



west virginia department of environmental protection

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

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

August 05, 2014

WELL WORK PERMIT

Re-Work

This permit, API Well Number: 47-4300576, issued to CHESAPEAKE APPALACHIA, L.L.C., is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

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

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

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.

A blue ink signature of James Martin, Chief.

James Martin
Chief

Operator's Well No: 5553
Farm Name: HUNT DEV & GAS FEE
API Well Number: 47-4300576
Permit Type: Re-Work
Date Issued: 08/05/2014

Promoting a healthy environment.

08/08/2014

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. 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 § 22-6-20, 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 fifty (50) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
2. Pursuant to 35 CSR § 4-19.1.a, at the request of the surface owner all water wells or springs within 1000 feet of the proposed well that are actually utilized for human consumption, domestic animals or other general use shall be sampled and analyzed.
3. Pursuant to 35 CSR § 4-19.1.c, if the operator is unable to sample and analyze any water well or spring within one thousand (1,000) feet of the permitted well location, the Office of Oil and Gas requires the operator to sample, at a minimum, one water well or spring located between one thousand (1,000) feet and two thousand (2,000) feet of the permitted well location.
4. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
5. 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.
6. During the surface casing and cementing process, in the event cement does not return to the surface, or any other casing string that is permitted to circulate cement to the surface and does not return to the surface, the oil and gas inspector shall be notified within twenty-four (24) hours.
7. Well work activities shall not constitute a hazard to the safety of persons.
8. This permit is being conditioned to address the possibility of flooding in the area of this well. Any tanks stored on this location must be securely anchored in cement to prevent the loss of tanks should a flood occur. In addition, cages must be placed around the well head to prevent debris from damaging the well head.

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

- 1) Well Operator CHESAPEAKE APPALACHIA, L.L.C. 494477557 Lincoln Laurel Hill Branchland, WV
Operator ID County District Quadrangle
- 2) Operators Well Number: 805553 WO 3) Elevation: 1070'
- 4) Well type: (a) Oil or Gas
(b) If Gas: Production Underground Storage
Deep Shallow
- 5) Proposed Target Formation(s): Injun/Big Lime Proposed Target Depth: 1484'-1710'
- 6) Proposed Total Depth: 1825' Formation at proposed Total Depth: Slate and Shells
- 7) Approximate fresh water strata depths: 100'
- 8) Approximate salt water depths: Behind Existing Casing
- 9) Approximate coal seam depths: Behind Existing Casing
- 10) Approximate void depths, (coal, Karst, other): None Known
- 11) Does land contain coal seams tributary to active mine? No
- 12) Proposed Well Work: See Attached Well Workover Procedure
- 13) CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	SIZE	GRADE	WEIGHT PER FT.	FOR DRILLING	LEFT IN WELL	FILL-UP (CU.FT.)
Conductor	10"			16	16	Existing Casing
Fresh Water						
Coal	8 1/4"			293	293	Existing Casing
Intermediate	6 5/8"			1505	1505	Existing Casing
Production	4 1/2"	M-65	9.5		1825	65
Tubing	2 3/8"	J	4.6	As	Needed	
Liners						

PACKERS: Kind Hookwall
Sizes 4 1/2" x 6 1/4"
Depths set Approximately 1825'

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805553 Workover Procedure

- 1) Safety first! Hold PJSA before all jobs.
- 2) Use slick line to check TD and verify tools will go to at least 1750'.
- 3) Run open hole logs and evaluate to be sure project is economic. (Repair road if needed to MIRU OHL).
- 4) MIRU Service Rig. Run tools to check TD
- 5) Run 4 ½" casing with appropriate float equipment to depth determined from OHL.
- 6) Cement 4 ½" casing from shoe to approximately 1300', WOC
- 7) Run cement bond log, swab and perforate
- 8) MIRU pumping company and stimulate zone or zones determined from OHL evaluation.
- 9) Flow back well starting with 3/8" choke and increasing size as needed
- 10) Finish clean up, check TD, record final open flow and rock pressure
- 11) Reclaim and turn in line

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STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

Well 805553 WO
API 47-043-00576

Middieff

WELL RECORD

Permit No. LIN-576

Oil or Gas Well GAS
(KIND)

