

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, May 4, 2018
WELL WORK PLUGGING PERMIT
Vertical Plugging

ANTERO RESOURCES CORPORATION 1615 WYNKOOP STREET

DENVER, CO 80202

Re: Permit approval for 2 47-017-00438-00-00

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

Operator's Well Number: 2

Farm Name: DAVIS, CHRISTOPHER

U.S. WELL NUMBER: 47-017-00438-00-00

Vertical Plugging Date Issued: 5/4/2018

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

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.

WW-4B Rev. 2/01

1) Date April 12	20 18
2)Operator's	
Well No. Christopher Davis 2	
3) API Well No. 47-017	- 00438

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

APPLICATION FOR A PERM	MIT TO PLUG AND ABANDON
4) Well Type: Oil/ Gas X/ Liquid (If "Gas, Production or Und	d injection/ Waste disposal/ derground storage) Deep/ Shallow X
5) Location: Elevation 898' District West Union	Watershed Conaway Run Middle Island Creek County Doddridge Quadrangle West Union 7.5'
6) Well Operator Antero Resources Corporation Address 1615 Wynkoop Street Denver, CO 80202	7) Designated Agent CT Corporation System - Dianna Stamper Address 5400 D Big Tyler Road Charleston, WV 25313
8) Oil and Gas Inspector to be notified Name Daniel Flack Address 601 57th Street, SE Charleston, WV 25304	9) Plugging Contractor Name N/A - Antero will plug well Address
*Please see attached Work Order.	ner of plugging this well is as follows:
	RECEIVED Office of Oil and Gas
	APR 1 3 2018 WV Department of Environmental Protection
Notification must be given to the district of work can commence.	.l and gas inspector 24 hours before permitted
	by phone Date Mm 4, 2018
9. NV M	





Antero Resources 1615 Wynkoop St. Denver, CO 80202

Office: 303.357.7310 Fax: 303.357.7315

Christopher Davis #2 Doddridge County, WV API #47-017-00438

Objective: Plug and Abandon Wellbore.

Pipe Schedule:

- 1. 16" Wood Conductor @ 162'. Cement unknown.
- 2. 8-5/8" set @ 788'. Cement unknown
- 3. 4-1/2" set @ 1,947' with estimated TOC @ 1,667' (To Be Confirmed)
 - a. **TOC assuming 7 7/8" hole size**

Oil and Gas Zones:

1. Big Lime: 1,742' - ,1860'; Perf'd from 1,854'-1,855'

Big Injun: 1,860' – 1,920'; Perf'd from 1,862-1,862' and 1,870'-1,920'

5/1/2018

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APR 1 3 2018

Elevation: 891'

Procedure:

- Check and record all casing/annular pressures into Wellview.
- Coordinate and schedule casing jacks.
- 3. Notify WVDEP prior to commencing work, for plug witnessing (Harrison County Inspector).
- 4. Move in and rig up flat tank and frac tank (No pits will be utilized).
- 5. Move in rig up service unit.
- 6. NU BOPE and test- check and report surface pressure including bradenhead pressure.
- Kill well prior to pulling tubing.
- 8. RU wireline and lubricator.
- 9. Make gauge ring run to @ 1,947'
- 10. POOH. Note fluid depth tagged.
- 11. MIRU logging crew.
- 12. Load Hole with 6% gel.
- 13. Run CBL from 1.947' to surface.
- 14. Locate TOC around 4.5" casing.
- 15. Discuss results with completions engineers before proceeding.
- 16. TIH with 2 3/8" tubing to 1,947'.
- 17. MIRU cement services. Mix and pump 22 sacks for a 240' balanced plug from 1,700'-1,940'. (Class A cement + 2% CaCl2, 20% excess included; yield =1,18 ft³/sk, WR=5,2 gal/sk)
 - a. Displace to balance plug
 - b. Slowly pull out of cement plug.
 - c. Reverse circulate tubing clear of cement
 - d. WOC and tag TOC @ 1,700'
- 18. POOH with tubing.
- 19. Lubricate and RIH W/ CIBP and set @ 1,700'.
- 20. POOH w/ wireline.
- 21. Pressure test CIBP to 500 psi
- 22. RIH wireline and run free point above TOC in 4.5" casing
 - a. Chemical cut at ~1,660' (exact depth to be determined via freepoint and CBL)
 - b. RU casing jacks and POOH LD 4.5" casing.
- 23. TIH with 2 3/8" tubing to 1,699 (1' above CIBP)

24. MIRU cement services. Mix and pump 25 sacks for balanced plug from 1,599'-1,699'. (Class A cement + 2% CaCl2, 20% excess included; yield =1.18 ft³/sk, WR=5.2 gal/sk) WV Department of Environmental Protection

a. Displace to balance plug

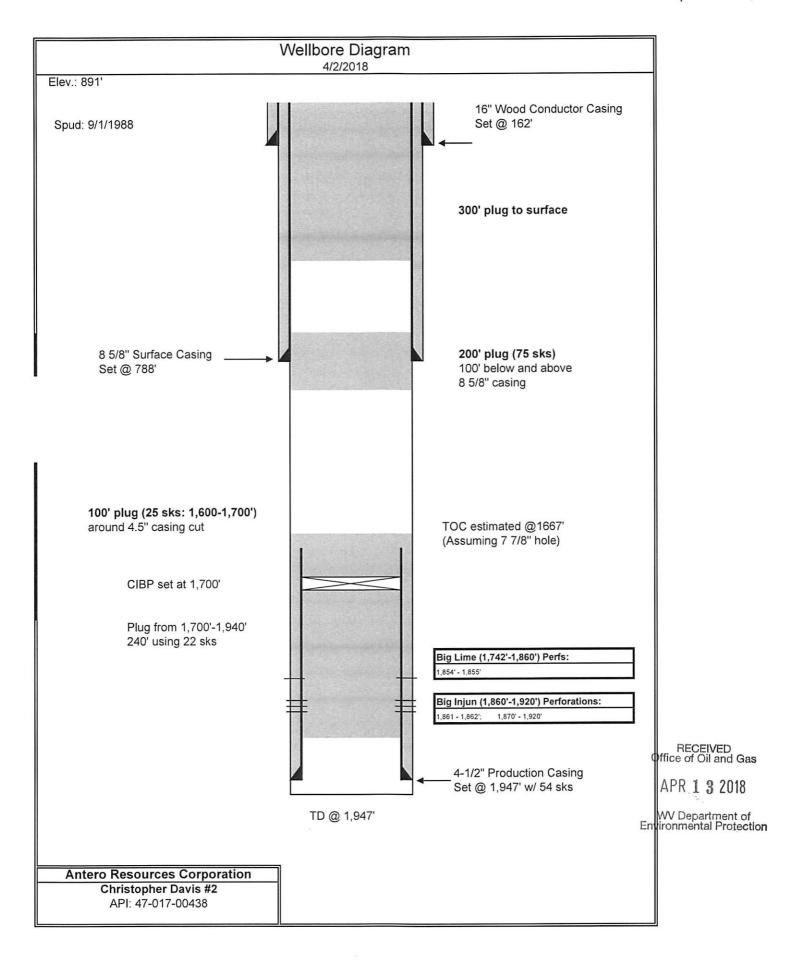
- b. Slowly pull out of cement plug.
- c. Reverse circulate tubing clear of cement
- 25. Pull up to 888'
- 26. Mix and pump 75 sacks for balanced plug from 688'-888' (Class A cement + 2% CaCl2, 20% excess included; yield =1.18 ft³/sk, WR=5.2 gal/sk).
 - a. Displace to balance plug
 - b. Slowly pull out of cement plug.
 - c. Reverse circulate tubing clear of cement
 - d. WOC and tag TOC @ 688'
- 27. Pull up to 300'
- 28. Mix and pump 112 sacks from surface-300' (Class A cement + 2% CaCl2, 20% excess included; yield =1.18 ft³/sk, WR=5.2 gal/sk) 05/04/2018

- 29. TOOH
- 30. Wait on cement 8hrs.
- 31. Weld on a P&A monument that extends thirty inches above the surface with well name and API number. (API No.: 47-017-00438).

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WV Department of Environmental Protection



