drilling medium anticipated for this well (vertical and horizon	nai)/ Air, iresuwater, oii based, etc.
-If oil based, what type? Synthetic, petroleum, etc5	
Additives to be used in drilling medium? Please See Attachmen	nt
Drill cuttings disposal method? Leave in pit, landfill, removed	d offsite, etc. Drill cuttings stored in tanks, removed offsite and taken to landfill.
-If left in pit and plan to solidify what medium will be	e used? (cement, lime, sawdust) N/A
-Landfill or offsite name/permit number? Meadowfill L	andfill (Permit #SWF-1032-98), Northwestern Landfill (Permit # SWF-1025/WVD109410)
West Virginia solid waste facility. The notice shall be provided	Gas of any load of drill cuttings or associated waste rejected at any office of Oil and Gas d within 24 hours of rejection and the permittee shall also disclose $MAY - 1$ 2020
law or regulation can lead to enforcement action. I certify under penalty of law that I have personall application form and all attachments thereto and that, base	nager 2D
My commission expires 3-13-2022	MEGAN GRIFFITH
My commission expires 0101012	NOTARY PUBLIC STATE OF COLORADO
	NOTARY ID 20184011666

Fertilizer type Hay or str Fertilizer amount 500 Mulch 2-3	Tons/acre or to correct to pH raw or Wood Fiber (will be used)	6.5 where needed)	н
Fertilizer type Hay or str Fertilizer amount 500 Mulch 2-3	raw or Wood Fiber (will be used y	where needed)	
Fertilizer amount 500 Mulch 2-3	1b		
Mulch 2-3	1000	25.202	
	and the same of	s/acre	
	Tons/a	acre	
	oad "A" (4,60 acres) + Well Pad (10,00 acr	res) + Excess/Topsoil Material Stockpile (9.11 acre	es) = 23.71 Acres
	See	d Mixtures	
Tempo	orary	Perm	anent
Seed Type	lbs/acre	Seed Type	lbs/acre
Annual Ryegrass	40	Crownvetch	10-15
Field Bromegrass	40	Tall Fescue	30
See attached Table IV-3 for additional s	seed type (Pyles Pad Design)	See attached Table IV-4A for addition	nal seed type (Pyles Pad Design)
*or type of grass seed reque	ested by surface owner	*or type of grass seed requ	ested by surface owner
	vill be land applied, include di	ation (unless engineered plans inclumensions (L x W x D) of the pit, an	
Photocopied section of involved	vill be land applied, include di rea.		
Photocopied section of involved	vill be land applied, include di area. 7.5' topographic sheet.		d dimensions (L x W), and
acreage, of the land application a	vill be land applied, include di area. 7.5' topographic sheet.		d dimensions (L x W), and
Photocopied section of involved a	vill be land applied, include di area. 7.5' topographic sheet.		d dimensions (L x W), and
Photocopied section of involved a	vill be land applied, include di area. 7.5' topographic sheet.		d dimensions (L x W), and

Form WW-9 Additives Attachment

SURFACE INTERVAL

- 1. Fresh Water
- 2. Soap -Foamer AC
- 3. Air

INTERMEDIATE INTERVAL

STIFF FOAM RECIPE:

- 1) 1 ppb Soda Ash / Sodium Carbonate-Alkalinity Control Agent
- 2) 1 ppb Conqor 404 (11.76 ppg) / Corrosion Inhibitor
- 3) 4 ppb KLA-Gard (9.17 ppg) / Amine Acid Complex-Shale Stabilizer
- 4) 1ppb Mil Pac R / Sodium Carboxymethylcellulose-Filtration Control Agent
- 5) 12 ppb KCL / Potassium Chloride-inorganic Salt
- 6) Fresh Water 80 bbls
- 7) Air

PRODUCTION INTERVAL

1. Alpha 1655

Salt Inhibitor

2. Mil-Carb

Calcium Carbonate

3. Cottonseed Hulls

Cellulose-Cottonseed Pellets – LCM

4. Mil-Seal

Vegetable, Cotton & Cellulose-Based Fiber Blend – LCM

5. Clay-Trol

Amine Acid Complex - Shale Stabilizer

6. Xan-Plex

Viscosifier For Water Based Muds

7. Mil-Pac (All Grades)

Sodium Carboxymethylcellulose - Filtration Control Agent

New Drill

Anionic Polyacrylamide Copolymer Emulsion - Shale Stabilizer

9. Caustic Soda

Sodium Hydroxide – Alkalinity Control

10. Mil-Lime

Calcium Hydroxide – Lime

11. LD-9

Polyether Polyol – Drilling Fluid Defoamer

12. Mil Mica

Hydro-Biotite Mica – LCM

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13. Escaid 110

Drilling Fluild Solvent – Aliphatic Hydrocarbon

14. Ligco

Highly Oxidized Leonardite - Filteration Control Agent

15. Super Sweep

Polypropylene – Hole Cleaning Agent

16. Sulfatrol K

Drilling Fluid Additive - Sulfonated Asphalt Residuum

17. Sodium Chloride, Anhydrous

Inorganic Salt

18. D-D

Drilling Detergent - Surfactant

19. Terra-Rate

Organic Surfactant Blend

20. W.O. Defoam

Alcohol-Based Defoamer

21. Perma-Lose HT

Fluid Loss Reducer For Water-Based Muds

22. Xan-Plex D

Polysaccharide Polymer – Drilling Fluid Viscosifier

23. Walnut Shells

Ground Cellulosic Material - Ground Walnut Shells - LCM

24. Mil-Graphite

Natural Graphite - LCM

25. Mil Bar

Barite - Weighting Agent

26. X-Cide 102

Biocide

27. Soda Ash

Sodium Carbonate - Alkalinity Control Agent

28. Clay Trol

Amine Acid complex – Shale Stabilizer

29. Sulfatrol

Sulfonated Asphalt – Shale Control Additive

30. Xanvis

Viscosifier For Water-Based Muds

31. Milstarch

Starch – Fluid Loss Reducer For Water Based Muds

32. Mil-Lube

Drilling Fluid Lubricant

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APR 2 9 2020



911 Address 509 Nash Run Road Middleboure, WV 26149

Well Site Safety Plan Antero Resources

Well Name: Pyles Unit 5H, Friend Unit 1H-2H, Prosper Unit 1H-2H,

Seagrave Unit 1H-2H & Vulcan Unit 1H-2H

Pad Location: PYLES PAD

Tyler County/West Union District

GPS Coordinates:

Entrance - Lat 39°50'09.36"/Long -80°83'99.27" (NAD83) Pad Center - Lat 39°50'38.15"/Long -80°83'71.12" (NAD83)

Driving Directions:

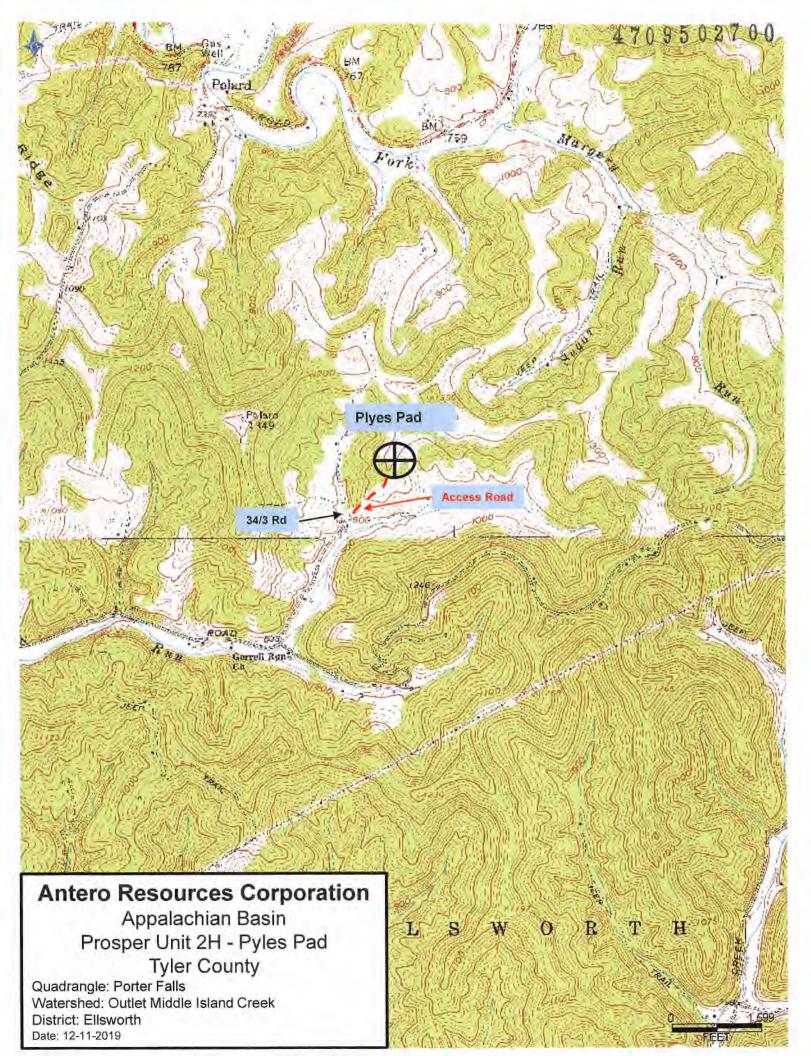
Office of Oil and Gas From Middlebourne: Head northwest on Main Street toward Court Street/Dodd Street for 0.2 miles - turn right onto Park Avenue for 397 feet - turn left onto Gorrell Run Road for 2.8 miles - turn left onto Gorrell Run Road for 0.2 miles - continue onto Gorrell Run Road for 2.8 miles - lease road will be on your left.

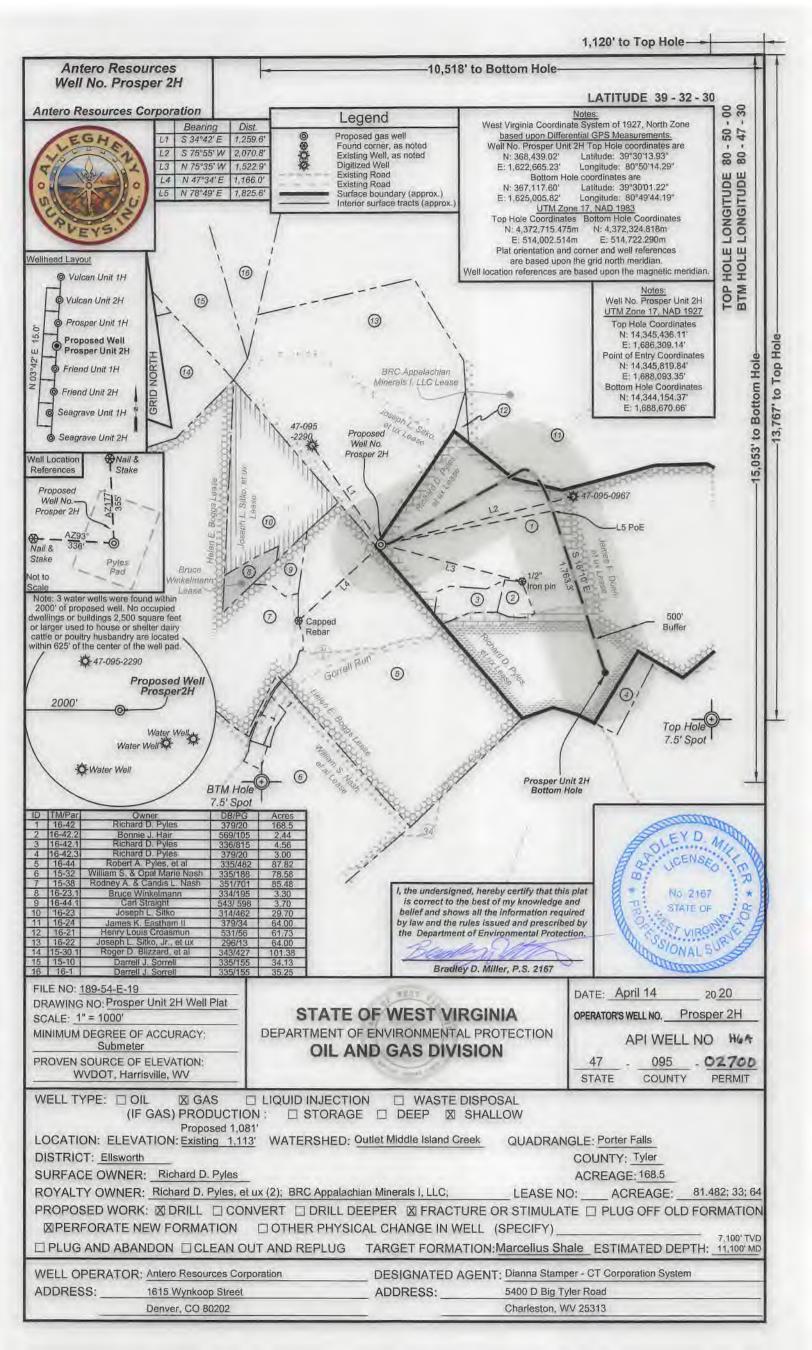
Environmental Projection

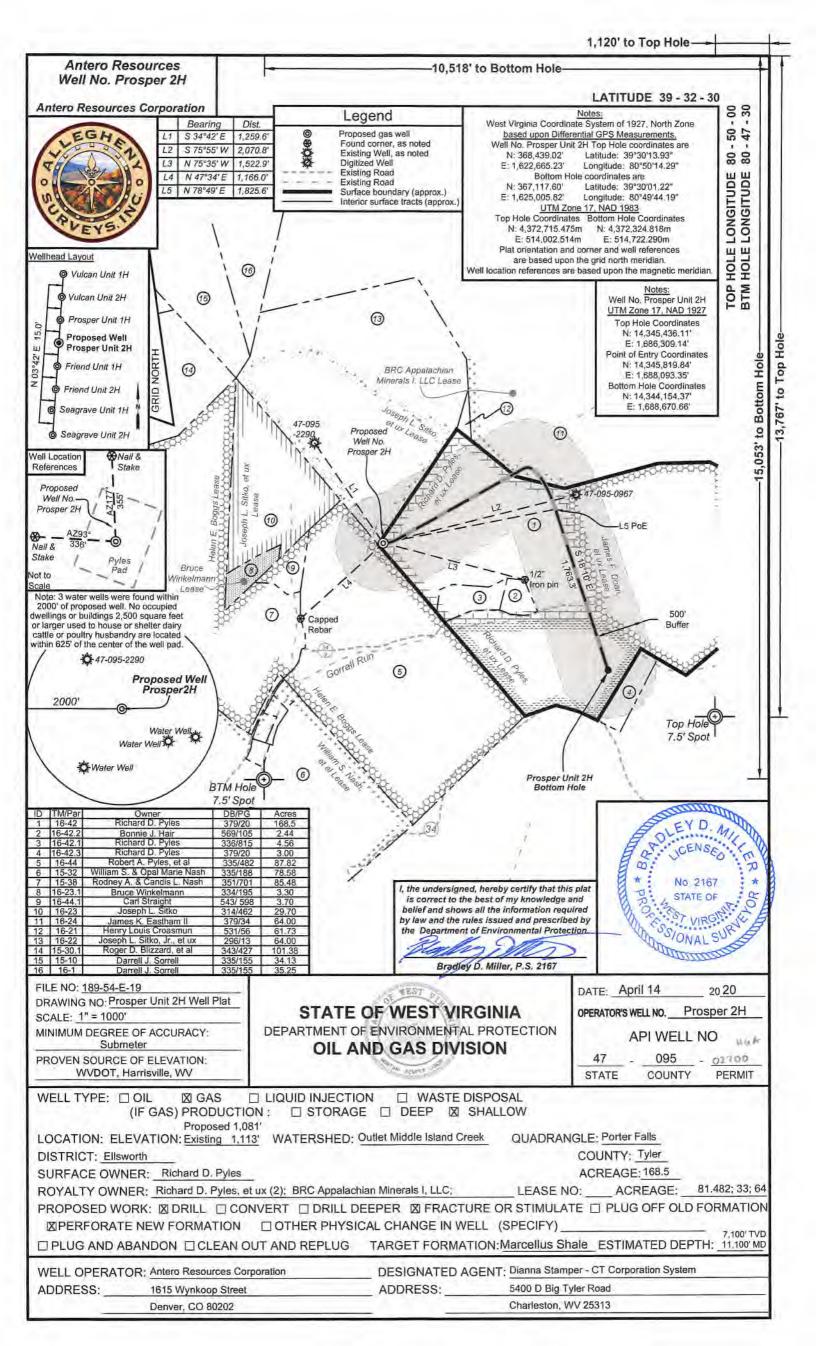
Alternate Route:

From Sisterville: Head southeast on Diamond Street toward Wells Street for 308 feet - follow WV-18 to Park Avenue in Middlebourne for 11.9 miles - take Gorrell Run Road to Co Road 34/3 for 4.2 miles - lease road will be on your left.

EMERGENCY (24 HOUR) CONTACT 1-800-878-1373







Operator's Well Number

Prosper Unit 2H

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:

Grantor, lessor, etc.	Grantee, lessee, etc.	Royalty	Book/Page
Richard D. Pyles Lease (TM 16 PCL 42)			
Richard D. Pyles	Antero Resources Corporation	1/8+	0562/0590
BRC Minerals LLC Lease			
BRC Minerals LLC	Statoil USA Onshore Properties Inc	Assignment	0378/0764
Statoil USA Onshore Properties Inc	SWN Exchange LLC	Assignment	0470/0668
SWN Exchange LLC	SWN Production Company	Merger	0009/0404
SWN Production Company	Antero Exchange Properties	Assignment	0544/0242
Antero Exchange Properties	Antero Resources Corporation	Merger	0525/0315
Richard D. Pyles Lease (TM 16 PCL 42.1)			
Richard D. Pyles	Antero Resources Corporation	1/8+	0562/0590



^{*}Partial Assignments to Antero Resources Corporation include 100% rights to extract, produce and market the oil and gas from the Marcellus and any other formations completed with this well.

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 Boo	/Page	

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 tal Protection nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Antero Resources Corporation			
Tim Rady	han ledy		
VP of Land			
	Tim Rady		

^{*}Partial Assignments to Antero Resources Corporation include 100% rights to extract, produce and market the oil and gas from the Marcellus and any other formations completed with this well.



Antero Resources 1615 Wynkoop Street Denver, CO 80202 Office 303.357.7310 Fax 303.357.7315

April 21, 2020

West Virginia Department of Environmental Protection Chief, Office of Oil and Gas Attn: Mr. James Martin 601 57th Street SE Charleston, WV 25304

RE: Prosper Unit 2H

Quadrangle: Porter Falls 7.5'

Tyler County/Ellsworth District, West Virginia

Mr. Martin:

Antero Resources Corporation (Antero) is submitting the following application for a new well work permit for the Prosper Unit 2H horizontal shallow well. As an authorized representative, I certify that Antero has the right to extract, produce or market the oil or gas for all leases through which the Prosper Unit 2H horizontal lateral will drill through including any and all roads crossed under as identified on the attached survey plat.

Sincerely,

Thomas Kuhn Senior Landman

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

Date of Notic	ce Certification: $4.20.20$	A	PI No. 47	- 095 -	
				Well No. Prosp	er Unit 2H
			-	ame: Pyles Pa	
Notice has l	been given:				
Pursuant to th	ne provisions in West Virginia Code §	22-6A, the Operator has provid	led the req	uired parties w	ith the Notice Forms listed
below for the	tract of land as follows:				
State:	West Virginia		asting:	514002.514m	
County:	Tyler	N	lorthing:	4372715.475m	
District:	Ellsworth	Public Road Access	s:	US Route 34	
Quadrangle:	Porter Falls 7.5'	Generally used farn	n name:	Richard D. Pyles	
Watershed:	Outlet Middle Island Creek				
information r of giving the requirements Virginia Cod	ed the owners of the surface described equired by subsections (b) and (c), see surface owner notice of entry to surface owner notice owne	ction sixteen of this article; (ii) to rvey pursuant to subsection (a) of this article were waived in we ender proof of and certify to the	that the red , section t riting by	quirement was en of this artic the surface ow	deemed satisfied as a result cle six-a; or (iii) the notice mer; and Pursuant to West
that the Ope	West Virginia Code § 22-6A, the Operator has properly served the require ECK ALL THAT APPLY		s Notice C	ertification	OOG OFFICE USE ONLY
☐ 1. NO	TICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIRE SEISMIC ACTIVITY WAS		l l	RECEIVED/ NOT REQUIRED
☐ 2. NO	TICE OF ENTRY FOR PLAT SURV	YEY or 🔳 NO PLAT SURVEY	Y WAS CO	ONDUCTED	☐ RECEIVED
■ 3. NO	TICE OF INTENT TO DRILL or	☐ NOTICE NOT REQUIRE NOTICE OF ENTRY FOR PL WAS CONDUCTED or		1	☐ RECEIVED/ NOT REQUIRED
		☐ WRITTEN WAIVER BY (PLEASE ATTACH)	Y SURFA	CE OWNER	
■ 4. NO	TICE OF PLANNED OPERATION				□ RECEIVED
■ 5. PUI	BLIC NOTICE				□ RECEIVED
■ 6. NO	TICE OF APPLICATION				□ received

Required Attachments:

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

Certification of Notice is hereby given:

THEREFORE, I Diana Hoff , 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: Antero Resources Corporation

By: Diana Hoff

Its: VP of Production

Telephone: 303-357-7223

Address: 1615 Wynkoop Street

Denver, CO 80202

Facsimile: 303-357-7315

Email: mgriffith@anteroresources.com

NOTARY SEAL

MEGAN GRIFFITH NOTARY PUBLIC STATE OF COLORADO

NOTARY ID 20184011666 MY COMMISSION EXPIRES MARCH 13, 2022 Subscribed and sworn before me this

Notary Public

My Commission Expires

3.13.2022

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 deprivacyofficer@wv.gov.

Office of Oil and Gas

APR 2 9 2020

WW-6A (9-13)