Company <u>United Fuel Gas Company</u>	Casing and Tubing	Used in Drilling	Left in Well	Packers
Address <u>Box 1273, Charleston 25, W. Va.</u>	Size			
Farm <u>Huntington Dev. & Gas Co. Fee Acres 17.695, 86</u>	16			Kind of Packer
Location (waters) <u>Six Mile Creek</u>	13			
Well No. <u>5553</u> Elev. <u>1100</u>	10	<u>16'</u>	<u>16'</u>	Size of
District <u>Laurel Hill</u> County <u>Lincoln</u>	8 1/4	<u>293</u>	<u>293</u>	Depth set
The surface of tract is owned in fee by _____	6 1/2	<u>1505</u>	<u>1505</u>	
Address _____	5 3/16			Perf. top
Mineral rights are owned by <u>Huntington Dev. & Gas Co.</u>	3			Perf. bottom
Address <u>Charleston, W. Va.</u>	2			Perf. top
Drilling commenced <u>2-21-45</u>	Liners Used			Perf. bottom
Drilling completed <u>8-16-45</u>				
Date Shot <u>8-20-45</u> From <u>3148</u> To <u>3445</u>				
With <u>3100# Gel.</u>				
Open Flow /10ths Water in _____ Inch				
/10ths Merc. in _____ Inch				
Volume <u>Gas Well</u> _____ Cu. Ft.				
Rock Pressure _____ lbs. _____ hrs.				
Oil _____ bbls., 1st 24 hrs.				
Fresh water _____ feet _____ feet				
Salt water _____ feet _____ feet				

CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date _____

COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES

_____ FEET _____ INCHES _____ FEET _____ INCHES

_____ FEET _____ INCHES _____ FEET _____ INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Surface			0	15			
Slate			15	100			
Sand			100	115			
Slate			115	130			
Sand			130	180			
Slate			180	200			
Sand			200	230			
Slate			230	340			
Sand			340	422			
Slate			422	473			
Sand			473	610			
Slate			610	645			
Shells			645	695			
Sand			695	705			
Slate & Shells			705	774			
Sand			774	1015			
Slate			1015	1020			
Sand			1020	1215			
Slate & Shells			1215	1270			
Sand			1270	1325			
Slate & Shells			1325	1461			
Little Lime			1461	1484			
Big Lime			1484	1660	Gas	1595	
Injun Sand			1660	1710			
Slate & Shells			1710	2221			
Brown Shale			2221	2236			
Berea Grit			2236	2249			
Slate & Shells			2249	2460			
Blue Slate			2460	2530			
Brown Shale			2530	2710			
Slate			2710	3175			
Brown Shale			3175	3433	Gas		
White Slate			3433	3445			
Total Depth			3445				



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Department of Environmental Protection

WW2-A
(Rev. 6-07)

- 1) Date: June 20, 2014
- 2) Operator's Well Number 805553 WO
State County Permit
- 3) API Well Number 47 - 043 - 00576 W

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

*OKH 5/165458
650^{dec}*

- 4) Surface owner(s) to be served:
 - (a) Name: Heartwood Forestland Group
Address: C/O Craig Kaderavak
19045 Stone Mountain Road
Abingdon, VA 24210
 - (b) Name: Lois Adkins
Address: 193 Nine Mile Creek
Midkiff, WV 25540
 - (c) Name: See Attached Page
Address:
- 5) (a) Coal Operator:
 - Name: None
Address:
 - (b) Coal Owner(s) with Declaration:
 - Name: Pocahontas Land Corporation
Address: 800 Princeton Avenue
Bluefield, WV 24701
 - (c) Coal Lessee with Declaration:
 - Name: None
Address:
- 6) Inspector:
 - Name: Ralph Triplett
Address: 5539 McClellan Highway
Branchland, WV 25506
Telephone: 304-389-0350

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

 Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas

OR
 Included is the information required by Chapter 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2).
I certify that as required under Chapter 22 of the West Virginia Code I have served copies of this notice and application
a location plat, and accompanying documents pages 1 through on the above named parties, by:

- Personal Service (Affidavit attached)
- X Certified Mail (Postmarked postal receipt attached)
- Publication (Notice of Publication attached)

I have read and understand Chapter 22-6 and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

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 penalties for submitting false information, including the possibility of fine or imprisonment.