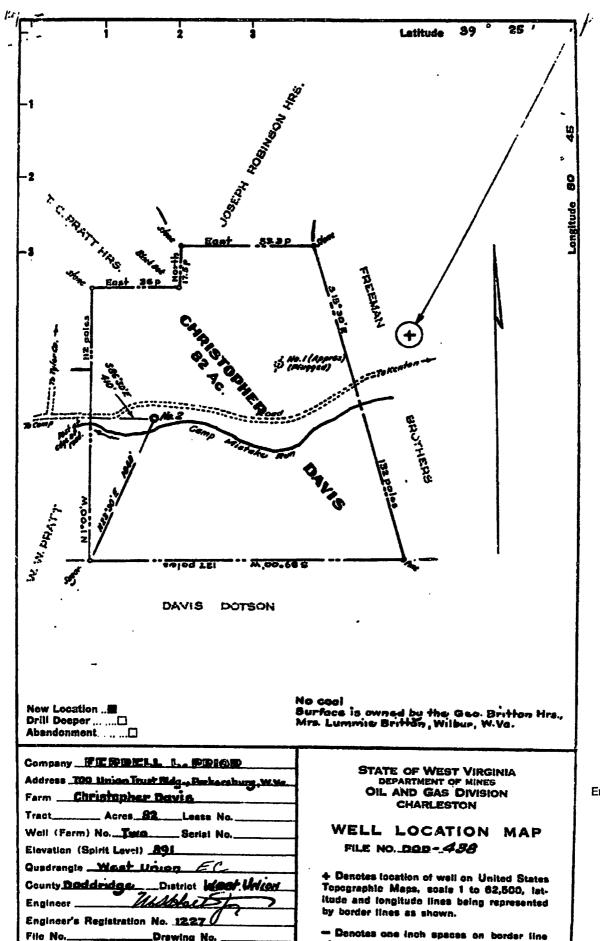


STATE OF WEST VIRGINIA DEPARTMENT OF MINES OIL AND GAS DIVISION 7

Quadrangle WES	t Union						
Permit No. DOI	<u> 438</u>		WELL	RECORD	l	Oil or (Gas Well Gas
Company Ferr	ell L. Pri	or			1		(MIND)
Address 720	Union Trus	t Bldg. Par	kersburg, '	W. Pasing and Tubing	Used in Drilling	Left in Well	Packers
		wis			ļ		
Location (water	_			Sise	ļ		
Well No	2		Elev. 891	16 16'	Wood C	onductor	Kind of Packer
District. Gpar			ldridge	13			
The surface of t	ract is owned in	fee by George	Britton He	ira	193'	162'	Size of
		Address Wilbun	r, W. Va.	. <u>% (5/8</u>	788		
Mineral rights a		mistopher,		656	<u> </u>		Depth set
		AddressWest U	nion, W. Va	- 53/16	ļ		
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Drilling complet	ed			. 2			Perf. bottom 1855
Date Shot	Fron	То	·	Liners Used	 	<u> </u>	Perf. top
With					 		Perf. bottom 1862
Open Flow		n			<u> </u>		1870
		n		CASING CEM	ENTED 41	SIZE 1947	No. Ft. 8-25-60 Date
Volume	30,000		Cu. Ft.	54 sks. ce	ment - h sk		- Lawson Cementing
Rock Pressure_			hra	Ha	5.		CO.
Oil			_bbls., 1st 24 hrs.		ncounterei		
WELL ACIDIZI	ED			-	TINC		
		0 262	200 00		TINC	HES	FEETINCHES
WELL FRACTU	JRED QU	o pois. war	er , 200 88	cks of sand			
			-				
RESULT AFTE		- ,-,	500 lbs.				
ROCK PRESSU			300 LDS.		None		
Fresh Water	None	Feet		Salt Water	WONG	Fee	
Formation	Color	Hard or Soft	Тор	Bottom	Oil, Gas or Water	Depth	Remarks
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Shale Red Rock	1 1	Ī	35 55	55 113		ı	
Shale	1 1		35 113	140		i	DECENCED.
Shale	!!!		140	170		1	RECEIVED Office of Oil and Gas
Red Rock	.	1	170	175			
Red Rock	.}		175	193			APR 1 3 2018
Sand	[]	i	193	230			W. W. T. 9 5010
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Sand	1 1		235 280	280 325		1	WV Department of Environmental Protect
Lime	1]	325	355			
Red Rock	1 1		355	365		1	1
Red Rock	4]]	365	380			1
Shale &	Lime		380	400			1
Sand Sand	1 1	1	400	405			
Sand Sand		j	405 454	454 460		A	1011121314gg
Red Rock]	1	460	468		105753/WE	733
Shale]]		468	510		♠ '⊘' ♠	
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Lime] [1	575	590		1	
Lime	[í	590	61.0			

ormation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
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hale			620	655	1	1	
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Date		·-
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of original tracing.

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Office of Oil and Gas

APR 1 3 2018

WV Department of Environmental Protection WW-4A Revised 6-07

1) Date: April 12, 2018	3			
2) Operator's Well Numb	er			
Christopher Davis 2				
3) API Well No.: 47 -	017	-	00438	

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

Surface Ow	ner(s) to be served:	5	(a) Coal Operator	
(a) Name	Charles C Hittel III	-/	Name	NO DECLARATIONS ON RECORD WITH COUNTY
Address	116 Michael Ave		Address	THE STATE OF THE SOURT WITH COUNTY
	Linthicum, MD 21090			
(b) Name			(b) Coal Own	ner(s) with Declaration
Address			Name	NO DECLARATIONS ON RECORD WITH COUNTY
			Address	The second will cook it
(c) Name	*All other surface owners	s with existing access re	oad Name	
Address	disturbance are off-lease a	and not required to be notif		
		no not required to be notif	icu.	
6) Inspector	Daniel Flack		(c) Cool Logo	see with Declaration
Address	601 57th Street SE		Name	
	Charleston, WV 25304		Address	NO DECLARATIONS ON RECORD WITH COUNTY
Telephone	304-389-7583		Address	
				
(2) The p The reason y However, yo Take notice accompanyin Protection, v the Applicat	lat (surveyor's map) sho you received these docume u are not required to take a that under Chapter 22-6 of ng documents for a permit to with respect to the well at the	to by the well location of the west Virginia Code to plug and abandon a she location described on mailed by registered	on on Form WW-6. ghts regarding the application the, the undersigned well op- well with the Chief of the Country and the attached Application or certified mail or deliver	ion which are summarized in the instructions on the reverses side. Berator proposes to file or has filed this Notice and Application and Office of Oil and Gas, West Virginia Department of Environmental and depicted on the attached Form WW-6. Copies of this Notice, ered by hand to the person(s) named above (or by publication in
RECE	IVE			
Office of O		Well Operator	Antero Resources Corpo	ration
		By:	Kevin Kilstrom	audi
MAY 0	4 1015	Its:	Sr Vice President of Prod	Lucities .
MIMIO	1 7010	Address	1615 Wynkoop Street	action
WV Depar	There are ext	riduress	Denver, CO 80202	
Environmenta		Telephone	303-357-7310	
		relephone	000-307-7010	
Subscribed and s	worn before me this	s 4th da	y of MAY	
My Commission I	Expires 03/1	3/2097		Notary Publican griffith
		71000	1	NOTARY PUBLIC STATE OF COLORADO
Oil and Gas Privac	Notice		nasil	NOTARY ID 20184011666
The Office of Oil an	d Gas processes your	personal informa	tion, such as name a	MY COMMISSION EXPIRES MARCH 13, 2022

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.

SURFACE OWNER WAIVER

Operator's Well Number

Christopher Davis 2

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 work described in these materials, 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 A CORPORATION,

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Office of Oil and Gas

Signature

Date 4/1/8 Name
By
Its

APR 2 4 2018 Date

Signature

WV Department of Date Environmental Protection WW-9 (5/16)

API Number 47 -	017	_ 0438	
Operator's Well N	o. Chris	topher Davis 2	

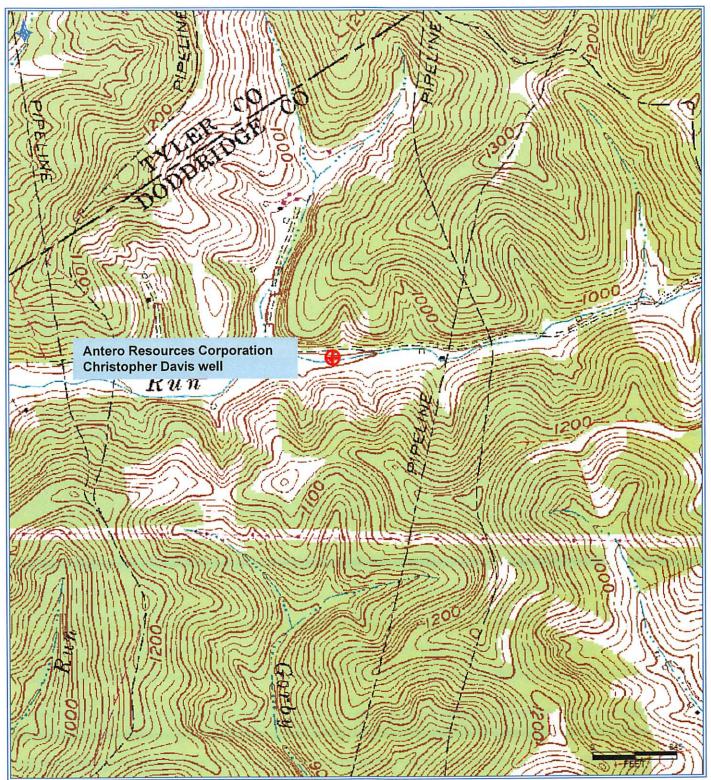
STATE OF COLORADO NOTARY ID 20184011666

MY COMMISSION EXPIRES MARCH 13, 2023 5/04/2018

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) Conaway Run Middle Creek Quadrangle West Union 7.5' Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes Will a pit be used? Yes No ✓ If so, please describe anticipated pit waste: Will a synthetic liner be used in the pit? Yes Proposed Disposal Method For Treated Pit Wastes: Land Application (if selected provide a completed form WW-9-GPP) Underground Injection (UIC Permit Number *UIC Permit # will be provided on Form WR-34 Reuse (at API Number Future permitted well locations when applicable. API# will be provided on Form WR-34 Off Site Disposal (Supply form WW-9 for disposal location) (Meadowfill Landfill Permit #SWF-1032-98) Other (Explain Northwestern Landfill Permit #SWF-1025/WV0109410 Will closed loop systembe used? If so, describe: Yes, fluids stored in tanks, cuttings removed off site and taken to landfill. 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 issued 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 this 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 parallel for submitting false information, including the possibility of fine or imprisonment. Office of Oil and Gas Company Official Signature (Company Official (Typed Name) Gretchen Kohler Company Official Title Senior Environmental & Regulatory Manager WV Department of Environmental Protection Subscribed and sworn before me this Notary Public Notary Public

Proposed Revegetation Treatment: Acres Disturbed 0.8	Preveg eta	tion pH
Lime 2-3 Tons/acre or to correct	t to pH 6.5	
Fertilizer type		
Fertilizer amount 500	lbs/acre	
Mulch 2-3	_Tons/acre	
	Seed Mixtures	
Temporary	P	'ermanent
Seed Type lbs/acre	Seed Type	lbs/acre
Annual Ryegrass 40	Crownvetch	10-15
Field Bromegrass 40	Tall Fescue	30
Please reference Table IV-3 on page 5 of the Christopher Davis 2Weil Plugging Plan	Please reference Table IV-4A on page 5	of the Christopher Davis 2 Well Plugging Plan
Maps(s) of road, location, pit and proposed area for land a provided). If water from the pit will be land applied, prov	application (unless engineered plans	including this info have been as (L, W, D) of the pit, and din
Attach: Maps(s) of road, location, pit and proposed area for land a provided). If water from the pit will be land applied, prov (L, W), and area in acres, of the land application area.	application (unless engineered plans	including this info have been is (L, W, D) of the pit, and din
*Or type of grass seed requested by sur Attach: Maps(s) of road, location, pit and proposed area for land a provided). If water from the pit will be land applied, prov (L, W), and area in acres, of the land application area. Photocopied section of involved 7.5' topographic sheet.	application (unless engineered plans ride water volume, include dimension	including this info have been as (L, W, D) of the pit, and din
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Antero Resources Corporation

Appalachian Basin Christopher Davis well Doddridge County

Quadrangle: West Union Watershed: Middle Island Creek

District: West Union Date: 4-12-2018

RECEIVED Office of Oil and Gas

APR 1 3 2018

WV Department of Environmental Protection



West Virginia Department of Environmental Protection Office of Oil and Gas

WELL LOCATION FORM: GPS

_{API:} 47-017-00438	WELL NO.: 2
FARM NAME: Christopher Davis	
RESPONSIBLE PARTY NAME: Antero	Resources Corporation
COUNTY: Doddridge	DISTRICT: West Union
QUADRANGLE: West Union	
SURFACE OWNER: Charles C Hitt	el III
ROYALTY OWNER: S&R Gas Ver	
UTM GPS NORTHING: 4356258.98	
UTM GPS EASTING: 518054.92 m	GPS ELEVATION: 898'
The Responsible Party named above has chosen preparing a new well location plat for a pluggin above well. The Office of Oil and Gas will not a the following requirements: 1. Datum: NAD 1983, Zone: 17 North, height above mean sea level (MSL). 2. Accuracy to Datum – 3.05 meters 3. Data Collection Method: Survey grade GPS × : Post Processed Diff	g permit or assigned API number on the accept GPS coordinates that do not meet Coordinate Units: meters, Altitude: meters. RECEIVED Office of Oil and Gas
Real-Time Differe	Wy Department of
Mapping Grade GPS X : Post Processed	
4. Letter size copy of the topography I the undersigned, hereby certify this data is conbelief and shows all the information required by prescribed by the Office of Oil and Gas. Permeth	map showing the well location. rect to the best of my knowledge and law and the regulations issued and

WELL PLUGGII CHRISTOPHER API#47-017

WEST UNION DISTRICT, DODDRIDGE CONAWAY RUN-MIDDLE ISLAND USGS 7.5 WEST UNION

CENTROID OF PAD LATITUDE: 39.355585 LONGITUDE: -80.780687 (NAD 83) N 4356258.30 E 518035.41 (UTM ZONE 17 METERS)

LOCATION COORDINATES:
ACCESS ROAD ENTRANCE
LATITUDE: 98-35749 LONGITUDE: -90.790946 (NAD 63)
N 4356275.74 E 517988.21 (UTM ZONE 17 METERS)

GENERAL, DESCRIPTION: THE EXISTING ACCESS ROAD AND WELL PAD ARE BEING UPGRADED TO AID IN THE PLUGGING OF EXISTING INDVIDUAL GAS WELL.