API NO. 47- 095 -	
OPERATOR WELL NO.	Prosper Unit 2H
Well Pad Name: Pyles Pad	

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

Notice Time Requirement: notice sha	all be provided no later than	the filing date of permit application.	
Date of Notice: 4.21.20 Date Perm Notice of:	nit Application Filed: 4-7	u·20	
PERMIT FOR ANY WELL WORK	CERTIFICATE OF APPR CONSTRUCTION OF A	ROVAL FOR THE IN IMPOUNDMENT OR PIT	
Delivery method pursuant to West	Virginia Code § 22-6A-10(b)	
PERSONAL REGIST MAIL		DD OF DELIVERY THAT REQUIRES A PT OR SIGNATURE CONFIRMATION	
sediment control plan required by section the surface of the tract on which the well oil and gas leasehold being developed by described in the erosion and sediment comperator or lessee, in the event the tract more coal seams; (4) The owners of recommon well work, if the surface tract is to be us impoundment or pit as described in sect have a water well, spring or water supply provide water for consumption by human proposed well work activity is to take place subsection (b) of this section hold interest records of the sheriff required to be main provision of this article to the contrary,	on seven of this article, and the list or is proposed to be located by the proposed well work, if control plan submitted pursuant of land on which the well proposed for the placement, construction nine of this article; (5) A lay source located within one than or domestic animals; and lace. (c)(1) If more than three lests in the lands, the applicant natined pursuant to section enotice to a lien holder is not atthat the operator shall also property in the lands of the la	r signature confirmation, copies of the application, there well plat to each of the following persons: (1) The otted; (2) The owners of record of the surface tract or tractic the surface tract is to be used for roads or other land do not to subsection (c), section seven of this article; (3) The opposed to be drilled is located [sic] is known to be understood to be drilled is located [sic] is known to be understood to be drilled in located [sic] is known to be understood to be drilled in located [sic] is known to be understood to be drilled in located [sic] is known to be understood to be drilled in located [sic] is known to be understood to be drilled in located [sic] is known to be understood to be drilled in located [sic] is known to be understood to endangement, alteration, repair, removal or abar ny surface owner or water purveyor who is known to be thousand five hundred feet of the center of the well pace (6) The operator of any natural gas storage field withing tenants in common or other co-owners of interests determines in common or other co-owners of interests determined in the common of the c	where of record of acts overlying the isturbance as the coal owner, derlain by one or d by the proposed adonment of any the applicant to d which is used to an which the escribed in escribed in the twithstanding any downer. W. Va.
☑ SURFACE OWNER(s) Name: Richard D. Pyles Address: 803 Nash Run Road Middlebourne, WV 26149 Name: Joseph L. Sitko Jr. Address: 315 Airport Drive Sellerville, PA 18960 ☑ SURFACE OWNER(s) (Road and/o Name: Richard D. Pyles Address: 803 Nash Run Road Middlebourne, WV 26149 Name: Joseph L. Sitko Jr. Address: 315 Airport Drive Sellerville, PA 18960 ☐ SURFACE OWNER(s) (Impoundm	or Other Disturbance)	OPERATOR OF ANY NATURAL GAS STOR Name:	
Name:Address:		*Please attach additional forms if necessary	

WW-6A (8-13)

API NO. 47- 095

OPERATOR WELL NO. Prosper Unit 2H

Well Pad Name: Pyles Pad

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 Company Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oip/i and Gas APR 2 9 2020 and-gas/pages/default.aspx.

Well Location Restrictions

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

API NO. 47-095 4709502700

OPERATOR WELL NO. Prosper Unit 2H

Well Pad Name: Pyles Pad

examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to

drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

Water Well Testing:

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

Water Testing Laboratories:

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

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

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

Written Comment:

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

Office of Oil and Gas

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

APR 2 9 2020

WV Department of Environmental Protection

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

WW-6A (8-13) API NO. 47-095 7.0 9 5 0 2 7 0 0

OPERATOR WELL NO. Prosper Unit 2H

Well Pad Name: Pyles Pad

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 http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx 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.

Office of Oil and Gas

APR 2 9 2020

4709502700

WW-6A (8-13) API NO. 47- 095

OPERATOR WELL NO. Prosper Unit 2H

Well Pad Name: Pyles Pad

Notice is hereby given by:

Well Operator: Antero Resources Corporation

Telephone: (303) 357-7223

Email: mgriffith@anteroresources.com

Address: 1615 Wynkoop Street

Denver, CO 80202

Facsimile: 303-357-7315

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 deprivacyofficer@wv.gov.

Diana Ho

MEGAN GRIFFITH
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20184011666
MY COMMISSION EXPIRES MARCH 13, 2022

Subscribed and sworn before me this day of HOVI

Notary Public

My Commission Expires

___ Notar

RECEIVED
Office of Oil and Gas

APR 2 9 2020

WW-6A Notice of Application to Surface Owner Attachment:

Surface Owner:

Tax Parcel ID: 2-16-42 & 2-16-22

Owner: Richard D. Pyles
Address: 803 Nash Run Road

Middlebourne, WV 26149

Owner: Joseph L. Silko Jr. Address: 315 Airport Drive

Sellerville, PA 18960

RECEIVED Office of Oil and Gas

APR 2 9 2020

CERTIFIED MAIL RECEIPT
MULTIPLE WELLS - PYLES PAD
WW-6A NOTICE OF APPLICATION TO SURFACE OWNER

Cut on dotted line.

Instructions

- Each Click-N-Ship® label is unique. Labels are to be used as printed and used only once. DO NOT PHOTO COPY OR ALTER LABEL.
- Place your label so it does not wrap around the edge of the package.
- Adhere your label to the package. A self-adhesive label is recommended. If tape or glue is used, DO NOT TAPE OVER BARCODE. Be sure all edges are secure.
- To mail your package with PC Postage®, you may schedule a Package Pickup online, hand to your letter carrier, take to a Post Office™, or drop in a USPS collection box.
- Mail your package on the "Ship Date" you selected when creating this label.

Click-N-Ship® Label Record

USPS TRACKING #: 9405 5036 9930 0341 4936 45

Trans. #: 490896606
Print Date: 04/22/2020
Ship Date: 04/22/2020
Expected
Delivery Date: 04/25/2020

Priority Mail® Postage: \$7.75
Total: \$7.75

From: MEGAN GRIFFITH 1615 WYNKOOP ST DENVER CO 80202-1106

To: JOSEPH L SILKO JR. 315 AIRPORT DR SELLERSVILLE PA 18950-3071

* Retail Pricing Priority Mail rates apply. There is no fee for USPS Tracking® service on Priority Mail service with use of this electronic rate shipping label. Refunds for unused postage paid labels can be requested online 30 days from the print date.

CERTIFIED MAIL RECEIPT MULTIPLE WELLS - PYLES PAD WW-6A NOTICE OF APPLICATION TO SURFACE OWNER

Cut on dotted line

Instructions

- 1. Each Click-N-Ship® label is unique. Labels are to be used as printed and used only once. DO NOT PHOTO COPY OR ALTER LABEL.
- 2. Place your label so it does not wrap around the edge of the package.
- 3. Adhere your label to the package. A self-adhesive label is recommended. If tape or glue is used, DO NOT TAPE OVER BARCODE. Be sure all edges are secure.
- 4. To mail your package with PC Postage®, you may schedule a Package Pickup online, hand to your letter carrier, take to a Post Office™, or drop in a USPS collection box.
- 5. Mail your package on the "Ship Date" you selected when creating this label.

Click-N-Ship® Label Record

USPS TRACKING #: 9405 5036 9930 0341 4936 52

Trans. #: Print Date: Ship Date: Expected Delivery Date:

490896606 04/22/2020 04/22/2020 04/27/2020 Priority Mail® Postage: \$7.75 Total: \$7.75

From: MEGAN GRIFFITH 1615 WYNKOOP ST **DENVER CO 80202-1106**

RICHARD D PYLES To: 803 NASH RUN RD

MIDDLEBOURNE WV 26149-7730

* Retail Pricing Priority Mail rates apply. There is no fee for USPS Tracking® service on Priority Mail service with use of this electronic rate shipping label. Refunds for unused postage paid labels can be requested online 30 days from the print date.