Well Operator: CHESAPEAKE APPALACHIA, L.L.C.
By: [Signature]
It's Manager - Operations, Appalachia South
Address: P.O. Box 18496
Oklahoma City, OK 73154-0496
Telephone: 405-935-4073

Subscribed and sworn before me this 30th day of June 2014
[Signature] Notary Public,

My Commission expires September 16, 2018

Oil and Gas Privacy Notice

The office of Oil and Gas processes your personal information, such as name, address and phone 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 Free of Information Act requests. Our office will appropriately secure your personal information. If you have questions about our use of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.



08/08/2014

WW2-A

Operator's Well Number: 805553 WO

API Well Number: 47 - 043 - 00576 W

4) Surface Owner(s) to be served - CONTINUED:

- (c) Bryan and Lisa Stevens
P.O. Box 473 ✓
Hamlin, WV 25523

- (d) Jerry Chapman ✓
P.O. box 142
Midkiff, WV 25540

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WW2-A Surface Waiver

7/8

SURFACE OWNER WAIVER

County Lincoln

Operator: Chesapeake Appalachia, L.L.C.
Operator Well Number: 805553 WO
API Well Number: 47 - 043 - 00576

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW2-A

The well operator named on page WW2A is applying for a permit from the state to do oil or gas well work. (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 required these materials to be served on or before the date the operator files his Application. You have FIFTEEN (15) 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.

Comments must be in writing. 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.

List of Water Testing Laboratories. The Office maintains a list of water testing laboratories which you can hire to test your water to establish water quality prior to and after drilling. Contact the Chief to obtain a copy.

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 A Notice and Application for a Well Work permit on Form WW2-A, and attachments consisting of pages 1 through ___ including a work order on Form WW2-B, a survey plat, and a soil and erosion plan, all for proposed well work on my surface land as described therein.

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, PARTNERSHIP, OR LIMITED LIABILITY PARTNERSHIP, L.P.

Signature

RECORDED
Date _____
Office of Oil and Gas
By: _____
Company Name: By: Heartwood Forestland Advisors LLC,
its general partner
By: The Forestland Group, LLC, its Manager

JUL 9 2014

WV Department of
Environmental Protection

Okashvash Regional Director
Signature _____ Date 08/08/2014
7-10-14

Well 805553 WO
 API 47-043-00576W

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For delivery information visit our website at www.usps.com

MIDKIFF WV 25540

7012 3460 0000 4499 3033

Postage	\$ 11.82	0523
Certified Fee	33.30	01
Return Receipt Fee (Endorsement Required)	12.70	Postmark Here
Restricted Delivery Fee (Endorsement Required)	00.00	
Total Postage & Fees	\$ 17.82	07/07/2014

Sent To: **805553 WO**
 Jerry Chapman
 P.O. Box 142
 Midkiff, WV 25540

PS Form 3800

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HAMLIN WV 25523

7012 3460 0000 4499 2999

Postage	\$ 11.82	0523
Certified Fee	33.30	01
Return Receipt Fee (Endorsement Required)	12.70	Postmark Here
Restricted Delivery Fee (Endorsement Required)	00.00	
Total Postage & Fees	\$ 17.82	07/07/2014

Sent To: **805553 WO**
 Bryan and Lisa Stevens
 P.O. Box 473
 Hamlin, WV 25523

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BLUEFIELD WV 24702

7012 3460 0000 4499 3019

Postage	\$ 11.82	0523
Certified Fee	33.30	01
Return Receipt Fee (Endorsement Required)	12.70	Postmark Here
Restricted Delivery Fee (Endorsement Required)	00.00	
Total Postage & Fees	\$ 17.82	07/07/2014

Sent To: **805553 WO**
 Pocahontas Land Corp.
 800 Princeton Avenue
 Bluefield, WV 24701