 $\overline{\text{FLOODPLAIN}}$ NOTES: THE PROPOSED SITE IS LOCATED WITHIN FEMA FLOOD ZONE "X" PER FEMA FLOOD MAP #54017C0110C.

MISS_UTILITY_STATEMENT:
MATERO RESOURCES CORPORATION BILL
UTILITIES PEOR TO THIS PROJECT DESIGN. IN ADDITION, MISS UTILITY WILL BE CONTACTED BY THE
CONTRACTOR PROOR TO THE START OF CONSTRUCTION FOR THIS PROJECT.

ENTRANCE PERMIT:
ATTERO RESOURCE ORPORATION WILL OFTAIN AN ENCROACHMENT PERMIT (FORM MM-108) FROM THE
MEST VIRGINIA DEFECTOR OF TRANSPORTATION DIVISION OF HIGHWAYS, PRIOR TO COMMENCEMENT OF
CONSTRUCTION ACTIVITIES, IF REQUIRED.

GEOTECHNICAL NOTES: no sol studies or subsurvace investigations were performed and analyzed for the design of this site.

ENVIRONMENTAL NOTES:

STREAM AND RETLAND BELINELTHOUS WERE PERFORMED IN FEBRUARY 2016 BY GAI CONSULTANTS TO REVIEW THE SITE OF WATERS AND RETLANDS THAT ARE MOST LIKELY WITHIN THE REGULATORY PURVIEW OF THE US. ARLY CORPS OF ENGINEERS (USACE) AND/OR THE WEST VIRGINA DEPARTMENT OF ENVIRONMENTAL PROTECTION (PROPER). THE MARCH 1, 2016 STREAM AND RETLAND DELINEATION ROPE AND SUMMARCES THE RESULTS OF THE FIELD DELINEATION. THE HADDES AND SUMMARCES THE RESULTS OF THE FIELD DELINEATION. THE HADDES AND BETLANDS WHICH MAY BE REGULATED BY THE USACE ON THE WIDER LINDWARD LIMITS OF WATERS AND BETLANDS WHICH MAY BE REGULATED BY THE USACE ON THE WIDER.

PROJECT CONTACTS:
OPERATOR:
ANTERO RESOURCES CORPORATION
53. WHITE OAKS BLVD.
BRIDDEEPORT, WY 26330
PHONE. (304) 842-4100
FAX. (304) 842-4102

JON MCEVERS - OPERATIONS SUPERINTENDENT OFFICE: (303) 357-8789 CELL: (303) 808-2423 ELI WAGONER - ENVIRONMENTAL ENGINEER
OFFICE: (304) 842-4068 CELL: (304) 476-9770

AARON KUNZLER - CONSTRUCTION SUPERVISOR CELL: (405) 227-8344

ROBERT B. WIRKS - FIELD ENGINEER OFFICE: (304) 842-4100 CELL: (304) 627-7405

CHARLES E. COMPTON, III - SURVEYING COORDINATOR CELL: (304) 719-6449

TIM RAINS - LAND AGENT OFFICE: (304) 842-4290 CELL: (405) 841-3538

ENGINEER/SURVEYOR:
NAVIUS ENGINEERING, INC.
CYRUS S. KUMP. PE - PROJECT
MANAGER/ENGINEER
OFFICE: (888) 662-4185 CELL: (1) CELL: (540) 686-6747

SPECIALIST OFFICE: (304) 926-8100 ENVIRONMENTAL:
GAI CONSULTANTS, INC.
JASON A. COOK — SENIOR ENVIRONMENTAL
SPECIALIST CELL: (303) 709-3306



WEST VIRGINIA COUNTY MAP

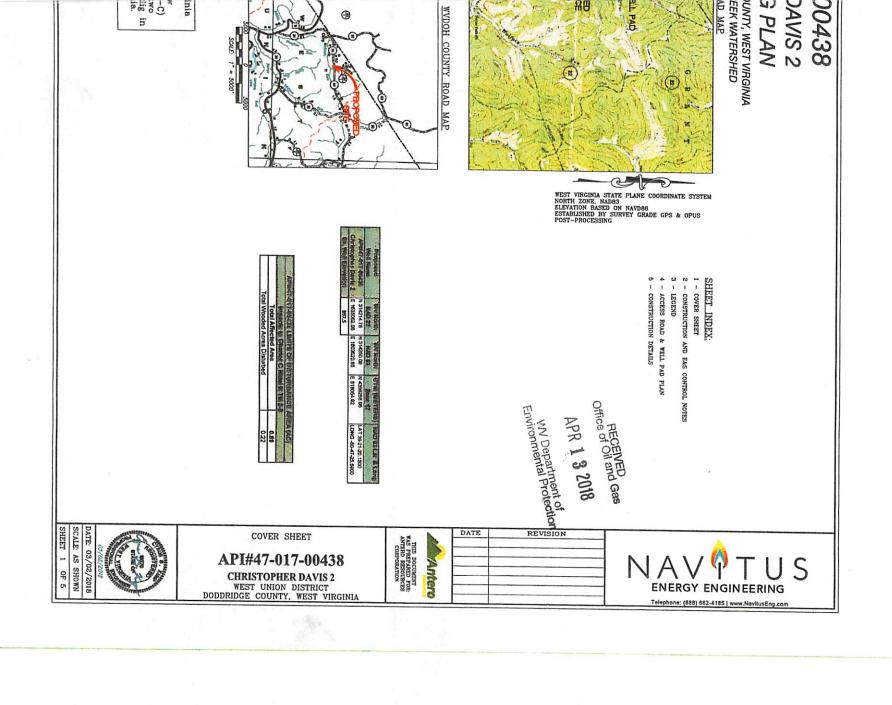


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(NOT TO SCALE)

MISS Utility of West V 1-800-245-4844 West Virginia State (Section XIV: Chapter Requires that you ca usiness days before yo the state of West Vir

REPRODUCTION NOTE THESE PLANS WERE CREATED TO BE PLOTTED ON 227%4" (ANSI D) PAPER. HALF SCALE DRAWINGS ARE ON 11707" (ANSI B) PAPER.



CONSTRUCTION AND E&S

CONSTRUCTION NOTES:

1. THE COMPLICITION NOTES:

1. THE COMPLICION BY TREATY FULLS COMPLIAND PRIOR TO AND DURBING CONTRICIONS AND THE ANY DESCRIPTION RECOVERED WITH THE CONTRICTOR AFTER THE PRODUCT OF ANY DESCRIPTIONS SETTERN ACTUAL FILLS OF BUTCHES THE PRODUCT APPROVED PLAY, ANY TRUE RECOVERED WITH CONTRICTOR'S ESS.

OF SUCH DESCRIPANCIES SHALL BE DONE AT THE CONTRACTOR'S ESS.

METIGODS AND MATERIALS USED IN THE CONSTRUCTION OF THE IMPROVIACION BY SECURITARIS AND THE CONSTRUCTION STANDARDS AND SECURITARISMS AND SECURITARISMS AND SECURITARISMS AND SECURITARISMS AND SECURITARISMS AND SECURITARISMS AND SECURITARISMS AND SECURITARISMS AND SECURITARISMS OF

- AN APPROVED SET OF PLANS AND ALL APPLICABLE PERMITS MUST BE AVAILABLE AT ALL THORS.