UNITED STATES POSTAL SERVICE Thank you for shipping with the United States Postal Service! RECEIVED and Gas

Check the status of your shipment on the USPS Tracking® page at usps.com

APR 2 9 2020

WW-6A3 (1/12) Operator Well No. Prosper Unit 2H

Multiple Wells on the Pyles Pad

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

entry Date of Noti	ce: 12/6/2019	Date of Plan	nned Entry: *12/13/2019	Antero may beg	at this is an estimated date, gin surveying seven (7) days but no y-five (45) after your receipt of this			
Delivery me	thod pursua	nt to West Virginia C	ode § 22-6A-10a		ver comes first).			
☐ PERSO	NAL	REGISTERED	■ METHOD OF DELI	VERY THAT RE	QUIRES A			
SERVIC	E	MAIL	RECEIPT OR SIGNA	ECEIPT OR SIGNATURE CONFIRMATION				
on to the surf but no more to beneath such bowner of min and Sedimen Secretary, wh	ace tract to othan forty-five tract that has the act and erly to Control Manich statement face owner	conduct any plat survey ye days prior to such en is filed a declaration pur ying such tract in the co- mual and the statutes ar it shall include contact to obtain copies from the	s required pursuant to this arti- try to: (1) The surface owner of suant to section thirty-six, art- bunty tax records. The notice and rules related to oil and gas of information, including the add	cle. Such notice so f such tract; (2) to least, chapter to shall include a state and p	shall provide notice of planned entry shall be provided at least seven days to any owner or lessee of coal seams wenty-two of this code; and (3) any attement that copies of the state Erosion roduction may be obtained from the age on the Secretary's web site, to			
			Tell delice		the foot			
	CE OWNER	(s)		OWNER OR LE				
Name: Richard				ECLARATIONS ON RE	CORD WITH COUNTY			
Address: 803 Middleboume, W\			Address:					
			_					
Name: Joseph Address: 315			■ MINE	RAL OWNER(s)				
Sellerville, PA 189				SE SEE ATTACHMENT				
Name:			Address:	SE SEE AT TACHMENT				
Address:			Address.					
			*please attach	additional forms if ne	cessary			
a plat survey State:	Vest Virginia on the tract West Virginia		Approx. Latitu	de & Longitude:	Approx. 39.503815, -80.837112 (Pad Center Coordinates)			
County: District:	Tyler		Public Road Ao Watershed:	ccess:	US Route 34			
Quadrangle:	Porter Falls 7.5	51	Generally used	form name:	Outlet Middle Island Creek Richard D. Pyles			
Copies of the may be obtai Charleston, V	ned from the VV 25304 (Secretary, at the WV I 304-926-0450). Copies	I Manual and the statutes and Department of Environmental	rules related to o Protection headq anal information r	il and gas exploration and production uarters, located at 601 57 th Street, SE, elated to horizontal drilling may be			
Notice is he					Office of Cil and APR 2 9 202			
Well Operato		ources Corporation	Address:	1615 Wynkoop Street	APD a			
Calaulausa.	(303) 357-7	7223		Denver, CO 80202	AFK 2 9 202			
elephone:			Programme Market	w000-00-008-008-008-0				
Telephone: Email:	mgriffith@a	nteroresources.com	Facsimile:	(303) 357-7315	WV Department of Environmental Protection			

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 deprivacyofficer@wv.gov.

4709502700

WW-6A3 Notice of Entry For Plat Survey Attachment:

Mineral Owner:

Tax Parcel ID: 2-16-42

Owner: Address:

Richard D. Pyles 803 Nash Run Road Middlebourne, WV 26149

Mineral Owner:

Tax Parcel ID: 2-16-44

Owner:

Stone Hill Minerals, LLC

Address:

PO Box 470426 → PO Box 470426

Fort Worth, TX 76147

Mineral Owner:

Tax Parcel ID: 2-16-22

Owner:
Address:

Joseph L. Sitko Jr. 315 Airport Drive Sellerville, PA 18960

Surface Owner:

<u>Tax Parcel ID: 2-16-42</u>

Owner: Address:

Richard D. Pyles 803 Nash Run Road

Middlebourne, WV 26149

Surface Owner: Tax Parcel ID: 2-16-22

Owner: Address:

Joseph L. Sitko Jr. 315 Airport Drive Sellerville, PA 18960

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Office of Oil and Gas

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Instructions

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- 3. Adhere your label to the package. A self-adhesive label is recommended. If tape or glue is used, DO NOT TAPE OVER BARCODE. Be sure all edges are secure.
- 4. To mail your package with PC Postage®, you may schedule a Package Pickup online, hand to your letter carrier, take to a Post Office™, or drop in a USPS collection box.
- 5. Mail your package on the "Ship Date" you selected when creating this label.

Click-N-Ship® Label Record

USPS TRACKING #: 9405 5036 9930 0218 7744 19

481011080 Trans. #: Print Date: Ship Date: Expected 01/02/2020 01/02/2020 01/06/2020 Delivery Date:

Priority Mail® Postage: \$7,35 \$7.35 Total:

From: MEGAN GRIFFITH ANTERO RESOURCES 1615 WYNKOOP ST **DENVER CO 80202-1106**

JOSEPH L SITKO To: 315 AIRPORT DR SELLERSVILLE PA 18960-3071

* Retail Pricing Priority Mail rates apply. There is no fee for USPS Tracking® service on Priority Mail service with use of this electronic rate shipping label. Refunds for unused postage paid labels can be requested online 30 days from the print date.

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Click-N-Ship® Label Record

USPS TRACKING #: 9405 5036 9930 0218 7744 02

Trans. #: 481011080 Print Date: 01/02/2020 Ship Date: Expected 01/02/2020 Delivery Date: 01/06/2020 Priority Mail® Postage: \$7.35 Total: \$7.35

MEGAN GRIFFITH From:

ANTERO RESOURCES 1615 WYNKOOP ST **DENVER CO 80202-1106**

BONNIE J HAIR

959 NASH RUN RD

MIDDLEBOURNE WV 26149-7731

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Click-N-Ship® Label Record

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Trans. #: 481011080 Print Date: Ship Date: 01/02/2020 01/02/2020 Expected Delivery Date: 01/06/2020

Priority Mail® Postage: \$7.35 \$7.35 Total:

MEGAN GRIFFITH From: ANTERO RESOURCES 1615 WYNKOOP ST **DENVER CO 80202-1106**

RICHARD D PYLES 803 NASH RUN RD MIDDLEBOURNE WV 26149-7730

Retail Pricing Priority Mail rates apply There is no fee for USPS Tracking® service

on Priority Mail service with use of this electronic rate shipping label. Refunds for unused postage paid labels can be requested online 30 days from the print date

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Click-N-Ship® Label Record

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From: MEGAN GRIFFITH ANTERO RESOURCES 1615 WYNKOOP ST **DENVER CO 80202-1106**

RICHARD D PYLES 803 NASH RUN RD MIDDLEBOURNE WV 26149-7730

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Click-N-Ship® Label Record

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Trans. #: Print Date: Ship Date: Expected Delivery Date: 481012979 01/02/2020 01/02/2020 01/06/2020 Priority Mail® Postage:

\$7.35

From:

MEGAN GRIFFITH ANTERO RESOURCES 1615 WYNKOOP ST DENVER CO 80202-1106

To: STONE HILL MINERALS LLC STONE HILL MINERALS LLC

STONE HILL MINERALS LLC PO BOX 470426 FORT WORTH TX 76147-0426

* Retail Pricing Priority Mail rates apply. There is no fee for USPS Tracking® service on Priority Mail service with use of this electronic rate shipping label. Refunds for unused postage paid labels can be requested online 30 days from the print date.

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WW-6A5 (1/12) Operator Well No. Prosper Unit 2H