PS Form 3800

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ABINGDON VA 24210

7012 3460 0000 4499 3026

Postage	\$ 11.82	0523
Certified Fee	33.30	01
Return Receipt Fee (Endorsement Required)	12.70	Postmark Here
Restricted Delivery Fee (Endorsement Required)	00.00	
Total Postage & Fees	\$ 17.82	07/07/2014

Sent To: **805553 WO**
 Heartwood Forestland Grop
 C/O Craig Kaderavek
 19045 Stone Mountain Road
 Abingdon, VA 24210

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MIDKIFF WV 25540

7012 3460 0000 4499 3002

Postage	\$ 11.82	0523
Certified Fee	33.30	01
Return Receipt Fee (Endorsement Required)	12.70	Postmark Here
Restricted Delivery Fee (Endorsement Required)	00.00	
Total Postage & Fees	\$ 17.82	07/07/2014

Sent To: **805553 WO**
 Lois Adkins
 293 Nine Mile Creek
 Midkiff, WV 25540

PS Form 3800

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WV Department of Environmental Protection

43 00576w

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

805553 WO
 Lois Adkins
 293 Nine Mile Creek
 Midkiff, WV 25540

COMPLETE THIS SECTION ON DELIVERY

A. Signature Agent
Lois J. Adkins Addressee

B. Received by (Printed Name) C. Date of Delivery
Lois J. Adkins *7-8-14*

D. Is delivery address different from item 1? Yes
 No
 If YES, enter delivery address below:

3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

2. Article Number (Transfer from service label) **7012 3460 0000 4499 3002**

Operators Well Number: 805553 WO
API Well Number: 47- 043 - 00576

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6, Section 8 (d)
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 leases(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:

<u>Grantor, lessor, etc.</u>	<u>Grantee, lessee, etc.</u>	<u>Royalty</u>	<u>Book/Page</u>
Huntington Gas Development	Chesapeake Appalachia, LLC	1/8	234 / 318


**Acknowledge 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 Services
- *County Floodplain coordinator

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

Well Operator:
By:
Its:


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 Office of Oil and Gas
 Chesapeake Appalachia, L.L.C.
 David Gocke
 Manager - Operations, Appalachia South
 WV Department of Environmental Protection
 JUL 08 2014
 08/08/2014

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

Operator Name CHESAPEAKE APPALACHIA, L.L.C. OP Code 494477557
Water (HUC 10) Sixmile Creek of Guyan River Quadrangle Branchland, WV 7.5'
Elevation 1070' County Lincoln District Laurel Hill

Description of anticipated using more than 5,000 bbls of water to complete the proposed well work: Yes ___ No X
Will a pit be used for drill cuttings? Yes ___ No ___ (Not drilling)

If so, please described anticipated pit waste: Cement and frac water
Will a synthetic liner be used in the pit? Yes X No ___ If so, what ml.? X 20 ml

Proposed Disposal Method for treated Pit Wastes:
 Land Application
 Underground Injection (UIC Permit)
 Reuse (at API Number _____)
 Off Site Disposal (Supply form WW-9 for disposal location)
 Other (Explain _____)

Will closed loop system be used? No (Not Drilling)
Drilling medium anticipated for this well? Air, fresh water, oil based, etc. _____
If oil based, what type? Synthetic, petroleum, etc. _____
Additives to be used in drilling medium? _____
Drilling 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? _____

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Division 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 penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature [Signature]
Company Official (Typed Name) David Gocke
Company Official Title Manager - Operations, Appalachia South



Subscribed and sworn before me this 30th day of July 2014
[Signature] Notary Public

My Commission expires September 16, 2018

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WV Department of Environmental Protection

Proposed Revegetation Treatment: Acres Disturbed 1.0 Prevegetation pH 6.1

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20 or equivalent) 500 lbs/acre (500 lbs minimum)

Mulch Hay 2 Tons/acre

Seed Mixtures

Area I			Area II		
Seed Type	lbs/acre		Seed Type	lbs/acre	
KY 31	40		Orchard Grass	15	
Alsike Clover	5		Alsike Clover	5	
Annual Rye	15				

Attach:
Drawing(s) of road, location, pit and proposed area for land application.

Photocopied section of involved 7.5' topographic sheet.