 AVAILABLE AT ALL THORS.
- THE CONTRACTOR SEALL PROFILE ADEQUATE LEANS OF CELANDIC AND FROM
 TRICES AND/OR OTHER BAUDWART PROIS TO BETTERING PAULE STREETS, AND IT
 SEEN CONTRACTOR'S REPROSESSEELY TO CHARL STREETS, ALLAY DIST, AND TO
 THEE TRACTOR'S LEASURED ARE INCESSARY TO REQUEE THE THE STREETS AND
 MAINTACES IN A CELAN, KNO AND DOST FREE CONDITION AT ALL THESE.
- THE LOCATION OF EXISTING UTILITIES SHOWN IN THESE PLANS ARE FROM FIRED TO LOCATIONS MOTO/OR CUS MAY. IT SEALL HE THE CONTRACTION'S EXPONENTIAL TO VERTILITY LOCATION OF ALL EXISTING UTILITIES AS RECIDED PROBA TO CONSTRUCTION, THE CONTRACTION SHALL INFORM THE RECOVERATION OF THE PROPERTY CONTRIBUTION.
- THE CHINACTOR SIMIL PROVIDE NOTIFICATION TO THE APPROPRIATE UTILITY COMPANY PRICE TO CONSTRUCTION OF MATER AND/OR GAS PEPALERES. COMPANY PRICE TO CONSTRUCTION OF MATER AND/OR GAS PEPALERES. CONCENTRATE OF PRICE THE APPROPRIATE AND PROPRIATE AND CONTESTIONS TO EXISTING LINES.
- THE CONTRACTOR TILL BE RESPONSELE FOR THE REPAIR OF ANY DAMAGES TO THE RESIDENCE FOR ANY DAMAGES TO THE CONTRACTOR WAS TRADILY OF CONTRACTOR OF THE PROPERTY O
- VEIZI GRADNO IS PROPOSED WITHEN EASILENTS OF UTILITIES, LETTERS OF ORDINO PEDILESSION PEOM ALL ANOLYDE COMPANIES NUST EE OSTANGED PEOR TO GRADINO ARE/OR SITE ENEMAPERAPEZA.
- THE DEPENDENT TILL BE RESPONMENT FOR THE REACCHING OF ANY UTILITIES WILL BE REACHED AS A RESULT OF HIS PRANET. THE RELOCATION SHOULD HE DOIS FROM TO CONSTRUCTION.
- 10. THESE PLANS CHEMITY THE LOCATION OF ALL INDITES CHAVESITES CHAVESTES HE STATE LAY. IT HE PROTECTED OF ACCUSANCE WITH STATE LAY, IN HE EXPENTED THE SECURITED THACKMAIN.
- THE CONTRACTOR(S) SHALL NOTITY OPERATORS WHO MADTHAN UNDERGROUND UTDATY LINES IN THE AREA, OF PROPOSED EXCLAVATING OR ELASTING AT LEAST TWO (S) PRORING DATS, ETHOR TO CONCENCENT OF EXCAVATION OR DEMOLITION.
- 12. CONTRACTOR TO CONTACT OPERATOR AND ENGINEER IF GROUNDWAYER IS EXCOUNTEDED BURING CONSTRUCTION.
- 13. THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MERTING WITH THE EXCECUTE AND SEPORTY CONTROL INSPECTOR 8 DATE PRICE TO THE START OF CONSTRUCTION.
- 14. THE CHITMACTOR IS RESPONSED FOR ALL FILL MITTHAL PLACETY REQUISED NUMBER THE CHISTRAN OF THIS PROJECT. ALL MATTHAL THEST SHALL HE CHISTRAN OF THIS PROJECT, ALL MATTHAL THEST SHALL HE CHISTRAN OF THE CHI
- THE CONTRACTOR IS RESPONSED TORS CONSTRUCTING THE SITE IN ACCORDANG WITH THE DESIGN FLANS AND CONSTRUCTION DOCUMENTS AND THE SOUTH OF YOUR SAME CONTROLS WITH THE GRADES, DEPUR, DEPUR, DECISIONS, ETC. SHOPN RESERVE.
- 16. Super sllt fince can be used in place of any compost filter sock
- IT SELLE THE SOLE RESPONSIBLITY OF THE CONTRACTION TO COMPAY THIS ALL TREMEL THAT AND THE SOLE RESPONSIBLITY OF THE CONTRACTION THE SPIN COMMAND THE SPIN COMMAND THE SPIN COMMAND THE SPIN COMMAND THE SPIN COMMAND THE SPIN COMMAND THE SPIN COMMAND THE CONTRACTION COMMAND THE SPIN COMMAND THE SPIN COMMAND THE SPIN COMMAND THE SPIN COMMAND THE SPIN COMMAND THE SPIN COMMAND THE SPIN COMMAND THE SPIN COMMAND THE CONTRACTOR THE SOLE RESPONSIBLITY OF THE CONTRACTOR.
- COMPUNCTION ACTIVITIES SHALL BE RESTRICTED TO THE ARRISE SHOWN ON THE PARKS WITHEN THE LICHES OF DISTRIBUANCE, CHALSS CHESCHISE AUTHENATIOD BY DESCRIPTION OF DESCRIPTION TO THE DESCRIPTION OF THE PARKS WITHEN THE STRUCTURE PREPARED BY THE DESCRIPTION OF THE LICHES OF DISTRIBUNCE.
- PRESENTATION OF EXCELLANCE, PROPERTY CONTRAS, REPRESENTE POINTS, FILMES AND OFFICE CONTRACTOR PROPERTY OF CHARGES OF TRUTTU OR CLUBLES DEFINITION HE CONTRACTOR STALL EX EXPLINED ON LOCAL OR REPORTS AND MONOTARY OR LUBBOR. EXECUTION OF MADERAS CANDIDATES OF A PROPESSORAL MADERA CANDIDATES CANDIDAT
- 20. THE CONTRACTOR SHALL MANTAIN ADEQUATE CLEARANCE FROM ALL ELECTRIC LINES IF ANT. IN ACCORDANCE WITH NATIONAL ELECTRICAL SAFEIT CODE.
- THE CONTRACTOR SEALL MUTHOUTE ALL CLEMENTS AND DISTURBANCE TO THE REVENENCE TO THE ALLEMENT STITES FOR THESE CLEMENS, GRUESING, AND TOPICH THEOPING SEALLE BE LINED TO THICKE AREAS DESCRISED IN SACH STACE OF THE CONSTRUCTION SEQUENCE.
- MY HOME THE PROPRIED TO THE CONTRACTOR BY MATTHE SEGRECATION, NE.
 ARE PROPRIED FOR THE CONTRACTOR SOFT MALE THE CONSTRUCTION OF THE TREE CONSTRUCTION OF THE THE CONSTRUCTION OF THE THE CONSTRUCTION OF THE PROPRIED APPRICE SEGRECATION, OC. DESIGN PLANS, MATTHES MECHANISM, THE PRILL FOR ANY THE CONTRACTOR DESIGN FLANS, OF THE DIGHT. THES TO WARTER FROM THE DIGHT. PRESS TO THE DIGHT. THES TO
- ANY CONSTRUCTION ISSUES OR QUISTIONS SIALL ER REQUERT TO THE EXCURZAGE ACCURATION, THE CONSTRUCTION INSPECTOR REALL HE CONFIGURATION ON THE RECOURT HER RESILLATION SHALL HE APPLIED AS POINTSMAY.
- ALL EXISTING AND DESIGNED CULVERTS AND CULVERT SUIDS SHALL BE CLEANED AND CLEARED OF DESIGN DURING THE COURSE OF CONSTRUCTION, ANY EXCESS EXEMPT USE TO THE FULLWARD OF A CULVERT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

NOTE:

EROSION AND SEDIMENT CONTROL NARRATIVE:

ENDING INSCEDIMENT RIS PROPOSE OF THIS PROPOSE IN CONSTRUCT A GAS WELL PLUGGING PAD AND
FRANCE INSCEDIMENT OF ALL SECURING CONTROLL OF THE ACCESS HOLD ENTHANCE TO THE
FRANCESS OF THE LICENSE ON THE SOUTH SIZE OF CONTRY SAVE AL, OLD MIZE SEAT OF THE
PROPOSED SITE IS LICENSE ON THE SOUTH SAVE OF DEPOPHENE COUNTY, PERST WARRING. THE
PROPOSED COUNTY BUTTE AL & COUNTY NOTE SALVE OF DEPOPHENE COUNTY, PERST WARRING. THE
TOTAL APPROXIMATE LAND DISTURBANCE ASSOCIATED WITH THIS PROJECT IS 0.49 ACRES.

TOWARD STIL COUNTRING, THE EXPINO SITE IS APPRIMINATELY SAME WOODEN. HIS WOOGENETY
WHOSE FROM MEMBERS TO GIFF PERSONNEL TO GET OF THE AREA COURS SOURCE,
OUTSIGN FROM THE THE THEORY STILL THE COURT OF THE AREA COURTS SOURCE,
OUTSIGN COURT FROM THE COURT OF THE COURT

adacent eropenty. The site is bordered by courty route 64 to the notifi and valunt vooldd and iclady land to the west, elst and south.

PP모스및

CHEAL AREAS THE AREA(S) SHOWN LIGHT THE DELIVATED STREAMS, VETLANDS, AND POINTS, AS ENDY OF THE PLANS, ARE DESIGNATED AS CHITCHAL AREA(S), IT PRESENT. ALL AS LOAPES AND STREAMS THAT AREA CONTROLLED CHITCH DESIGNA AREA, THESE AREAS SALL HE RICHTORIAD AND MATTHER SCHOOL DESIGN CONTROLLED CHILD PRIVATE OCH AND ATTER EACH LANGUAGE DESIGN FINAL BECOMES OF THE SOCIAL HE TO BE USED TO PROTECT HERES FILED BUILDRATED LARLED) FINAL DELIVERY OF THE SOCIAL HE RICHTORY THE AREA(S) ARE NOT TOTALDED. THE LOCAL CONTROLLED AND THE AREA(S) ARE NOT ADDITIONAL DECOMES CHITCH AND ATTERED. THE LOCAL CONTROLLED AND ATTERED AND THE ADMINISTRATION THE PLANSAGES HE WAS AREA OF TOTAL THE MOST OFFICER OF THE PLANSAGES HE THESE AREAS OF THE EXPLANS PRESENT DURING HER THE ATTERET AND THE THE TEXTURES PRESENT DURING HER THE ORIGIN OF THE AREA OF THE TOTAL DURING HER THE ORIGIN OF THE PLANSAGES HERE AREA OF THE EXPLANS PRESENT DURING HER THE ORIGIN OF THE AREA OF THE THEORY OF THE TOTAL SHOPE OF THE ADMINISTRATION OF THE PLANSAGES HERE AND THE THE EXPLANS PRESENT DURING HERE OF THE THEORY OF THE TOTAL SHOPE OF THE ADMINISTRATION OF THE PLANSAGES HERE AND THE ADMINISTRATION OF THE

SOLS: NO SOL STUDIES OR SUBSURFACE INVESTIGATIONS DESIGN OF THIS SITE. à

<u>077. STR. AREAS.</u> THERE ARE NO DORSOW AREA(S) OR EXPORT STOCKPILE AREA(S) OUTSIDE OF THE PROPOSED LIMITS OF DISTURBANCE FOR THIS PROJECT.

NICH AND SEDICAT CONTROL LEAGUES. WALESS OTHERTES UNICATED, ALL VEGETATIVE AND UNIVERSE ESCAPE AND SEDICATE CONTROL ELECTRICS SHALL ES CRICATIVETED AND MANTAURED SCHOOL TO LOCALE REPORTATION OF THE CHICAGO THEY VEGETA ENCINA MID PALETY CONTROL EST MANAGELERY PRACTICS MANUAL.

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- NETALL GRANGE MATT FRICE TO ENSURE NO DESTURBANCE TO THE DELIGRATED AREA(S).

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- DIFFICES LEATED ABOUT, ACE CONSIDERED ECHNICA ERROSSIA AND SELDARIT CONTROLS, ADDITIONAL CONTROL MASSIERS MAY BE HEXCESSARY PAR TO CONTROLICURE HANDES OF DEPROPAREMENT AND CONTROLICURE PRESENT RELEGIORATION DE CONTROLICURE PRESENTA FOR CONTRACTOR RELALIA DEPARTMENT REPORTEMENT ROPER DE LA CONTROLICURE AND CONTROLICURE RELALIA DE L'ORIGINATION DE CONTROLICURE PRESENTA ALL MASSIERS SILLA BE CONTROLICURE AND CONTROLICURE DE L'ORIGINATION DE CONTROLICURE PRODUCTION DE CONTROLICURE PRODUCTION AND CONTROLICURE PRODUCTION DE CONTROLICURE PRODUCTION AND CONTROLICU

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NACEDANES PROGRAM, DURINO CONSTRUCTION ACTIVITIES, ALL CRIPTON CASASTES SIGLAL ER DESPORTE DALVET THE CITE SUPPORTACIONE OR LES ACRECADATION AND WITCH THE PER OF CORP. ON DURINS A THE ACT SECURITY MAN BETTE, THESE CHALL HE DEFINE A MARKAL OF THE OF DECESS OR MORE BY A CORP. PER OF THE CORP. THE CORP. THE CORP. AND ACCOUNTY OF THE OF CORP. OF THE CORP. OF THE CORP. THE OF THE CORP. AND ACCOUNT THE CORP. THE CORP. OF THE CORP. OF A SECURITY HE OF THE DAY, OR AT THE ACCOUNT THE CORP. OF THE TO OF CO. CITCUIO OF THE OF THE CORP. ACCOUNTY OF THE CORP. OF THE CORP. ACCOUNTY OF THE CORP. OF THE CORP. ACCOUNTY OF THE CORP. AND ACCOUNTY OF THE CORP. OF THE CORP. ACCOUNTY OF THE CORP. OF THE CORP. AND ACCOUNTY OF THE CORP. OF THE COR

DILTH AND OFFICER OF THE RELEFF CHAPTERS SELLL BE SECONDED BROWLARLY FOR SECONDET BRILLINGS OF THE RELEFF AND/OR OFFICER IS CAMPAID OF GOOD OR GREATER, IT SELLL BE RELIVED CLANDE OR TEXTURE DESCRIPTION. TRAPPED SEDUENT IS TO BE RELIGIED AS REQUIRED TO MAINTAIN 60% TRAP AND/OR SOCK EPPICENCY AND DESPOSED OF AS ENGINEERED FILL ON THE STOCKPILES.