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

Notice Time I Date of Notic	Requirement: notice shall be provided no e: 04/21/2020 Date Permit Ap	later than the filing option of the plication Filed: 04/2		application.			
Delivery met	hod pursuant to West Virginia Code § 2	2-6A-16(c)					
■ CERTIF	FIED MAIL	HAND					
	N RECEIPT REQUESTED	DELIVERY					
KETUR	IN RECEIFT REQUESTED	DELIVERI					
return receipt the planned of required to be drilling of a l damages to th (d) The notice of notice.	requested or hand delivery, give the surface peration. The notice required by this surprovided by subsection (b), section ten of norizontal well; and (3) A proposed surface affected by oil and gas operation	ce owner whose land bsection shall include this article to a surface use and compens s to the extent the da o the surface owner a	will be used for le: (1) A copy ace owner whos ation agreement mages 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 at containing an offer of compensation for pensable under article six-b of this chapter. Sted in the records of the sheriff at the time			
	s listed in the records of the sheriff at the ti						
Name: Richard		Name:	oseph L. Sitko Jr.				
Address: 803 N			315 Airport Drive				
Middlebourne, WV	26149	Sellerville	PA 18960				
State: County: District:	the surface owner's land for the purpose o West Virginia Tyler Ellsworth	UTM NAD 8	Easting: Northing: Access:	514002.514m 4372715.475m US Route 34			
Quadrangle:	Porter Falls 7.5'	Generally use	d farm name:	Richard D. Pyles			
Watershed:	Outlet Middle Island Creek	_					
Pursuant to W to be provide horizontal we surface affect information r	d by W. Va. Code § 22-6A-10(b) to a s ll; and (3) A proposed surface use and cored by oil and gas operations to the extended at the control of the control o	urface owner whose mpensation agreement the damages are co ned from the Secret	land will be untracted that containing are sampled and arry, at the WV	code section; (2) The information required used in conjunction with the drilling of a noffer of compensation for damages to the der article six-b of this chapter. Additional Department of Environmental Protection or by visiting <a antara="" carpenting<="" href="https://www.dep.wv.gov/oil-and-drive-new-color: blue color: blue color: www.dep.wv.gov/oil-and-drive-new-color: blue color: blue</td></tr><tr><td>Well Operato</td><td>" passusana="" td=""><td>Address:</td><td>1615 Wynkoop Stre</td><td>and the state of t</td>	Address:	1615 Wynkoop Stre	and the state of t
Telephone:	Antero Resources Corporation (303) 357-7223	Audiess.	Denver, CO 80202	0.			
Email:	mgriffith@anteroresources.com	Facsimile:	303-357-7315				
Dillati.	mgmini@anteroresources.com	- Tuesimite.	303-331-7313				
The Office of				telephone number, as part of our regulatory ies 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

APR 29 2020

Environmental Protection

CERTIFIED MAIL RECEIPT MULTIPLE WELLS - PYLES PAD WW-6A5 NOTICE OF PLANNED OPERATION TO SURFACE OWNER

Cut on dotted line.

Instructions

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Click-N-Ship® Label Record

USPS TRACKING #: 9405 5036 9930 0341 4936 45 Priority Mail® Postage: \$7.75 Trans. #: 490896606 Print Date: Ship Date: Expected Delivery Date: Total: 04/22/2020 04/22/2020 04/25/2020 From: MEGAN GRIFFITH 1615 WYNKOOP ST **DENVER CO 80202-1106** JOSEPH L SILKO JR. 315 AIRPORT DR SELLERSVILLE PA 18960-3071 Retail Pricing Priority Mall rates apply. There is no fee for USPS Tracking® service on Priority Mall service with use of this electronic rate shipping label. Refunds for unused postage paid labels can be requested online 30 days from the print date.

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APR 2 9 2020

Environmental Protection

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Click-N-Ship® Label Record

USPS TRACKING #: 9405 5036 9930 0341 4936 52

Trans. #: Print Date: Ship Date: Expected

Delivery Date:

490896606 04/22/2020 04/27/2020 Priority Mail® Postage: \$7.76 \$7.75 Total:

MEGAN GRIFFITH From:

1615 WYNKOOP ST **DENVER CO 80202-1106**

RICHARD D PYLES To: 803 NASH RUN RD

MIDDLEBOURNE WV 26149-7730

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APR 2 9 2020 Environmental Protection



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

April 17, 2020

Byrd E. White, III Secretary of Transportation/ Commissioner of Highways

Jimmy Wriston, P. E. Deputy Secretary/ Deputy Commissioner

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

Subject: DOH Permit for the Pyles Pad, Tyler County

Prosper Unit 2H Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2014-0553 which has been issued to Antero Resources Corporation for access to the State Road for a well site located off Tyler County Route 34/3 SLS.

This operator is in compliance with §22-6A-20 of the WV Code. 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 October 1, 2018.

Very Truly Yours,

Gary K. Clayton, P.E.

Regional Maintenance Engineer Central Office O&G Coordinator

Cc: Megan Griffith

Antero Resources Corporation

CH, OM, D-6

File

Office of Oil and Gas

APR 29 2020

Environmental Protection

List of Anticipated Additives Used for Fracturing or Stimulating Well

Additives	Chemical Abstract Service Number (CAS #)
Fresh Water	7732-18-5
2 Phosphobutane 1,2,4 tricarboxylic acid	37971-36-1
Ammonium Persulfate	7727-54-0
Anionic copolymer	Proprietary
Anionic copolymer Anionic polymer	Proprietary
BTEX Free Hydrotreated Heavy Naphtha	64742-48-9
Cellulase enzyme	Proprietary
Demulsifier Base	Proprietary
Ethoxylated alcohol blend	Mixture
Ethoxylated aconor brend Ethoxylated Nonylphenol	68412-54-4
Ethoxylated Nonyiphenoi Ethoxylated oleylamine	26635-93-8
Ethylene Glycol	107-21-1
Glycol Ethers	111-76-2
Guar gum	9000-30-0
Hydrogen Chloride	7647-01-0
Hydrotreated light distillates, non-aromatic, BTEX free	64742-47-8
Isopropyl alcohol	67-63-0
liquid, 2,2-dibromo-3-nitrilopropionamide	10222-01-2
Microparticle	Proprietary
Petroleum Distillates (BTEX Below Detect)	64742-47-8
Polyacrylamide	57-55-6
Propargyl Alcohol	107-19-7
Propylene Glycol	57-55-6
Quartz	14808-60-7
Sillica, crystalline quartz	7631-86-9
Sodium Chloride	7647-14-5
Sodium Hydroxide	1310-73-2
Sugar	57-50-1
Surfactant	68439-51-0
Suspending agent (solid)	14808-60-7
Tar bases, quinoline derivs, benzyl chloride-quaternized	72480-70-7
Solvent Naphtha, petroleum, heavy aliph	64742-96-7
Soybean Oil, Me ester	67784-80-9
Copolymer of Maleic and Acrylic Acid	52255-49-9
DETA phosphonate	15827-60-8
Hexamthylene Triamine Penta	34690-00-1
Phosphino Carboxylic acid polymer	71050-62-9
Hexamethylene Diamine Tetra	23605-75-5
2-Propenoic acid, polymer with 2 propenamide	9003-06-9
Hexamethylene diamine penta (methylene phosphonic acid)	23605-74-5
Diethylene Glycol	111-46-6
Methenamine	100-97-0
Polyethylene polyamine	68603-67-8
Coco amine	61791-14-8
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Department of Inental Protection

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OFFICE (666) 213 2665 CELL (564) 892-7477

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EVX. (384) 945-4105
Infone. (384) 945-4105
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PROJECT CONTACTS:

NANYOES/RODINESS
CARGE STRING BE - BECREA
NANIAGE SACINGERONC INC
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APPROVED

EROSION & SEDIMENT CONTROL PLANS SITE DESIGN & CONSTRUCTION PLAN, **BAFES METT BAD**

(NUT TO SCALE)

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WEST VIRCINIA COUNTY MAP



ENTRANCE

USGS 75 MIDDLEBOURNE, PADEN CITY, PORTERS FALL & SHIRLPY QUAD MAPS

GORRELL RUN-MIDDLE ISLAND CREEK WATERSHED

ELLSWORTH DISTRICT, TYLER COUNTY, WV





Requires that you call two business days before you dig in the state of West Virginia.

