

#### west virginia department of environmental protection

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

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

Wednesday, May 1, 2019 WELL WORK PLUGGING PERMIT Vertical Plugging

CORE APPALACHIA OPERATING LLC 414 SUMMERS STREET

CHARLESTON, WV 25301

Re: Permit approval for 806182 47-099-00482-00-00

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.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. Please be advised that form WR-38, Affidavit of Plugging and Filling Well, 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

806182 Operator's Well Number:

Farm Name: HENDERSON ALDRIDGE C/

U.S. WELL NUMBER: 47-099-00482-00-00

Vertical Plugging Date Issued: 5/1/2019

### **PERMIT CONDITIONS**

West Virginia Code §22-6-11 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. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
- 2. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
- 3. Well work activities shall not constitute a hazard to the safety of persons.
- 4. This well is under a consent order and must be plugged under the terms of that agreement.

WW-4B 'Rev. 2/01

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

#### APPLICATION FOR A PERMIT TO PLUG AND ABANDON

5)	Location: Elevati			) Deep/ Shallow_X ork of Twelvepole Creek
- /		Lincoln		Quadrangle Wilsondale
6)		Appalachia Operating, LLC		nt Jessica Greathouse
	Address P.O. Char	eston, WV 25362	Addre	Charleston, WV 25362
8)	Oil and Gas Inspector to be notified  Name Allen Flowers  Address 165 Grassy Lick Lane		9) Plugging Contractor  Name Precision Drilling (BOSS)  Address 3978 N Elmdale Road	
) )		VV 25124  ork order for the mann		is well is as follows:
11				

Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Work order approved by inspector

Date 3-//-20/9

PLUGGING PROCEDURE 806182 WAYNE COUNTY, WEST VIRGINIA API# 47-099-00482

BY: DMC

DATE: 3/7/2019

#### **Current Status**

10" @ 211'

7" @ 1837'

5 3/16" @ 2116' Pulled

2" tbg @ 3619' w/ hookwall pkr 2" x 6 5/8" x 16" @ 2008'

Shale: Shot 2680-3635'

TD @ 3635'

Water @ No Record

Gas Shows @ 1970-1975', 3380', 3550'

Elevation 1345.55'

3/27/2013 Echometer FL @ 1201'

#### Objective: Plug and abandon

- 1) Prepare road and location.
- 2) PJSA. MIRU service rig and support equipment.
- 3) Blow well down. Check TD.
- 4) Attempt to pull 2" tbg and pkr. If unsuccessful, cut 2" tbg at free and pull.
- 5) Spot 100' cement plug at TD, ~ 2640 2540'.
- 6) TIH and tag cement plug. ADD MORE CEMENT (F NEEDED.
- 7) Spot 6% gel from 2540'- 2025'
- 8) Spot 150' cement plug from 2025' 1875'. (Bic Line)
- 9) Spot 6% gel from 1875 1890'.
- 10) Attempt to pull 7" csg. If unsuccessful, cut 7" at free point and pull.

PLACE 100' CEMENT PLUC ACROSS CASING COT.

- 11) Spot 100' cement plug from 1890 1790'.
- 12) Spot 6% gel from 1790 1400'.
- 13) Spot 100' cement plug from 1400 1300'.
- 14) Spot 6% gel from 1300 250'.
- 15) Attempt to pull 10" csg. If unsuccessful, shoot or rip holes @ 100'.
- 16) Spot 100' cement plug from 250 150'.
- 17) Spot 6% gel from 150 100'.
- 18) Spot 100' cement plug from 100' Surface.

AF. 3-11-19

05/03/2019

- 19) Pull work string and top off w/cement.
- 20) Erect permanent monument (30" minimum height and 6" minimum diameter pipe) with API # (1/2" height numbering) and reclaim.