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EROCHET TRACED OFTO ANY PUBLIC ROMPAY OR EXPENDE SILLER ER ENTERFED IN THE CONTRIVEND STE THE TOE OUT ALLEY WAYS AND AND EXPEND IN THE MURCH DESCRIPTION THE FLAN THE COLUMN SILLE THE RECURSIVE OF THE FLAN OR STREET INTO ANY ROLLINGS SITUATED OR STREET INTO ANY ROLLINGS SITUATED OR STREET WATER AND ANY ROLLINGS SITUATED OR STREET WATER SITUATED OR STREET

ANY DETVIREDO AFRAS ALVIO TRE ACCESS ROAD SELLE ES FLABLESDA AS COMPRISOTROS PROCESS, PEROR TO COMPENSA VIOLENS ACCESS ROAD CONSTRUCTION, WITH ESTERS ROCK STABLEZATION OR SERDING AND MULTIPOL METHODS.

NOTE. THE WY DEF MEALING THE MIGHT TO AND AND/OR MODELY THESE EXCERN AND SECURITY CONTROL MALISHIED DUGGET THE CONSTRUCTION PROCESS, WITHIN MALISHA, TO EXCURE ADEQUATE PROTECTION TO THE PODUC AND THE DEPROMENTAL PROCESS.

DURIN COL REGISTATION.

CONTRACTOR SELLA MENTA SEED AND STABILIZATION OF ACCESSANCE WITH THE BY DEP ERSON AND
SEGMENT CONTROL EET MANABERT PRACTICE (SUP) MANUAL BASED UPON SITE SPECIFIC SCI.

CHARACTERISTICS.

SECURITY SECTION IS TO 12 APPLIED TO SITES SUPPER (* 5147). SEED MATURES SECULD EE .

SELECTED THAT ARE APPROPRIATE FOR SITES SUPPER.

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IL CONTROL SEZONG SEALL DE APPLIDO TO ALL DISTURBEDO AREA CONSTRUCTION PRAPTIC. ALL EAUT, ROADS AND OTRES REANY TRAFFIC ROVITES SEALL DE SURFACE IS VET AND REPEATED AS REEDED TO CONTROL DUST. ST TE ş

CONTROL NOTES

AUCTION SEQUENCE:

OPERAT OF THIS SITE SHALL BE CONSISTENT WITH THE POLLOWING GENERAL

PROMETRICITION. HE CONTINUENCE SHALL REPLEMENT, MAINTAINS, AND OPERATE ALL

PROMETRICITION. HE CONTINUENCE STREAMS AND SETTING AND SETT

-construction contregace with the contractor and the appropriate erosion duart control respector at house from to beging work to review the Oction drawings and provide any requested guidance.

THE LIUTS OF CONSTRUCTION AND MARK/FIAG ALL IDENTIFED WETANDS, STREAMS.
ES, AND OTHER AREAS OF CONCERN FOR CONSTRUCTION ACTIVITIES. INSTAIL SIGNS TO
ATE THE AREAS AND ORANGE SAFETY FENCE TO IDENTIFY IMPORTANT PROJECT
(THES SUCH AS APPROVED ACCESS ROADS, NO REPUBLING ZONES, WETLANDS/STREAM)
S, ETC.

RUCT THE ROCK CONSTRUCTION ENTRANCE. ALL VEHICLES HALL DO SO VIA THE ROCK CONSTRUCTION ENTRANCE. ENTERING AND EXITING THE

cuct all bap's as soon as clearing and gruebung operations allow. Diversions diment trap(s)/basin(s) shall be seeded and mulched dimediately. LCARIA, CONTEY UPSLOPE DIANNAGE ABOUND THE ACCESS ROAD AND WELL PAD AREAS STRUCTING ALL DIVERSION BERM(S) AND/OR COMPOST FILTER SOCK DIVERSION(S) AS ON THE PLANS.

NAN DERIES THE STEE. ALL PROOFF MATERALL, BRUTSE, REEZES, STUAPES, LABGE BROTSE, LABGE BROTSE, AND DEBERS SHALL BE CLAMED FROM THE METALLATION OF NECESSARY MANUAL MET YOR PROPER CONSTRUCTION, INCLIDING THE DISTRICTAND OF NECESSARY MEDICAL PROOF OF THE DESCRIPTION OF THE PROPERTY OF THE

IN COPSOIL FROM THE ACCESS ROAD, PRIOR TO PLACING ANY FILL. THE EXPOSED DAE SHALL HE COMPATED AND PROOP ROLLED TO PRODUCE A FRAILE AND WITHELDING ALL STREPED TOPSOIL SHALL HE STOCKPILD IN AFEAS SHOWN IN THE PLANS, OR EAD) AT AN APPROMISE ENETH OF 2-4 INCHES ON ALL PROPOSED 2-1 OR FLATTER, AND THATCHIELY STABLIZED, ADDITIONAL BUY MEASURED SHALL HE CONSTRUCTED > TOPSOIL STOCKPILES, IF RECESSION. ICABLE, INSTALL ALL WETLAND OR STREAM CROSSINGS AS SHOWN ON THE PLANS.

UCT THE ACCESS ROAD. ALL FILL AREAS, INCLUDING ENCRS MATERIAL STOCKPILES.

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18 "TATED IN" AND COMPATED IN A PRINCIPAL SECRET OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE CONTENT HIT ARE CONTROLLED IN THE CONTROLLED IN THE CONTROLLED IN THE PROPERTY OF THE PRO 10

IN TOPSOUL FROM THE WELL PAD. PRIOR TO PARCHE ANY FILL THE EXPOSED DIS SEALL BE COMPATED AND PROOF ROLLED TO PRODUCE A SEALES AND WITHELDING LLI STEEPED TOPSOUL SEALL BE STOCKPILD IN AFELS SHOWN IN THE PLANS, OR EAD. A LAW APPROACHED ENTER OF ALL ROLLED ON ALL PROPOSED EAL OR THATES AND INJUSTICATED STABILIZED. ADDITIONAL BUP MEASURES SHALL BE CONSTRUCTED TOPSOUL STOCKPILES, IT MEXICESARY.

THE TELL PED MEL AS SHOPN ON THE PLANS, DEFALL PAD SINGES (THE 4. PRO-BY AND OUTLIN FROMETHING MAD COTALMANDER BERM LARGE NETEL. MADVATEN IS THE OUTLIN ANGLES OF THE TELL PAD. THE TELL PAD AREA SHALL RESTAULING OUTSILE PASSED & STORE AND THE SIDE SUPPES WITH SEED AND MUCH. DEFALL AN "ATTLES AS SHOWN ON PLANS, APPLY SEED AND MUCH TO BECOLUR THE APPLY CITY OF STANDINGS ALL MEANS, THAT THIL YOU BE SUBJECT TO BECOLUR THE APPLY CITY OF STANDINGS ALL MEANS THAT THIS OF HE SUBJECT TO BECOLUR THE APPLY CITY OF STANDINGS AND THE STORES. OR ANY DISTURBED AREA THAT WILL NOT BE

CE WELL DRILLING

'S MUST REMAIN IN PLACE AND FUNCTIONAL UNTIL ALL AREAS WITHIN THE LIAIT OF NACE ARE COMPLETE AND PERMANENTLY STABILIZED. MAINTRIMANCE MUST INCLIDE ON OF ALL EROSION, AND EXPLICATI CONTROLS AFTER EACH RUNOFF EVENT IN OF 0.5" AND ON A EIWEEKLY BASIS.

AS DISTURBED BY NTLY SZEDED. MANENT SEDIMENT CONTROL MEASURES CAN BE REMOVED AFTER THE SITE IS NILY STABILIZED AND APPROVAL IS RECEIVED FROM THE WYDEP. REMOVAL OF CONTROLS SHALL BE REPAIRED. STABILIZED, AND

LAMATION NARRATIVE.

WORTHS - THE CONSTRUCTION STEE SHALL BE STABILIZED AS SOON AS POSSELE. IT TO CONSTRUCTION STEE SHALL BE STABILIZED AS SOON AS POSSELE. IT TO CONSTRUCTION STEE SHALL

SITE RECLAMATION ALL FILL AF ITH A VIBRATING SHEEPSFOOT M D-698, MOISTURE CONTENT COCTOR TEST (ASTM-D698) RES AREAS SHALL BE COMPA OF ROLLER TO 95% COMPA OF WILL BE CONTROLLED I ESULTS. ACTED IN 12" MAXOMUM LIFT PACTION PER STANDARD PRO IN ACCORDANCE WITH THE

CONSTRUCTION STANDARDS:

THE DESIGN, CONSTRUCTION EXAMINED OF THE POR OIL AND GAS STITS MUST RECONSTRUCTION AND STATES AND THE PORT OF THE STATE. STEET OF PROPER THE STATE STATE OF PROPER THE STATE STATE STATE STATE AND ANTIANDS OF THE STATE STATE STATE AND ANTIANDS OF THE STATE STATE STATE STATE AND ANTIANDS OF THE STATE STATE SOUND EASIER DESIGNED, CONSTRUCTED, AND MANTIANDS OF THE STATE STATE AND ANTIANDS OF THE STATE AND ANTIA 胡問 DINA

ALL FILL AREAS SHOULD BE CLEARED OF TREES, AND STRIPPED OF TOPSOIL/ORGANIC SOILS PRIOR PLACEMENT. TO THE START OF FILL

ANY GROUNDWATER ENCOUNTERED DURING THE OUTSIDE/DOWNSTREAM TOE OF THE SI. SHALL BE AN EXCAVATED 2' x 2' TRENCH COLPACTED BY HAND TAMPER. GEOTEXTILE TRENCH. CONSTRUCTION SHALL BE DRAINED TO LOPE. CONSTRUCTED DRAIN SECTION AND BACK FILLED WITH \$57 STONE, FABRIC SHALL BE USED TO LINE

SATISFACTORY MATERIALS FOR USE AS FILL FOR PAD AREAS INCLUDE MATERIALS CLASSIPID IN ASTIL D-2487 AS GW, GP, GK, GC, SW, SP, SM, SC, ML, AND CL GROUPS.