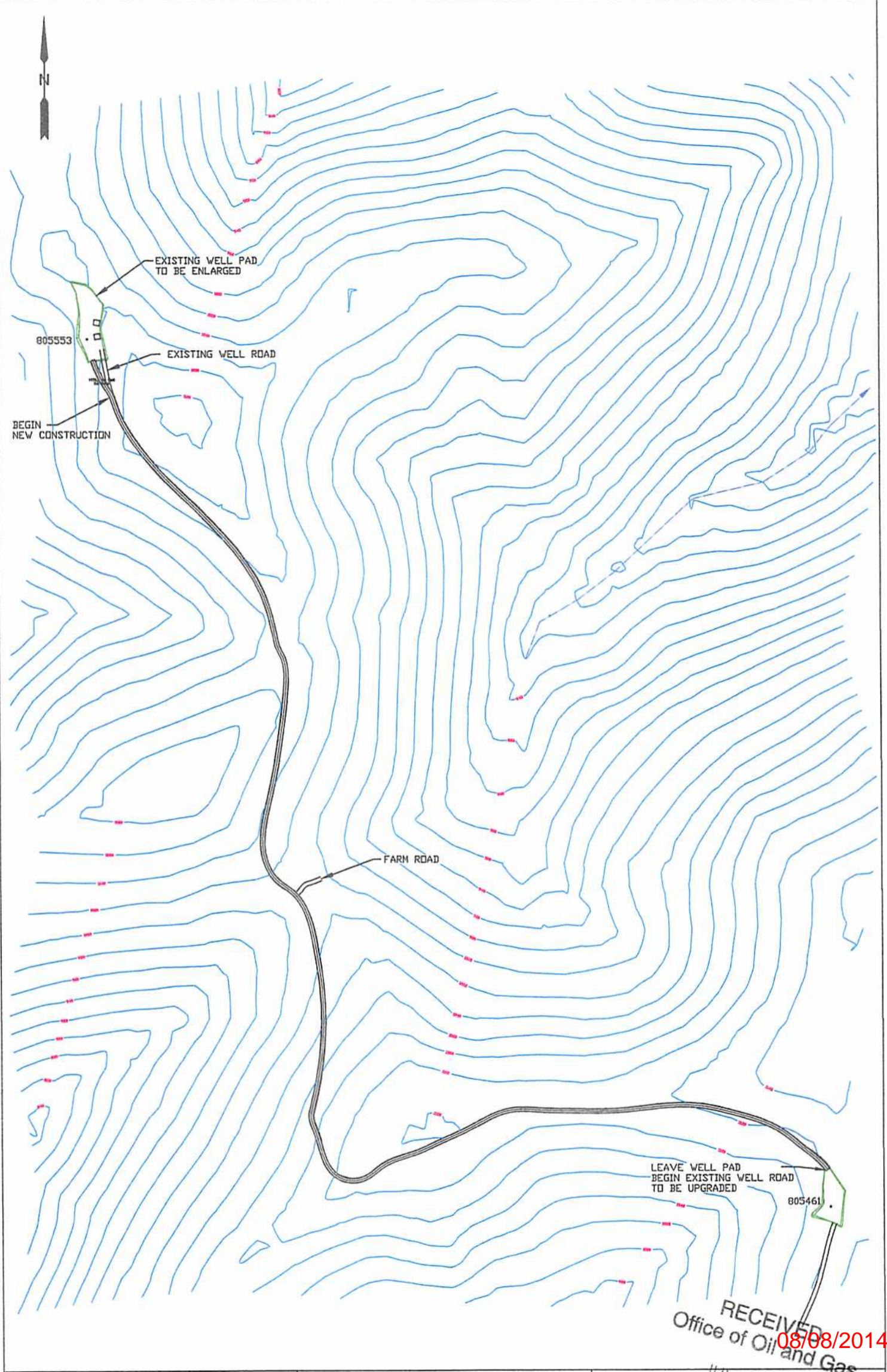
Plan Approved: *Ralph D. Tripiello*

Comments:

Title: *District Inspector* Date: *07/07/14*

Field Reviewed? Yes No

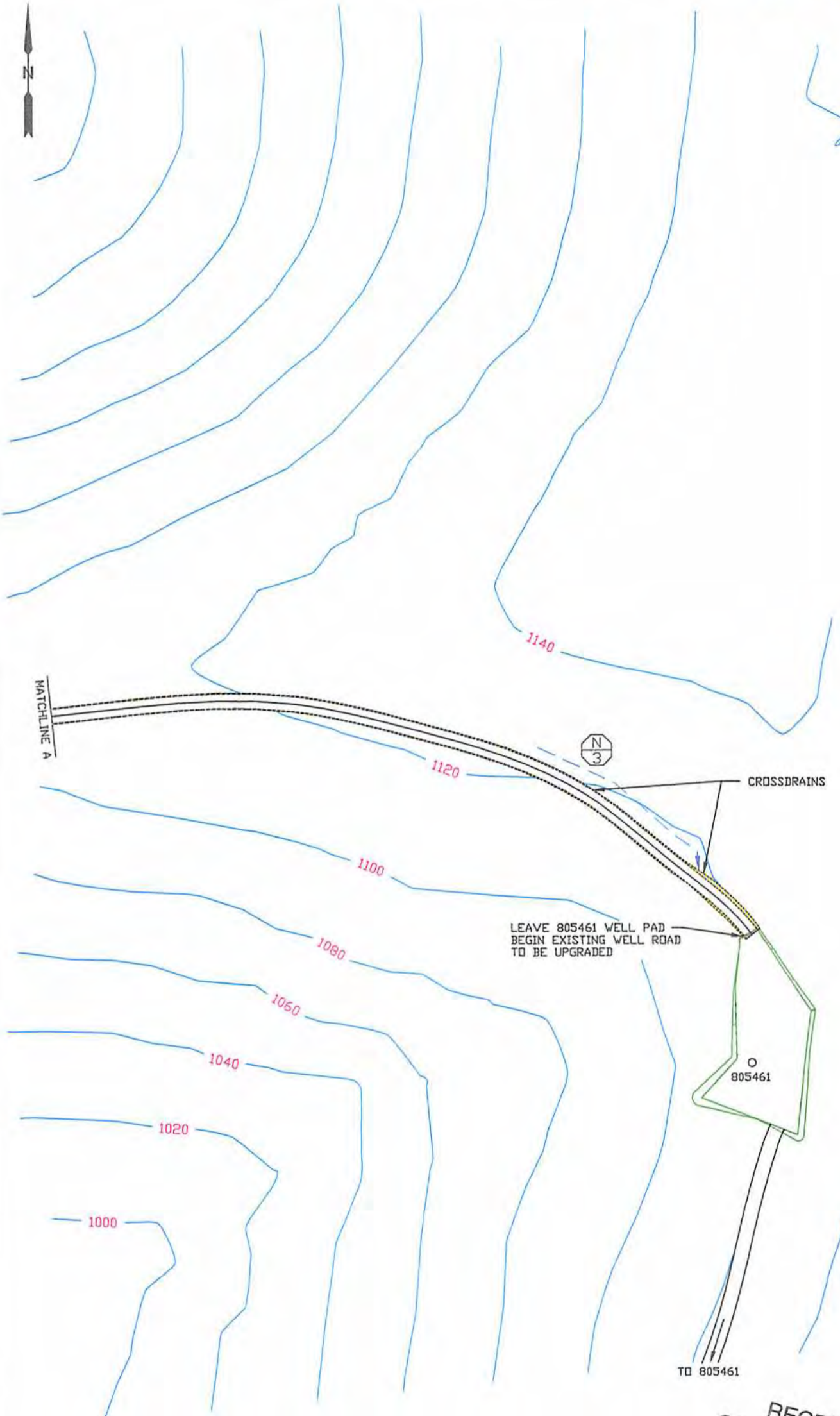
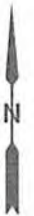
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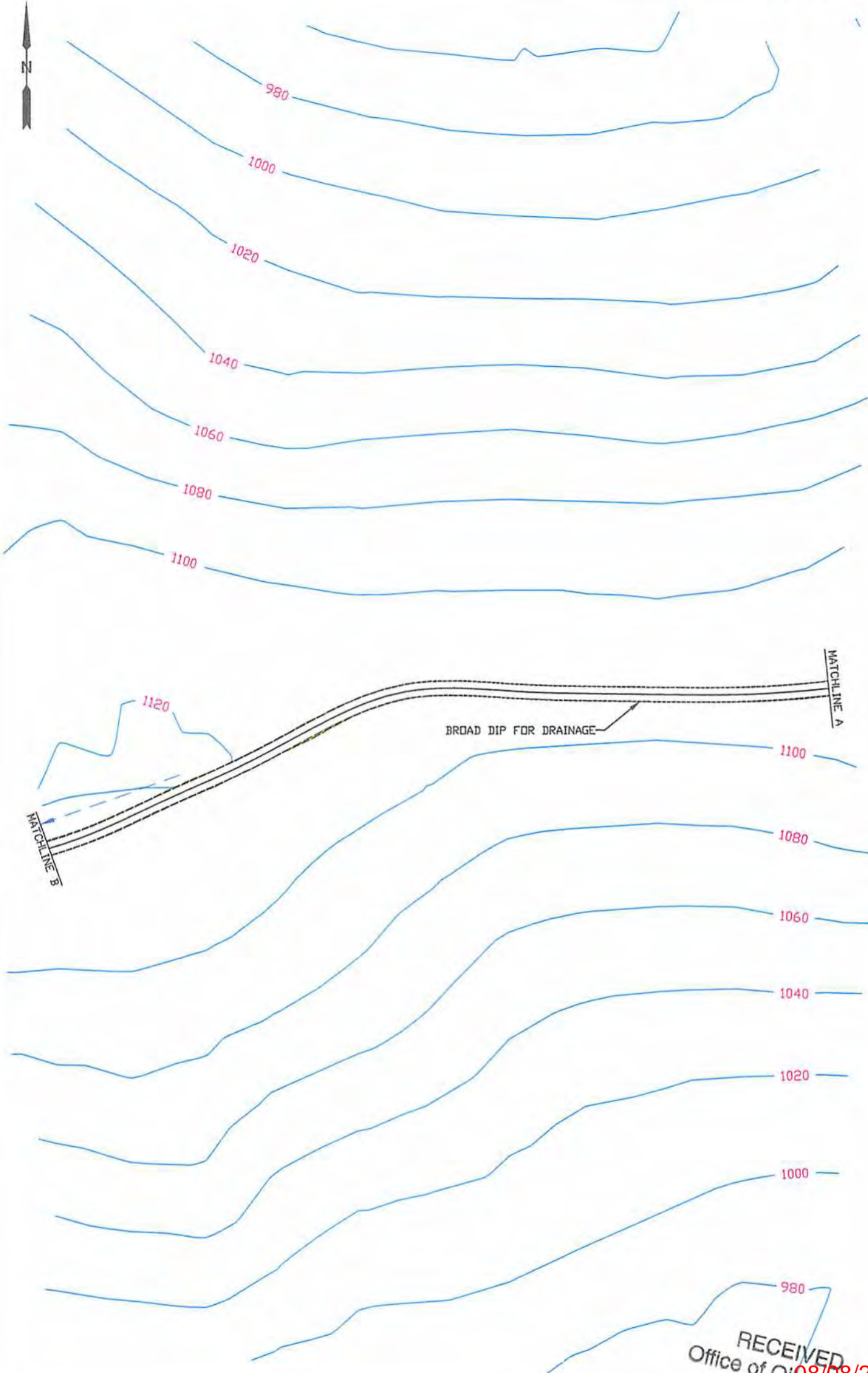
DISTURBED AREAS		LEGEND		SITE PLAN	
EXISTING WELL PAD	0.25 AC.		STREAM	JUL 16 2014	
EXISTING ACCESS ROAD	1.41 AC.		PROPERTY LINE	CHESAPEAKE APPALACHIA, L.L.C.	
NEW WELL PAD CONSTRUCTION	0.06 AC.		SLOPE AREA	PROPOSED WORK OVER WELL # 805553	
NEW ACCESS ROAD CONSTRUCTION	0.03 AC.		WETLAND	LAUREL DISTRICT, LINCOLN COUNTY	
TOTAL NEW DISTURBANCE	0.09 AC		BUFFER AREA	BRANCHMONT QUAD, WV 11501	
				JUNE 5, 2014	
				TRUE LINE SURVEYING	
				6211 FAIRVIEW DR.	
				HUNTINGTON, WV 25705	
				PAGE 1 OF 1	