AS 3-11-19

## WEST VIRGINIA DEPARTMENT OF MINES OIL & GAS DIVISION: WE L L R E G O R D

806182 47-099-00482P

Permit No. Way 482		
Naugatuck Quad.		
Company		d Fuel Gas Co.
Address	P.O.	Box 1273, Charleston 25, W.V
Form	u.F.G	. Co. Min Tr. #19 A 323 04
Location		e Pole Greek
Woll No.	61.82	
District	Linco	In Wayne County
Surface		<b>\</b>
Mineral	Unite	d Fuel Gas Co. P.O. Box 1273
Ø		eston, 25, W.Va.
Commenced	7-18-	
Completed	9-18-	•
Date shot	9-22-	47 Depth 2680 to 3635
b7 . N .	with:	5900# Dat
Volume	946,0	00 C.F.
Rock Pressure	382 1	bs. 48 hrs. B.Limo
	480 11	bs. 48 hrs. Shale
Olay	0	18
SLate	18	30
Sand	30	140
Slate	140	151
Sand	151	220
Slate	220	225
White Sand	225	340
Black Slate	340	361
Sand	361	420
Slate	420	470
Sand	470	550
Slate	550	625
Sand	625	717
Slate	717	750
Sand	750	81.5
Black Slate	815	951
Sand	951	1050
Bark Slato	1050	1250
Salt Sand	1250	1700
Red Rock	1700	1700
Gray Slato	1708	1730
Lime Shells	1730	1738
Gray Slate	1738	3.747
Rod Rock	1747	1751
Gray Slate	1751	1755
Maxon Sand	1765	1790
Little Lime	1790	1822
Pencil Cave	1822	1826
Big Lime	1826	2024
Injun Sand	2024	2075
Slate & Shells	2075	2600
Brown Shale	2600	2620
Berea Sand	2620	2635
Slate & Shells	2535	2685
Brown Shale	2685	2735
White Slate	2735	3300
Brown Shale	3300	3630
Slate	3630	3635
Total Depth		T.M.
	_	

Gas 1970-1975 Big Lime Gas 3380 and 3550 Shale Va. 10 211 211

Gas Well Casing & Tubing

7 1837 1837 5 3/16 2116 Pld. 05/03/2019 2 tub. 3619

Hookwall Packer Size 2 x 6 5/8 x 16 Depth 2008 WW-4A Revised 6-07

1) Date:

February 22, 2019

05/03/2019

Operator's Well Number

3) API Well No.: 47 -

806182

47-099

00482

### STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF APPLICATION TO PLUG AND ABANDON A WELL

4) Surface Ow	vner(s) to be served:	5)	(a) Coal Operato	r	
(a) Name	See Attached Sheet for		Name	None	
Address			Address	V	
(b) Name	-			wner(s) with Declaration	ALC:
Address	1		(b) Coar O		
11441655	-		Name Address	Henderson Aldridge, C/O Da	allas Aldridge
	<del></del>		Address	72 Hillandale Avenue	
(c) Name			Managa	Garner, NC 27529	
Address			Name		
Address	(		Address		
6) Inspector	Allen Flowers		- (a) Cool I a	ssee with Declaration	
Address	165 Grassy Lick Lane		(c) Coar Le Name		
21441655	Liberty, WV 25124		Name Address	None	
Telephone	304-552-8308		Address		
rerebuotte	504-552-6506		_		
Take notic accompany Protection, the Applic	you are not required to take a e that under Chapter 22-6 of ring documents for a permit with respect to the well at t	any action at all.  If the West Virginia Cod to plug and abandon a v the location described or mailed by registered	le, the undersigned well well with the Chief of the n the attached Application or certified mail or de	operator proposes to file or has ne Office of Oil and Gas, West V	filed this Notice and Application and Virginia Department of Environmental I Form WW-6. Copies of this Notice, i) named above (or by publication in
WENTER	OFFICIAL SEAL	Well Operator	Core Appalachia Ope	rating, LLC	
St. A. E.	MOTARY PUBLIC BTATE OF WEST VIRGINIA	By:	Jessica Greathouse		
声(金属型金)引	Phyllis A. Copley	Its:	Manager - EHS & Adr	100000000000000000000000000000000000000	RECEIVED Gas
	144 Willard Circle Hurricene, WV 25528	Address	P.O. Box 6070		Other
My C	ommission Explans Saptember 10, 93		Charleston, WV 2536	52	EFR 25 7019
***********	**************	Telephone	304-353-5240		
		relephone	201002		Environmental Protection
Subscribed and	sworn before me th	is 22nd d	ay of	1.6	EUALO

Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a 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 of your personal information, please contact DEP's Chief Privacy Officer at depprivacyoffier@wv.gov.