GENERALY, UNSATISPACTORY MATERIAS DICLIDE MATERIAS CLASSIFED IN AST D-2487 AS PT. CH. MH. OL. OH. AND MY SOIL TOO ETE TO FACILITATE COMPACTION. CH. AND MH. SOILS MAY BE USED SUBJECT TO APPROVAL OF THE TRANSPACE OF THE COMPACT OF TH

L TILL AREAS SHALL BE "XXYED N" AND COMP MAXIMUM LOOSE LIFT THICKNESS OF 12" AND 1 TULNED IN THE GENTECHNICAL REPORT, ALL TULNED IN THE LEFT CONTEXT THE ES CONTEXT TILL-DEGO), MIGHTURE CONTEXT THIL BE CONTEXT NUMBED PROCTOR TEST (ASTM-DOGG) RESULTS. DOMPACTED IN HORIZONTAL LIFTS WITH MAXIMUM PARTICLE SIZE AS L. FILL SHALL BE COMPACTED BY A THE STANDARD PROCTOR TEST ANTROLLED IN ACCORDANCE WITH THE

LITTS AUE NOT PROPOSED 708 THE CONSTRUCTION OF THIS SITE. HOTVEL ER ROCK PARTICLES OR BOULDERS THAT ALE RECONSTRUCTION OF THIS SITE AND THE STRUCTION MEED TO BE RECOED FOR TO A MANAGEMENT GET CONTAINING IS SIZE ROCK PARTICLES, IT IS CHITICAL THAT NO VOID SPACES BE LEFT EN THE ROCKS WILLIES BOOK PROMULES AFTER THIS FOR SIZE TO BE THE PACE. AND OFFENDING SERVICES THE ROULDERS AFTER THIS FOR SIZE FOR THE PACE. THE PACE OF THE

ER PLOCEMENT OF ALL PLIL MERGIAL SHALL BE FREE OF WOD, STUDES AND DOTS. LARGE ROCKS AND BOULDES, AND ANY OTHER NOCOMPACTIBLE SOIL DOTS AND BOULDES, AND ANY OTHER NOCOMPACTIBLE. THE FILL ALL COMPACTED TO A MINUTE OF NISTED NON-MOYELETT, HOTTERS, THE MAKACHON EFFORT SHALL NOT SECRED THE OFFINION MOSTERIES LITTS.

ALL ESCISID AREAS, NOT COVERED BY CONDACTED GRAVEL OR REP-RAP SHALL RE-LIADO, PERTILLED, SERSIDO AND MUCHEN, PREMANEN YERSAMITE GONDOL CREE HIS CONFLANCE VITH THE BY DEP ERGOSION AND SEDIMENT CONTROL FIELD MANUAL MUST HE ESTAILLIBED UPON THE CONFLICTION OF CONSTRUCTIONS, SLOPES SHALL BE LIATANUED WITH A GRASSY VECETATIVE COVER AND FREE OF BRUSH AND/OR TREES.

IF STANDING WATER IS PRESENT ON SITE, CONTRACTOR TO CORRECT DRAINAGE ISSUE BY DRECTING WATER TO PROPER EAS CONTROLS OR OUTLET WITH POSITIVE DRAINAGE IF NECESSARY, CONTACT ENGINEER FOR GUIDANGE IN CORRECTING DRAINAGE ISSUES.

ALL DRAWAGE DITCHES DIVERSIONS, AND CHAPERTS SHALL HAVE POSTITIVE DRAWAGE AND OUTFALL RICH THE PROPER OUTFAL PROCESSION OF LAVE SPEEDUNG DAVIGE. SHEEP SHALL DEVICE. OR APPROVED ALTERNATIVE, SHALL BE INSTALLED WITHIN STALL BE THE OUTFALL OF DIVERSION OF LAVEL SPEEDUNG DEVICE. TO PERSON SERVICE DEVICE OF THE OUTFALL BOTTALL OR DEVICE. TO PERSON SERVICE DEVICE OUTFALL BOSTON CONTROLS AND THE DEVICE OUTFALL BOSTON CONTROLS AND THE DEVICE OUTFALL BOSTON CONTROLS AND STALL BUTCH OUTFALL SHEEP

= ALL DRANAGE DITCHES AND DIVESSIONS THAT ARE ROCK LINED SHALL BE NETHALED PER THE DETAILS ON THE WALL INCLUDING THE NECESSARY INSTALLATION OF ANY GEOTEXTILE PARKE UNDERNEATH THE ROCK LINING.

13 12 IF THE ENGGON CONTROL DEVICES SHOY EVERNICE OF BEHG ENLEGULATE DIE TO CONSTRUCTION MENS AND METHODS, THE CONTRACTOR IS TO INSTALL ADDITIONAL DRAINAGE EDVICES OR ENGGING CONTROLS TO PETYENT FURTHER ERGSION FROM COCURENG.

CONTRACTOR IS TO EXTEND ALL KEYWAY AND BONDING BENCH OUTLET DRAINS A MINIULM OF ONE POOT PAST THE FINSHED CHADE OF THE SLOPE AND INSTALL THE PROPER OUTLET PROFECTION PER THE DIFFALM ON THESE PLANS. ALL OUTLET DRAINS ARE TO BE CLEARLY VISIBLE AND MARKED.

15 7 ALL SLOPES SHALL BE TRACKED IN PER THE DITALS ON THESE PLANS. CONTRACTOR SHALL REPLAY THIS METHOD ANY TIME AN AREA, HAS BEEN DISTURBED PRIOR TO THAT AREA BEING STABILIED.

ALL LANDWRIP ACCESS ROADS AND EXERTING TELL ROADS THAT ARE BRING MAINTAINED SIALL ARE RETY OPEN DEBUNG THE BYTHEE COURSE OF CONSTRUCTION OF PROVIDE CONTINUOUS, ACCESS IP CLOSURE IS RECESSANT. THE CONTRACTOR SIALL PROVIDE ALL RUTHALDER BETOUR ROUTE TO THE SATISFACTION OF THE LANDWRIPE OR THE OFFICE. . AUNTEMANTE OF ERCORM AND SEDILENT CONTROLS MATE HE PERFORMED
MEMORITY ONCE THE CONTRACTOR IS NOTITIZED OF THE DISCREPANCY.
THALFTOR TO PERFORM LUMITEMANCE OR INACEMATELY NOTIFY THE
R-CONTRACTOR PERFORMING THE MEMORITY EXCUSION CONTROL
HIGHWALCHE PROPERMING THE MEMORITY EXCUSION.
MEMORITY THAN IS DECAMED TO BE AN EXPENSION CHAIL HE PERFORMED
MEMORITY UPON THE CLEARY, ROMERRE, OR STRIFT SEQUENT.

17 ANY NATE INTERVATIO, ACOUNT THE WELL AND DEWATERING SYSTEM, SHALL BE CORRECTED INSERTANTALY TO PREVIOURT THE PALLINE OF THE SOILS AND DESIGN. OF THE DATES IN THE PALLINE SYSTEM, ANY EXCRESS RECISION OF SLOPE PALLINES DUE TO THE WATER INTERVATION IN THE SOUP AREA, SHALL BE THE SOIL RESPONSEBLATY OF THE CONTRACTOR. THE

ALL DITCH RELIEF AND STREAK GROSSING CULVERIS SHALL ABET ALL MATUFACTURES SPECIFICATIONS CANNOT RE MET, CONTRACTOR SHALL CONSULT THE ENGINEER OR MATUFACTURES FOR ALTERNATIVES.

SITE CLEANUP & RECYCLE PROGRAM;

1. GABAGE, FUELS OR BAY SUBSTACE HARUTU, TO HUMM, AQUATIC OR FISH LIFE,

11 LE REFERENTED FORM METEROG SERMOS, STEEMAS, PONDS, LAKES, RETLANDS
OR ANY WATER COURSE OR WATER BODY.

OILS, FUELS, LUBRICANTS AND COOLANTS WILL BE PLACED IN SUITABLE CONTAINERS AND DISPOSED PROPERLY.

AND

TRASH AND

ALL SEDIMENT REMOVED FROM SEDIMENT CAPTURING DEVICES SHALL BE FLACED THE TOPSOIL STOCKPILE, THEN SEEDED AND MILCHED, AS NECESSARY, ALTERNATIVELY, THE REMOVED SEDIMENT CAN BE TRANSPORTED TO A SITE WITH APPROVED PERMIT.

>

03/02/2018

2 OF 5

ALL POLLITION AND EMERGENCY SPILLS SHALL BE IMMEDIATELY REPORTED TO ANTERO RESOURCES CORPORATION AND THE WYDEP OFFICE OF OIL AND GAS. (EMERGENCY #1-800-642-3074)