(Section XIV. Chapter 24-C) West Virginia State Law

MISS Utility of West Virginia 248-4848

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EY.D-	4.62	Well Pad
000	69°t	Access Road 'A'
PH-91 ML BBIA	휴 hadoft &	Hispacits to Richard D. Vichie P.
000	960 .	bedruteid eenaA beboot/ligroT
91.0	06.8	Tobs! Affected Area
910	07.5	astigxoord teneral troagoTissacx3
00.0	61.1	Mel Pad
00 D	10.0	*A* beoff equotA
25-31 M	T CAME COURT	∆ inpact of stoagmt
00.0	61.0	beduted seroA belooW letoT
00.0	38.6	Total Affected Area
00.0	10.01	REMIGNATED BARRING LOSGOT/RESOX
00.0	72.E	Dari FeW
848	MI SHARO	bredail of grandrif
000	00.0	Total Wooded Acres Designed
00.0	30.0	Total Affected Area
000	90'0	*A* bseA seconA
BE-BI WA	(BEN T RIPER	D & A yenbuff of strategist
00.0	3.33	Total Wooded Acres Distribed
89'0-	35.92	Total Affected Area
950	67.8	Excess/Topsoil Material Stockpiles
-0.73	86.6	bed leW
	927	"A" bead espook
0.00		
	000 ELO 000 EL	82.0 56.5 82.0 5

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DESCRIPTION OF THE PROPERTY OF
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SHEEL INDEX:

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1 (1988) or (1988) or	ENERGY	77	7 > /	TROGET		

PYLES WELL PAD SWORTH DISTR

COVER

SHEET

BE 30 1 JESHS CALE AS SHOWN

RIDE/II/SI/SDIB

900

70.0

total impact

DZ6 L

PLDL

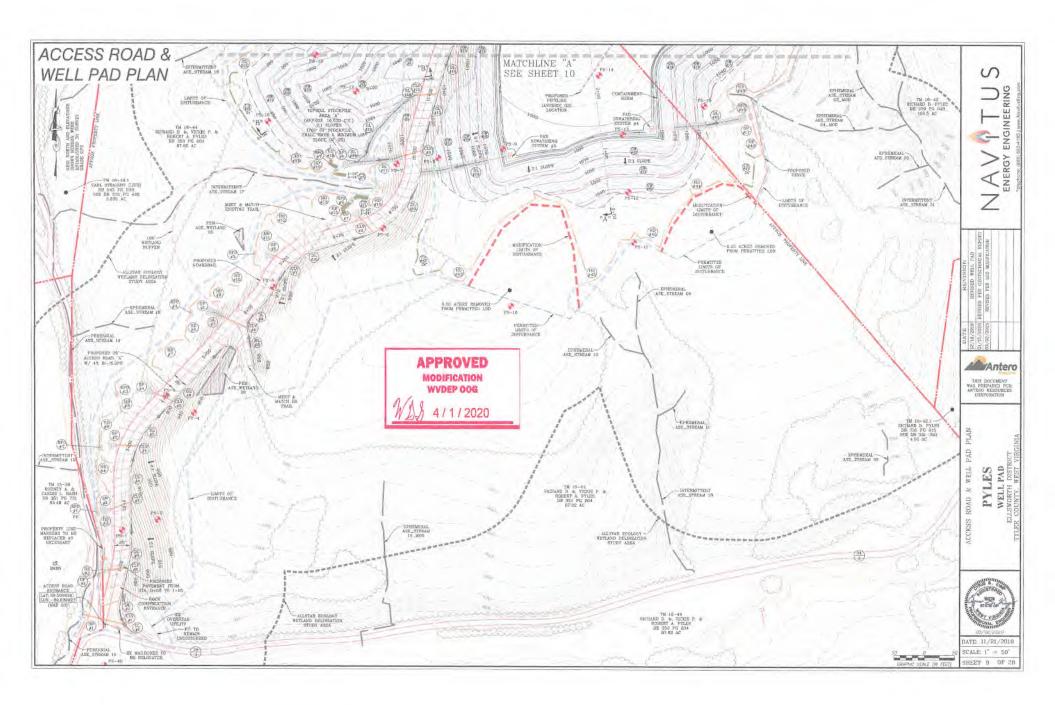
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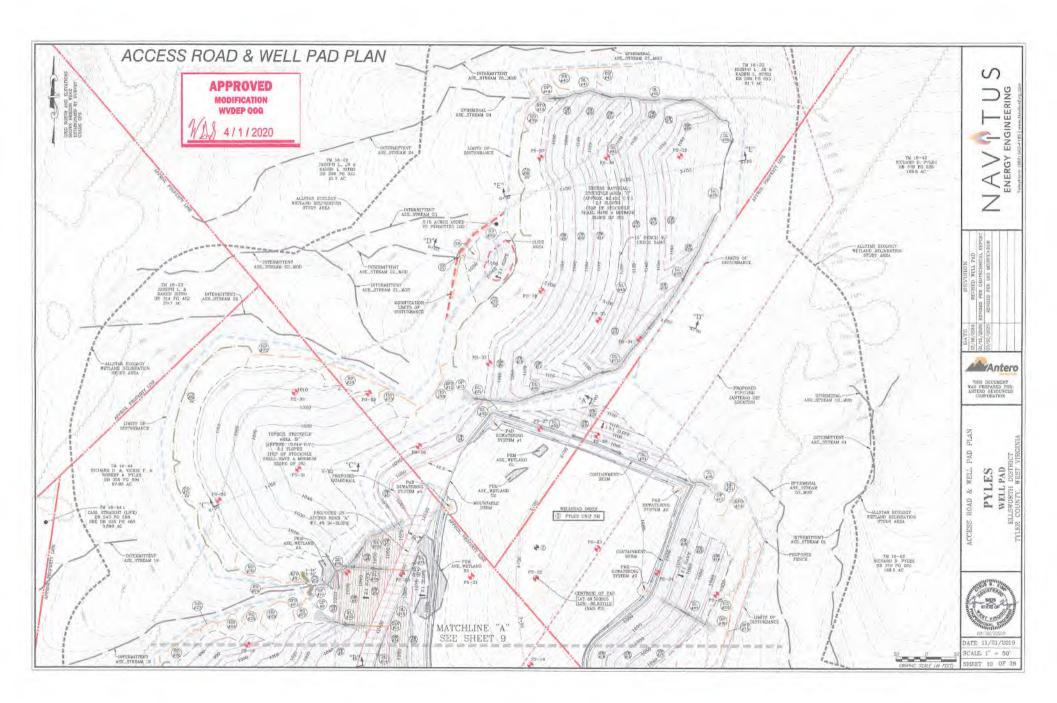
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ENGINEER S





LOCATION COORDINATES:
ACCESS ROAD 'A' ENTRANCE
LATHIUM: 35 DEGOS LONGIUDE: -80.839827 (NAD 83)
LATHIUM: 35.50887 LONGIUDE: -80.640598 (NAD 27)
N 43723605 8 513787.72 (UM 2008 17 META)

CENTRÓID OF PAD | LATITIDE: 98.533616 | LONGTIUDE: 88.83713 (NAD 83) | LATITIDE: 39.53376 | LONGTIUDE: -89.837288 (NAD 27) | N. 4872709 58 | E. 514004 JR | [UTM ZONE IT METERS]

GENERAL DESCRIPTION: THE ACCESS ROAD(S) AND WELL PAD ARE BEING CONSTRUCTED TO AID IN THE DEVELOPMENT OF INDIVIDITAL MARCELLIES SHALE GAS WELLS.

MISS_UTILITY_STATEMENT.
ASTRON RESOURCES COMPONATION WILL NOTIFY MISS UTILITY OF WEST VIRGINIA FOR THE LOCATING OF
UTILITIES PRIOR TO THIS PROJECT DESIGN IN ADDITION, MISS UTILITY WILL BE CONTACTED BY THE
CONTRACTOR PRIOR TO THE START OF CONSTRUCTION FOR THIS PROJECT.

FLOODPLAIN NOTES:
THE PROPOSES SITE IS LOCATED WITHIN FEMA FLOOD ZONE "X" PER FEMA FLOOD MAP #54005000700.

ENVIRONMENTAL NOTES:

STREAM AND WETLAND BEINDATIONS WERE PERFORMED IN SEPTEMBER COID BY ALLSTAR ECOLOGY, ILC.

STREAM AND WETLAND BEINDATIONS WERE PERFORMED IN SEPTEMBER COID BY ALLSTAR ECOLOGY, ILC.