Well 806182

API: 47-099-00482

#### **SURFACE OWNERS:**

Each own ¼ of surface

Henderson Aldridge C/O Dallas Aldridge 72 Hillandale Avenue Garner, NC 27529

Richard Dale Maynard 17070 Route 152 Road Genoa, WV 25517

Sharon Rooney Las Brisas Way Jacksonville, FL 32224

Patty Ferguson 4056 Deeds Road, S.W. Grandville, OH 43023

Office of O' and Gas
FEB 2 5 2019
WV Department of Environmental Protection



Office of Oil and Gas
FEB 2 5 2019

WY 1 Sparkment of Environmental Protection

#### **SURFACE OWNER WAIVER**

05/03/2019

Operator's Well Number

806182

#### INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW4-A

The well operator named on page WW-4A is applying for a permit from the State to plug and abandon a well. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

### NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT. WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:

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

Time Limits and methods for filing comments. The law requires these materials to be served on or before the date the operator files his Application. You have FIVE (5) 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.

<u>Comments must be in writing.</u> Your comments must 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.

The Chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation...".

If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

#### VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application For A Permit To Plug And Abandon on Forms WW-4A and WW-4B, and a survey plat.

I further state that I have	no objection to the	planned wor	k described in these mater	ials, and I have no
objection to a permit being issued on	those materials.			
FOR EXECUTION BY A NATURAL	PERSON		FOR EXECUTION BY	A CORPORATION,
ETC.			FOR EXECUTION BY RECEIVED Office of Oil and G	3as
	Date	Name	FEB 2 5 201	9
Signature		By	7 LD -	of
Ü		Its	WV Capariment Environmental Pro	tection Date
			Environing	
			Signature	Date

API No. 47-099-00462/63/2019
Farm Name TCO MIN TR
Well No. 806182

#### INSTRUCTIONS TO COAL OPERATORS OWNERS AND LESSEE

The well operator named on the obverse side of WW-4 (B) is about to abandon the well described in the enclosed materials and will commence the work of plugging and abandoning said well on the date the inspector is notified. Which date shall not be less then five days after the day on which this notice and application so mailed is received, or in due course should be received by the Department of Environmental Protection Office of Oil & Gas.

This notice and application is given to you in order that your respective representatives may be present at the plugging and filling of said well. You are further notified that whether you are represented or not the operator will proceed to plug and fill said well in the manner required by Section 24, Article 6, Chapter 22 of the Code and given in detail on obverse side of this application.

NOTE: If you wish this well to be plugged according to 22-6-24(d) then as per Regulation 35CSR4-13.9 you must complete and return to this office on form OB-16 "Request by Coal Operator, Owner, or Lessee for plugging" prior to the issuance of this plugging permit.

WAIVER					
has examined this proposed plugging we	ork order. The undersigne ll operator has complied	see/ of the coal under this well location ed has no objection to the work proposed to be with all applicable requirements of the West			
Date:					
	By:				