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CORPORATION Antero

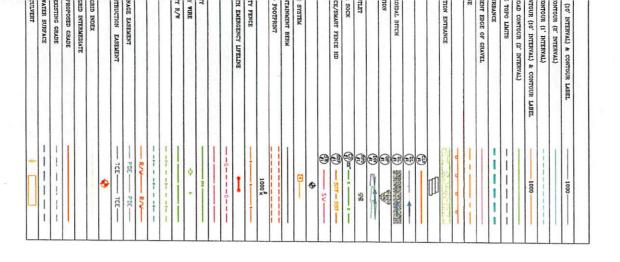


CONSTRUCTION AND E&S CONTROL NOTES

API#47-017-00438

CHRISTOPHER DAVIS 2
WEST UNION DISTRICT
DODDRIDGE COUNTY, WEST VIRGINIA

X-SECTION/PROFIL		MATCHLINE
X-SECTION/PRO		
a second france	R/V R/V	
X-SECTION/PROFIL	SV	EX STRAW WATTLE
X-SECTION/PROFI	® -××-	EX. SILT FENCE
X-SECTION/PROF	(A) - SSF - SSF -	EX. SUPER SILT FENCE
X-SECTION/PROF	® —×——×—	EX. COMPOST SOCK
BORING LOCATION	8	EX. WATER WELL/EX. SPRING
PR. TEMPORARY		EX. SANITARY LINE
PR. PERMANENT		EX. WATERLINE
PR. RIGHT-OF-F	constant automatate taxanounter motorata	EX. UTILITY R/W
PR. WATERLINE		EX. UNDERGROUND FIBER OFFIC
PR. TELEPHONE		EX. UNDERGROUND TELEPHONE
PR. OVERHEAD UT		EX. UNDERGROUND ELECTRIC
PR. POWER POLE		EX. OVERHEAD UTILITY
PR. OVERHEAD U	φ -	EX. POWER POLE/GUY WIRE
PR. PIPELINE R,		EX. PIT
PR. PIPELINE		EX. PIPELINE VALVE
PR. ACCESS GATE	100	EX. PIPELINE METER
PR. PERIMETER S		EX. PIPELINE R/W
PR. SPOT SHOT		EX. PIPELINE
PR. 220' X 320'	*	EX. GV2 MEIT
PR. TOP OF PAD	*	EX. WELL HEAD ON DESIGNED PAD
PR. PAD DEWATE	1	EX. ACCESS GATE WITH EMERGENCY LIFELINE
PR. WELL HEAD	1	EX. GATE
PR. STRAW WATT		EX. PENCELINE/PERIMETER SAFETY FENCE
PR. SUPER SILT		STREAM/WETLAND DELINEATION STUDY AREA
PR. COMPOST FI		100' WETLAND/STREAM BUFFER
PR. ROCK FILTER		EX. DELINEATED WETLAND/POND
PR. DIVERSION	-	EX DELINEATED STREAM
PR. OUTLET PRO	SPANICALES - GEOGRAPHICA - MICHARDES	EX 100-YR FEMA FLOODPLAIN
PR. RIP-RAP TH	1	EX. MISCELLANEOUS FEATURE
PR. DITCH	1	EX. BUILDING
PR. CULVERT	1	EX. TREELINE
PR. AIR BRIDGE	the designation of the property of the second of the secon	EX. CULVERT
PR. ROCK CONS	(a) Caralla and Ca	EX. RIP-RAP
PR. GUARDRAIL		EX. DITCHLINE/DRAINAGE FEATURE
PR. ROAD CENTE		EX. BRIDGE
PR. ROAD/IMPOU	0 0 0	EX. GUARDRAIL
		EX. EDGE OF CONCRETE
PR. PADS/STOCK		EX. ROAD CENTERLINE
PR. INTERMEDIAT		EX. EDGE OF PAVEMENT
PR. INDEX ROAD		EX. EDGE OF GRAVEL/DIRT
		EX. PROPERTY LINE
PR. INTERMEDIAT		EX. INTERMEDIATE CONTOUR
PR. INDEX CONT		EX. INDEX CONTOUR & CONTOUR LABEL
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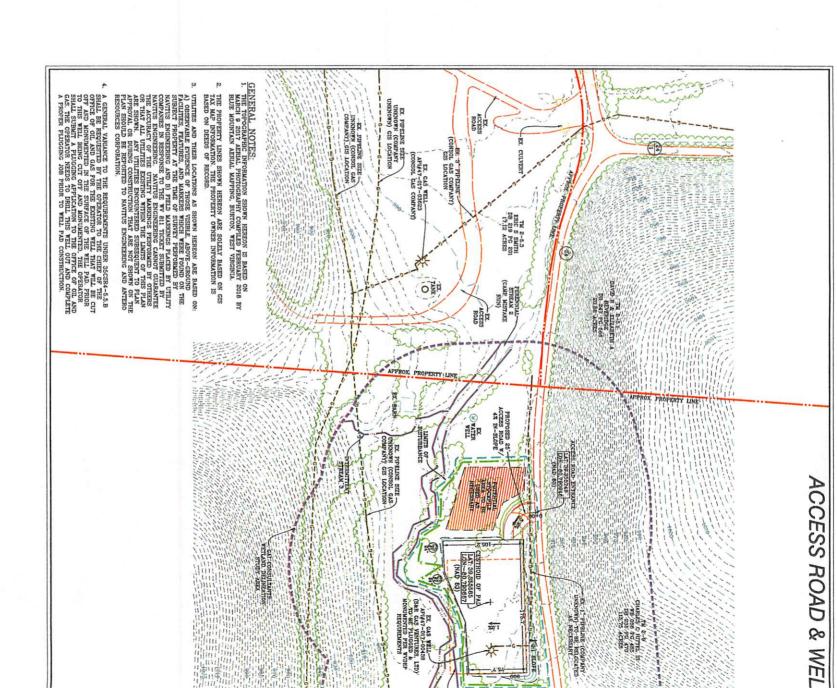
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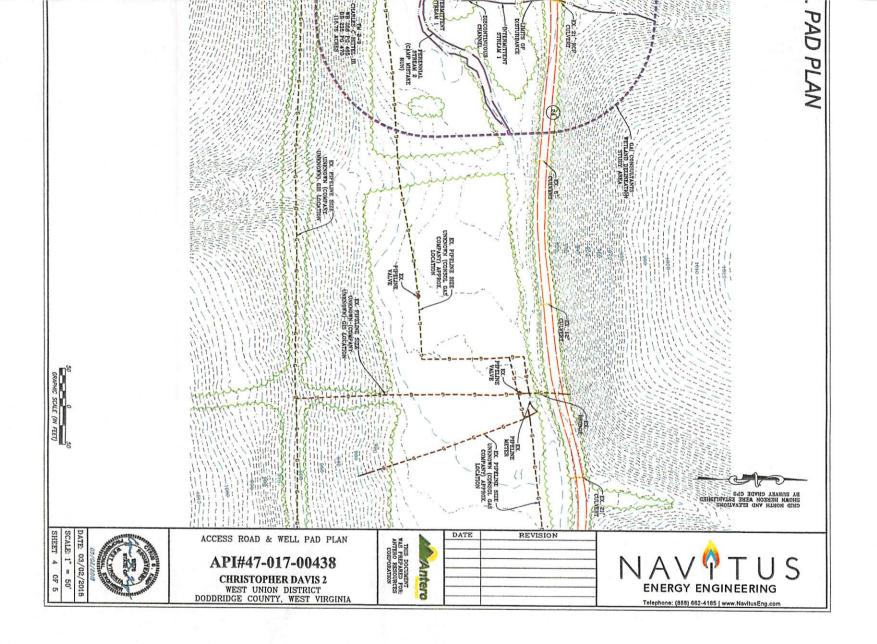
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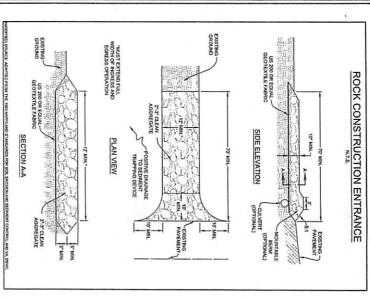
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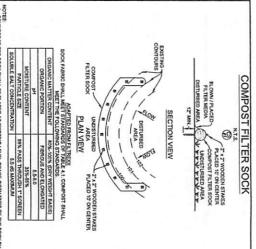


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I BE PIACED AT EXISTRAL LEVEL GRADE. BOTH ENDS OF THE SOCK SHAL THE SLOPE OR TO A HEIGHT EQUAL TO THE EFFECTIVE SOCK HEIGHT, IS' TO THE MAIN SOCK ALISMMENT, MAXMAINS SLOPE LENGTH ABOVE ANY RIFACTURER'S MAXMAIN PERMISSIBLE SLOPE LENGTH.

SHALL BE REMOVED WHEN IT RECARDES 12 THE ABOVE GROUND HEIGHT OF SHALL BE REMOVED WHEN IT REACHES IN THE FLAN. IT THE MANER DESCRIBED ELSEWHERE IN THE FLAN. DIVERSITY AND AFTER EACH RUNDEF EVENT, DAMAGED SOCKS SHALL BE MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF

FILTER SOCKS SHALL BE REPLACED AFTER 8 MONTHS; PHOTODEGRADABLE SOCKS LYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S

ATTION OF THE AREA TREBUTANT TO THE SECKE STAKES SHALL BE REMOVED. THE SCOKE IN A SECKE STAKES SHALL BE REMOVED. THE SCOKE STAKES SHALL BE COMMUNICATE STATES. AS SOLD, SEPTEMBERT.

THE GROUND IS TAKEDED, AS A SOLD, SEPTEMBERT.

THE GROUND IS THE TELTER SCOKE, OWELT THE SECULDO THANKS, THE BEBLAN AND-SOLD SET TO AND ON THE ALTER THE TELTER SCOKE, OWELT THE SECULDO THANKS, THE SERIAN AND-SOLD SET TO AND ON THE ALTER THE THE THE SCOKE OF THE SERIAN AND SOLD SET TO AND ON THE ALTER THE THE THE SCOKE OF THE SERIAN AND SOLD SET THE SERIAN AND SOLD SET THE SERIAN AND SOLD SET THE SERIAN AND SOLD SET THE SERIAN AND SOLD SET THE SERIAN AND SOLD SET THE SERIAN AND SOLD SET THE SERIAN AND SOLD SET THE SERIAN AND SOLD SET THE SERIAN AND SOLD SET THE SERIAN AND SOLD SET THE SERIAN AND SOLD SET THE SERIAN AND SOLD SET THE SERIAN AND SET THE SERIAN AND SOLD SET THE SERIAN AND SOLD SET THE SERIAN AND SET THE SECOND SET THE SECO

REVEGETATION TAKEN FROM THE DISION AND SEDIMENT CONT

COBERAL CONSTITOMS WHERE FRACTICE APPLIES
WELL EXPONED SOM, BUTHALES, APPLIES PRICE, ABUDED OR WORKED FOR PERIODS LONGER THAN 21 DAYS. TELEPO'S
WELL EXPONED SOM, BUTHALES, APPLIES TO BE FRIE CAULAED OR WORKED FOR PERIODO OF MORE THAN DES MOWNES
WELL CO DESCRIP KITO, A STREAM, AMERINATE V PLOYA CONSTRUCTION OF THE STE SITE SALLESES ROUGH AND CONSTRUCTION
WELL CO DESCRIP LE PAPELLO TO AREAS HAN THALE ELE THE MAYORIZE FOR A PORTION OF MORE THAN DES MONTHS.
WELL CONTROLLED AND A PROPERTY OF THE PROPERTY OF TH

SEED HETTINES AND FLATING DATES REFER TO TAILES AND FLATINGUIGH HALFOR RECOMMENDED DATES TO ESTABLISH YEGETATIVE COVER AND THE APPROVED LI RECOMMENDED TYPES OF TEMPOVARY YEGETATION, RATES OF APPLICATION, AND OPTIMUM GEEDING DATES, IN SITUATION SEEDING RECOMMENDATIONS. DEED APPLICATION APPLY ESSEED BY RRAADCASTING, DRILLING, OR BY HYDROSEED ACCORDING TO THE RATES INDICATED IN TABLE INS., PEPFOR AND ROUGHENING OF THE SOIL SURFACE SHOULD BE DONE JUST PRIOR TO SEEDING. SEEDING.

REMENA.