TO BLIED YIE SITE POR MARIES AND WETLANDS THAT ARE MOST LARM WITHIN THE REGULATORY

OF ENVIRONMENTAL PRITECTION (WYNEY). THE SEPTEMBER 6, 2019 FIGURE 2 POTENTIALLY JURISDICTIONAL

MATRIES HAW MAY PERFORMED TO ALLSTAR SOLOGY, ILC. AND SHAMANIZED THE RESULTS OF THE FIELD

BELINEATION. THE MAP DOES NOT, IN ANY WAY, REPRESENT A JURISDICTIONAL RETERMINATION OF THE

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AND THE THE PRINT RECORD AND THE DELINEATION SHOWN ON THE BEGINNEY RECORD. AND WE REPORTED IMPACES. PERMITS FROM THE PEDERAL AND/OR STATE REGULATORY AGENCIES PRIOR TO ANY PROPOSED IMPACTS TO WATERS OF THE U.S., INCLUDING WETLAND FILLS AND STREAM CHOSSINGS.

CHARLES E COMPTON, III SUFVEYING COORDINATOR CELL: (304) 710-6448

OFFICE: (888) 802-4185 CELL (548) 886-8747

ENVIRONMENTAL:
ALSTAR ECOLOGY, LLC
SYAN L. WARD - BRYTHONWENTAL SCIENTIST
ONTICS (606) 818-2656 CELL: (304) 692-7477

DAVID PATRY - LAND AGENT CELL: (204) 476-6093 ENGINEER/SURVEYOR: NAVITUS ENGINEERING, INC. CYRUS S. KUMP, PS PROJECT MANAGER/ENGINEER

PROJECT CONTACTS:

OPERATOR: ANTERO RESOURCES CORPORATION 555 WHITE GAKS BLVD. BRIDGEPORT, WV 28133 PHONE: (304) 842-4100 VAX: (304) 842-4102

ELI WAGDNER - ENVIRONMENTAL ENGINEER OPPICE (304) 842-4060 CELL (304) 476-9770

JON MOEVERS - OPERATIONS SUPERINTENDENT OFFICE: (303) 357-8709 CELL (303) 808-8423

AABON KUNZLER - CONSTRUCTION SUPERVISOR CELL (495) 227-8344

ROBERT S WHENS FUELD ENGINERS OFFICE (2005) 842-4100 CHLL (204) 827-7400 ENGINEERING MARK SOIL & ROCK, INC GIRSTOPHER W. SAMOUS - PROJECT ENGINEER 0FFICE (142) 372-4000 CELL (412) 589-0682

RESTRICTIONS NOTES.

1. THERE ARE NO PERSONAL STREAMS, LAKE, PORDE, OR RESERVORS WITHIN 100 FEBT OF THE WELL AND AND LOO. THERE ARE WELLAND IMPACTS THAT WILL KEED TO BE PERMITTED BY THE APPROPRIATE AGENCIES.

- THERE ARE NO NATURALLY PRODUCING TROUT STREAMS WITHIN SEO FRET OF THE WELL PAD AND LOD.
- THERE ARE NO GROUNDWATER INTAKE OR PUBLIC WATER SUPPLY FACILITIES WITHIN 1000 FEET OF THE WELL PAD AND 10D.
- THERE ARE NO APPARENT EXISTING WATER WELLS OR DEVELOPED SPRINGS WITHIN 250
- THERE ARE NO OCCUPIED DWELLING STRUCTURES WITHIN 625 FEST OF THE CENTER OF
- THERE ARE NO AGRICULTURAL BUILDINGS LARGER THAN 250D SQUARE PEET WITHIN 625 FEET OF THE CENTER OF THE WELL PAD.

REPRODUCTION NOTE PAPER PLAND WEIGH CREATED TO ME PLOTTED DR PROAT (ASE, D) PAPER RALF STALE DRAWINGS ARE ON 117417 (AMBI H) PAPER

THESE PLANS FERE SEATED FOR COLOR PLOTTING AND ANY REPRODUCTIONS IN GRAY FEALE OR COLOR MAY RESULT IN A LOIS OF PERMANTON AND MINUTED FOR CONSTRUCTION PURPORTS.

APPROVED WVDEP OOG

1/5/2020

PYLES WELL PAD SITE DESIGN & CONSTRUCTION PLAN. **EROSION & SEDIMENT CONTROL PLANS**

ELLSWORTH DISTRICT, TYLER COUNTY, WV GORRELL RUN-MIDDLE ISLAND CREEK WATERSHED

USGS 7.5 MIDDLEBOURNE, PADEN CITY, PORTERS FALL & SHIRLEY QUAD MAPS

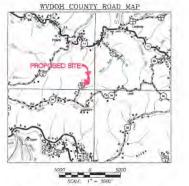


WEST VIRGINIA COUNTY MAP



(NOT TO SCALE)

DESIGN CERTIFICATION:
THE DRAWNIGS, CONSTRUCTION NOTES, AND
REFERENCE DAMAGNAS ATTACHED HERSTO HAVE
BEEN PREPARED IN ACCORDANCE WITH THE
WEST VIRGINAL CODE OF STATE RULES, DIVISION
OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL
AND GAS CITES 55—5.



MISS Utility of West Virginia 1-800-245-4848 West Virginia State Law (Section XIV: Chapter 24-C)
Requires that you call two
business days before you dig in
the state of West Virginia. IT'S THE LAW!!

ATTA JERS ON NAVE

Total Bita	
Access Road "A"	4 60
Well Pad	10.00
Excess/Topsoil Material Stockpiles	9.11
Total Affected Area	23.71
Total Wooded Acres Disturbed	3.19
Inspects to Rodney A. & Candis L. Nash	TM 15-38
Access Road "A"	0.00
Total Affected Area	0.08
Total Wooded Acres Disturbed	0.00
Impacts to Richard D Pyles TM-16	42
Wat Pad	2.83
Excess/Topsoli Malorial Stockpiles	0.35
Total Affected Area	4.18
Total Wooded Acres Disturbed	1 D.19
Impacts to Joseph L & Karen Sitko TI	f 16-22
Access Road "A"	0.01
Well Pad	5.18
Excess/Topsoil Material Stockpiles	4 69
Total Affected Area	5.88
Total Wooded Acres Disturbed	0.95
Impacts to Richard D, Vickie P, & Robert AP	yles TM 18-44
Access Road "A"	4.53
Wat Pad	4.98
Excess/Topso Material Stockpiles	4.07
Total Affected Area	13.58
Fotal Wooded Acres Disturbed	2.05

	Parma	nent Impaets	Temp. Impants	Total Impact (LF)	
Stream and Impact Cause		Inlets/Outlets Structures (LF)	Controls (LF)		
ASE_Stream 14 (Access Road *A*)	10	0	0	10	

	Ferme	ment Impacts	Temp. Impacts	Total Impact	
Stream and Impact Cause		Inlets/Outlets Structures (LF)	Controls (LF)	(LF)	
ASE_Stream 18 (Access Road "A"/Stockpile "B")	Q.	20	17	37	

Wetland and Impact Cause	FIII (SF)	Total Impact (SF)	Total Impact (AC)
ASE Watsand D1 (Well Pad)	233	238	0.01
ASE_Wattand 02 (Well Pad)	331	331	0.01
ASE Watland 03 (Well Pad)	3,453	3 483	0.08
ASE_Watland 04 (Stockpile "B"/Access Road "A")	1,014	1.014	0.02
ASE_Welland 06 (Access Road*A*7	1,920	1 920	0.04

WARP/amer	WAS ST	NAU J7 Lat 8 Long	UTM (METERS) 201/E 17	RAS 63 Let & Long
Pyles	N 388463.34	EAT SERVING 14 5174	N-8372710.83	AT 32-30-14 3910
Unit 5H	E 1822976-16	LONG-99-60-14-1566	E 514008.78	UCN/3-80-60-11-5362
Proposed Well)	Pad Ellevation	1,081.6		



S

ENERGY





PYLES WELL PAD SWORTH DISTRA COVER SHEET



DATE: 11/07/2019 CALE AS SHOWN HEET 1 OF 28