Office of Cit and Gas

FEB 2 5 2019

And Compartment of Environmental Protection

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Core Appalachia Operating, LLC  OP Code 494518671  Watershed (HUC 10) West Fork of Twelvepole Creek  Quadrangle Wilsondale  Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No  Will a pit be used? Yes No  If so, please describe anticipated pit waste: Plugging returns/Cement - Will utilize above ground tanks
Will a pit be used? Yes No No Plugging returns/Cement - Will utilize above ground tanks
If so, please describe anticipated pit waste: Plugging returns/Cement - Will utilize above ground tanks
Will a synthetic liner be used in the pit? Yes No If so, what ml.? 20
Proposed Disposal Method For Treated Pit Wastes:
Land Application (if selected provide a completed form WW-9-GPP)
Underground Injection ( UIC Permit Number)  Reuse (at API Number )
Off Site Disposal (Supply form WW-9 for disposal location)  Other (Explain Any fluid recovered will be hauled to a Core tank battery and disposed of properly)
Will closed loop systembe used? If so, describe:
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc.
-If oil based, what type? Synthetic, petroleum, etc
Additives to be used in drilling medium?
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc
-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust)
-Landfill or offsite name/permit number?
Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.
I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issue on April 1, 2016, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.  I certify under penalty of law that I have personally examined and am familiar with the information submitted on the application form and all attachments thereto 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 or imprisonment.  Phyllis A copletion of the GENERAL WATER POLLUTION PERMIT issued on April 1, 2016, by the Office of Company Official Signature.
Company Official (Typed Name) Jessica Greathouse
Company Official Title Manager - EHS and Administrative Services
Subscribed and sworn before me this 20nd day of Librury, 2019  Phyllis a. Coply  Notary Public  My commission expires  September 16, 2023  Environmental Protes

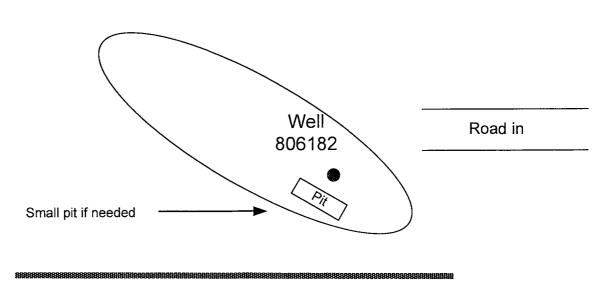
Operator's Well No. 806182 05/03/2019

Proposed Revegetation Treat	tment: Acres Disturbed	+/- Preveg etation pH		
Lime 3	Tons/acre or to correc	et to pH 6.5		
Fertilizer type 10	0-20-20 or equivalent			
Fertilizer amount_	intlbs/acre			
Mulch 2		_Tons/acre		
		Carl Minter		
TV.		Seed Mixtures		
	emporary	Perma		
Seed Type Red Fescue	lbs/acre	Seed Type Red Fescue	lbs/acre 15	
Alsike	5	Alsike Clover	5	
Annual Rye	15	7 1101110 010 101		
provided). If water from the L, W), and area in acres, of	pit will be land applied, pro	l application (unless engineered plans include vide water volume, include dimensions (L,		
Maps(s) of road, location, piperovided). If water from the (L, W), and area in acres, of Photocopied section of invol	pit will be land applied, pro the land application area.	vide water volume, include dimensions (L,	W, D) of the pit, and di	
Maps(s) of road, location, piperovided). If water from the (L, W), and area in acres, of (Photocopied section of involved).	pit will be land applied, pro the land application area.		W, D) of the pit, and di	
Maps(s) of road, location, piperovided). If water from the (L, W), and area in acres, of Photocopied section of invol	pit will be land applied, pro the land application area.	vide water volume, include dimensions (L,	W, D) of the pit, and di	
Maps(s) of road, location, piperovided). If water from the (L, W), and area in acres, of (Photocopied section of involved).	pit will be land applied, pro the land application area.	vide water volume, include dimensions (L,	W, D) of the pit, and di	
Maps(s) of road, location, piperovided). If water from the (L, W), and area in acres, of (Photocopied section of involved).	pit will be land applied, pro the land application area.	vide water volume, include dimensions (L,	W, D) of the pit, and di	
Maps(s) of road, location, piperovided). If water from the (L, W), and area in acres, of (Photocopied section of involved).	pit will be land applied, pro the land application area.	vide water volume, include dimensions (L,	W, D) of the pit, and di	
Maps(s) of road, location, piperovided). If water from the (L, W), and area in acres, of (Photocopied section of involved).	pit will be land applied, pro the land application area.	vide water volume, include dimensions (L,	W, D) of the pit, and di	
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Maps(s) of road, location, piperovided). If water from the (L, W), and area in acres, of (Photocopied section of involved).	pit will be land applied, pro the land application area.	vide water volume, include dimensions (L,	W, D) of the pit, and di	