FREMANT VEGETATIVE COVER WILL BE ESTABLISHED WHERE NO PURITHER SOIL DISTURBANCE IS ANTICIPATED OR NEEDSTERMANT VEGETATIVE COVERS MUST BE PERFORMED ON ALL DISTURBED MEMA, A THE PECCES PLANTED, PLANTING OF PERMANENT OR SOLD FREMENT OF SOLD FOR THE ACADED TO SOLOF ROPEIG AND MAN AND SEEDER OF PROMANTON, HE YIGHETATION WILL RESETABLISH GROUND COMER FOR THE COMMEND OF LEADING SOLD FOR THE ACADED SOLD FOR THE SOLD FREMENT OF SOLD FOR THE SOLD FOR THE PERFORMED OF LEADING SOLD FOR THE RECOMMENDED ANTE SHOWN IN TAILES IN AN AND IVA.

SOLD TO THE RECOMMENDED ANTE SHOWN IN TAILES IN AN AND IVA.

FINEL HORROSSEEDING, ADVING SOLD FREMENTATION AND YOUR SECRESSAY IF ADEQUATE SITE PREPARATION WAS PERFORMED FROM HORROSSEEDING, AND ANTE SHOWN IN THE MEMORISSEEDING. AND ANTE OF WATER, MO MEMORISSEEDING, APPLY THE SLAWRY UNEFORMED OFFIT HE PREPARATION WAS PERFORMED FROM HORROSSEEDING, APPLY THE SLAWRY UNEFORMED OFFIT HE PREPARAD OFFIT HAS AND ANY THE LIME FERTILIZER, AND MYDROAMLY OFFIT HE PREPARAD SECRESSAY.

AND FERTILIZER.

IME SHALL BE APPLIED TO ALL PERMANENT SEEDINGS. THE PH OF THE SOIL IS TO BE DETERMINED AND LIME APPLIED AG

THE THE SHALL BE APPLIED IN ALL PERMANENT SEEDINGS. APPLY THE EQUIVALENT FOR 500 LBS. MINIMAM 10-00-20 FE CERTIFIED SOAL TEST. APPLICATION: FOR BEST RESULTS AND MAXIMAM BENEFITS. THE LIME AND FERTILIZER ARE TO BE APPLIED AT THE TIME O

ERLANGTI SEE HATURES. VANKESS DOULD VAE ENTO CONSIDERATION THE SPECES HAVELP OF THE EXITING PACTURE AND THE LANGOWNERS FU VAELS VAA AND IV-18, PERMANENT SEEDRO MOTURES SJITABLE FOR ESTAELISHMENT IN WEST VIRGINA. OTES

LECOMES NUTS DE PLANTED WITH THE RROPER MOCHLANTS PRIOR TO SEEDING.

ALLECOMES NUTS DE PLANTED WITH THE RROPER MOCHLANTS PRIOR TO SEEDING.

ALLECOMES NUTS DE PLANTED WITH THE RROPER MOCHLANTS PRIOR TO THE COMMISSION ON TROOPHYLE FREE VALUE WED TO THE GIFTED THE MOTHAUM HISTORY AND ALBEC WED TO THE GIFTED THE COMMISSION OF THE COMMISSI

SEEDNG FOR WILDLIFE HABITAT DOUSDER THE USE OF THE MATIKE PLANTS OR LOCALLY AGAPTED PLANTS WHEN SELECTING COVERT TYPES AND SPECIES FOI SHOULD DE CONSIDERED, SEE WILDLIFE FRIENDLY SPECIESMIXTURES IN TABLE IV-8. CONSIDER SELECTING NO OR LOW MA WITH EQUIPMENT.

GERSEAL ORGANIC MALCHES

THE APPLATION OF STRAWN HAY ON OHER SUITABLE MATERIALS TO THE SOIL SURFACE TO PREVENT ENGISON, STRAWN MATERIANS DUE TO THE RISK OF SPREJAMON MAY STREED, MALCH MUST SEE APPLED TO ALL TEMPORATIVE MANUEL SURFACE TO THE RISK OF SPREJAMON MAY SEED AND SELECT SUBJECT OF THE SOIL SURFACE, ADDITIONAL OR SUBSTITUTE SOIL SUBSTITUTE SOIL SUBMITHER AND SECURITION AND SELECTION FOR SEED AND SUBJECT SUBSTITUTE SOIL SUBJECT SUBSTITUTE SOIL SUBJECT SUBSTITUTION TO THE SOIL SURFACE, AND PROVIDE A SUITABLE MORDCHAFT FOR SECURITION TO THE SUBSTITUTION TO THE SUBSTITUTION TO THE SUBSTITUTION SUBJECT SUBSTITUTION TO THE SUBSTITUTION SUBSTITUTION SUBSTITUTION SUBJECT SUBSTITUTION SU

PERIOLAL MALCHES, SOR INSOERS, AND TACHERIS WICE PANAGE OF SYNTHETH SPRAY ON MICERUS, ARE MARKETED TO STABILIZE AND PROTECT THE SOIL SURFACE. THESE WICE PANAGE OF SYNTHETH SPRAY ON MICERUS OR HE COMMINITION WITH FIBER MALCH STRUM, ON HAVI, NEW MISED ALONE, MOST CHEMICAL MALCHES DO NOT HAVE THE CAPAGITY TO BROAUCH THE SOIL ON RETAIN SOIL MOSTI.

SPECIFICATIONS ROM TABLE IV-6 SELECT THE TYPE OF MULCH AND RATE OF APPLICATION THAT WILL BEST SUIT THE CONDITIONS AT THE SITE

ANCHORNIC MATERIED STIUNTION, MULCH MAY NOT STAY IN PLACE BECAUSE OF WIND ACTION OR RAVID WATER RUNOFF. REPEARS ON THE FRELD STIUNT AND ACTION OR RAVID WATER RUNOFF. HE RECOMMEND, MODIFIED BY STIPLION OF A THE MACH. AND STAY USED, SET THE DISK STIPLION FAIR FOR A STIPLION FAIR AND STAYLING THE MACH HETTHO IN THE SOIL.

FOLLOW MANUFACTURER'S RECOMMENDATION WHEN POSITIONING AND STAYLING THE MACH HETTHO IN THE SOIL.

ANTERO'S PREFERRED SEED MIXTURE

	MALES ET PASITION	SWOTKIN B	2000
Bestfor Intermediate Ryegrass	29.95%	30%	Q
Climax Timothy	24.96%	2014	CM
Annual Ryegrass "	24.92%	30%	04
Medium Red Clover *	9.95%	90%	92
Potomec Orchardgrass	9.46%	\$0%	Oğ.
Other Crop Seeds:	0.01%		* Variety Not Stated
inert Matter:	0.69%		ALK: 5143
Wand Seeds:	0.02%		77.00

Good seeding period. Dormant seeding	December 1 - March I
HIGH RISK - freeze damage to young seedlings	October 1 - December 1
HIGH RISK - moisture stress likely	April 15 - August 1
Best Seeding Periods	March 1 - April 15 and August 1 - October 1

14 - HOW	Spring	Annual R	Redt	Japanese	Winter	Winter	Sundan	Spring	Field Bron	Annual R	200

7-00438 P

OF TEMPORARY AND PERMANENT PLANT SPECIES AND PLANTING RATES. TABLE IV-3 GIVES VERE ANOTHER COVER IS DESIRED, CONTACT THE LOCAL SOIL CONSERVATION DISTRICT FOR LL PLANTING OPERATIONS AT RIGHT AVIGLES TO THE SLOPE JIRED ON NEWLY DISTURBED AREAS. SEED AND INOCULANTS TOGETHER WITHIN ONE HOUR PRIOR TO PLANTING, AND ADD TO THE UDUS THROUGHOUT THE SEEDING OPERATION AND THE MIX IS APPLIED WITHIN ONE HOUR VEGETATIVE COVER WITH SEDIMENT CONTROLS MUST BE ESTABLISHED WHERE RUNOFF ETATION MUST BE ESTABLISHED ON ROAD BANK AND LOCATION SLOPES, A PERMANENT 5.0-7.5 5.0-7.5 4.5.7.5 45-75 5.0-7.5 5.0-7.5 45-75 4.0-8.0 5.0-7.5

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FICE OF OIL AND GAS

26.75	Well - New Well	30	Lathoo Flatpea */
		8	Perennial Ryegrass
25.75	Well-Mod Well	8	Lethco Flatpes */
		8	Orchardgrass
5.5 - 7.5	Well - Mod. Well	5	Redtop/
		10	Birdsfoot Trefoll /
6.0-7.5	Well - Mod. Well	8	Orchardgrass or KY Bluegrass
-		5	Perennial Ryegrass
55.75	Was - Mod wes	8	Creeping Red Fescue /
-		B	Perennial Ryegrass
55.75	Mint . Mart Mint	20	Orchordgrass /
-		2	Ladino Clover
56.75	Well- Mod Well	10	Orchordgrass /
		3	Redtop
55-75	Wed - Mod Well	2	Lodino Clover /
		10	Orchardgrass /
	from a mare	8	Birdsfoot Trefoil
55.75	Wall - Boods	u	Timothy /
0.0		u	Alfalfa
55-R0	Well - Mod Well	5	Timothy/
		2/10	Ladino Clover or Birds foot Trefoil
5.5 - 7.5	Well - Mod. Well		Redtop /
		8	KY Bluegrass /
Storms Link	TOTE STWEETING STREETS TOT	Factor Street, some Shrand	一

URFACE, AN ORGANIC MULCH, STRAW, OR HAY SHOULD BE USED AND THE AREA THEN FOR THIS PRACTICE; AT NORWAL APPLICATION RATES IT WILL NOT GIVE THE SOIL

EBET SEEP-SOIL CONTACT WHEN APPLIED OVER THE TOP OF US A SEPARATE OPERATION. IG LESS THAN FAMORALE GROWING CONDITIONS. FIRER MLACH SHOULD NOT BE USED GODS AND FIBER MULCH MAY BE USED TO TACK (ANCHOR) THE STRAW MULCH. FIBER

ROMANIAN OR OATS IS THE PREFERRED MILOCH THE USE OF HAY IS PERMISSIBLE BUT NOT TREETING ON ALL DISTINBEED ACEA, DEPENDING ON SITE CONDITIONS, IN OUTDIAL AREAS CESSARY, EXAMPLES INCLUDE JUTE MESH AND SOIL STABILIZATION BLAINETS OR ENGSION LONES CONSERVE DESINABLE SOIL PROPERTIES, REDUCE SOIL MOISTURE LOSS, PREVENT

LDLIFE HABITAT. WILDLIFE FRIENDLY SPECIES OR MIXES THAT HAVE MULTIPLE VALUES YANGE LONG-LIVED PLANTS ADAPTABLE TO SITES WHICH MAY BE DIFFICULT TO MAINTAIN

ASIVE SPECIES, NON-NATIVE TO WY. TE. MIXTURES IN TABLE IV-4B ARE MORE WILDLIFE AND FARM FRIENDLY; THOSE LISTED IN

IZER PER ACRE OR USE THE AMOUNT OF FERTILIZER AND

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CONSTRUCTION DETAILS