## CORE APPALACHIA OPERATING, L.L.C. 47-099-00489

Diagram of Well 806182 API 47-099-00482 Field Office - Hamlin County - Wayne

Surface Owner: Henderson Aldridge



Sediment Control



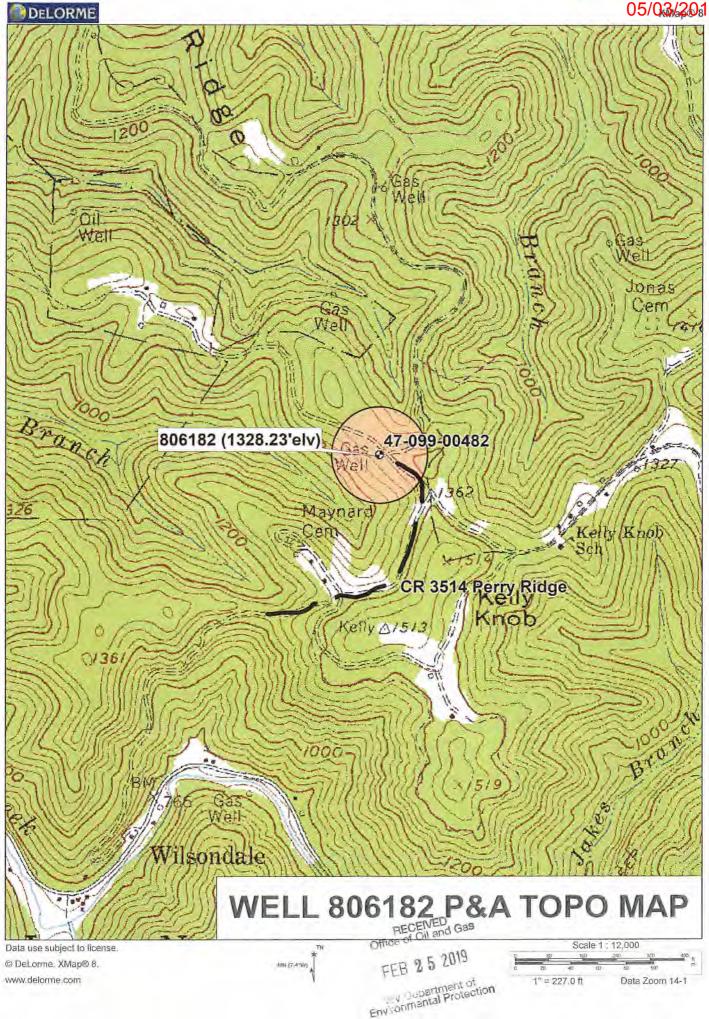
Note: No Land Application if pit is used

### Site Plan

Prepared by: Kris Aldridge

Date: 2/22/2019

05/03/2019



WW-7 8-30-06



# West Virginia Department of Environmental Protection Office of Oil and Gas WELL LOCATION FORM: GPS

API: 47-099-00482	WELL NO.:	
FARM NAME: TCO M		
RESPONSIBLE PARTY NA	AME: Core Appalachia O	perating, LLC
<sub>COUNTY:</sub> Wayne	DISTRICT: Li	incoln
QUADRANGLE: Wilson	ndale	
	nderson Aldridge c/o D	allas Aldridge
ROYALTY OWNER: CO	re Appalachia Product	ion, LLC
UTM GPS NORTHING: 42		
UTM GPS EASTING: 384	154.72m GPS ELEVA	404.85m [1328.23' elv]
above well. The Office of Oil the following requirements:  1. Datum: NAD 1983 height above mean 2. Accuracy to Datum 3. Data Collection Mean	ethod:	ates that do not meet
	Post Processed Differential Real-Time Differential	WY Environmental Protection
2.1	: Post Processed Differential	Environmental
	Real-Time Differential X	
I the undersigned, hereby cert	f the topography map showing the ify this data is correct to the best of mation required by law and the regula I and Gas.	ny knowledge and
Tur (Ahli)	EHS Specialist	2/22/19
Signature	Title	Date