4



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LEGEND		EROSION AND SEDIMENT CONTROL
	PROVIDE FLEXTERRA HIGH PERFORMANCE FLEXIBLE GROWTH MEDIUM (HP-FLM) ON CUT AND FILL SLOPES	CHESAPEAKE APPALACHIA, L.L.C. PROPOSED WORK OVER WELL # 805553
	LEVEL SPREADER	MUREL HILL DISTRICT, LINCOLN COUNTY BRANCHLAND ROAD, WV 7.5'
	DIVERSION DITCH	TRUE LINE SURVEYING 6211 FAIRVIEW DR. HUNTINGTON, WV 25705
	BERM OUTLET	PAGE 1 OF 5
	STREAM	
	PROPERTY LINE	
	SLOPE AREA	
	WETLAND	
	24" COMPOST FILTER SOCK AS REQUIRED	



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LEGEND

N 1	PROVIDE FLEXTERRA HIGH PERFORMNCE FLEXABLE GROWTH MEDIUM (HP-FLM) ON CUT AND FILL SLOPES	— — — — —	STREAM
N 2	LEVEL SPREADER	—————	PROPERTY LINE
N 3	DIVERSION DITCH	[Yellow shaded box]	SLOPE AREA
N 4	BERM OUTLET	[Green hatched box]	WETLAND
		— FS24 —	24" COMPOST FILTER SOCK AS REQUIRED

EROSION AND SEDIMENT CONTROL PLAN

CHESAPEAKE APPALACHIA, L.L.C.
PROPOSED WORK OVER WELL # 805553
LAUREL HILL DISTRICT, LINCOLN COUNTY
BRANCHLAND, WV 25755
JUNE 4, 2014
TRUE LINE SURVEYING
6211 FAIRVIEW DR.
HUNTINGTON, WV 25705
PAGE 2 OF 5



MATCHLINE C

MATCHLINE B



920

940

960

980

1000

1020

1040

1060

1080





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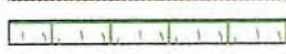
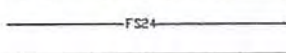
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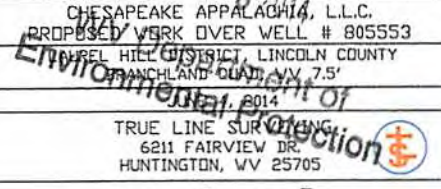
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LEGEND

-  PROVIDE FLEXTERRA HIGH PERFORMAMCE FLEXABLE GROWTH MEDIUM (HP-FLM) ON CUT AND FILL SLOPES
-  LEVEL SPREADER
-  DIVERSION DITCH
-  BERM OUTLET

-  STREAM
-  PROPERTY LINE
-  SLOPE AREA
-  WETLAND
-  24" COMPOST FILTER SOCK AS REQUIRED

EROSION AND SEDIMENT CONTROL PLAN
 SEP 11 8 2014
 CHESAPEAKE APPALACHIA, L.L.C.
 PROPOSED WORK OVER WELL # 805553
 WHEEL HILL DISTRICT, LINCOLN COUNTY
 HUNTLAND QUAD, NW 7.5'
 8014
 TRUE LINE SURVEYING
 6211 FAIRVIEW DR.
 HUNTINGTON, WV 25705
 PAGE 3 OF 5





LEGEND

	PROVIDE FLEXTERRA HIGH PERFORMANCE FLEXIBLE GROWTH MEDIUM (HP-FLM) ON CUT AND FILL SLOPES		STREAM
	LEVEL SPREADER		PROPERTY LINE
	DIVERSION DITCH		SLOPE AREA
	BERM OUTLET		WETLAND
			24" COMPOST FILTER SOCK AS REQUIRED

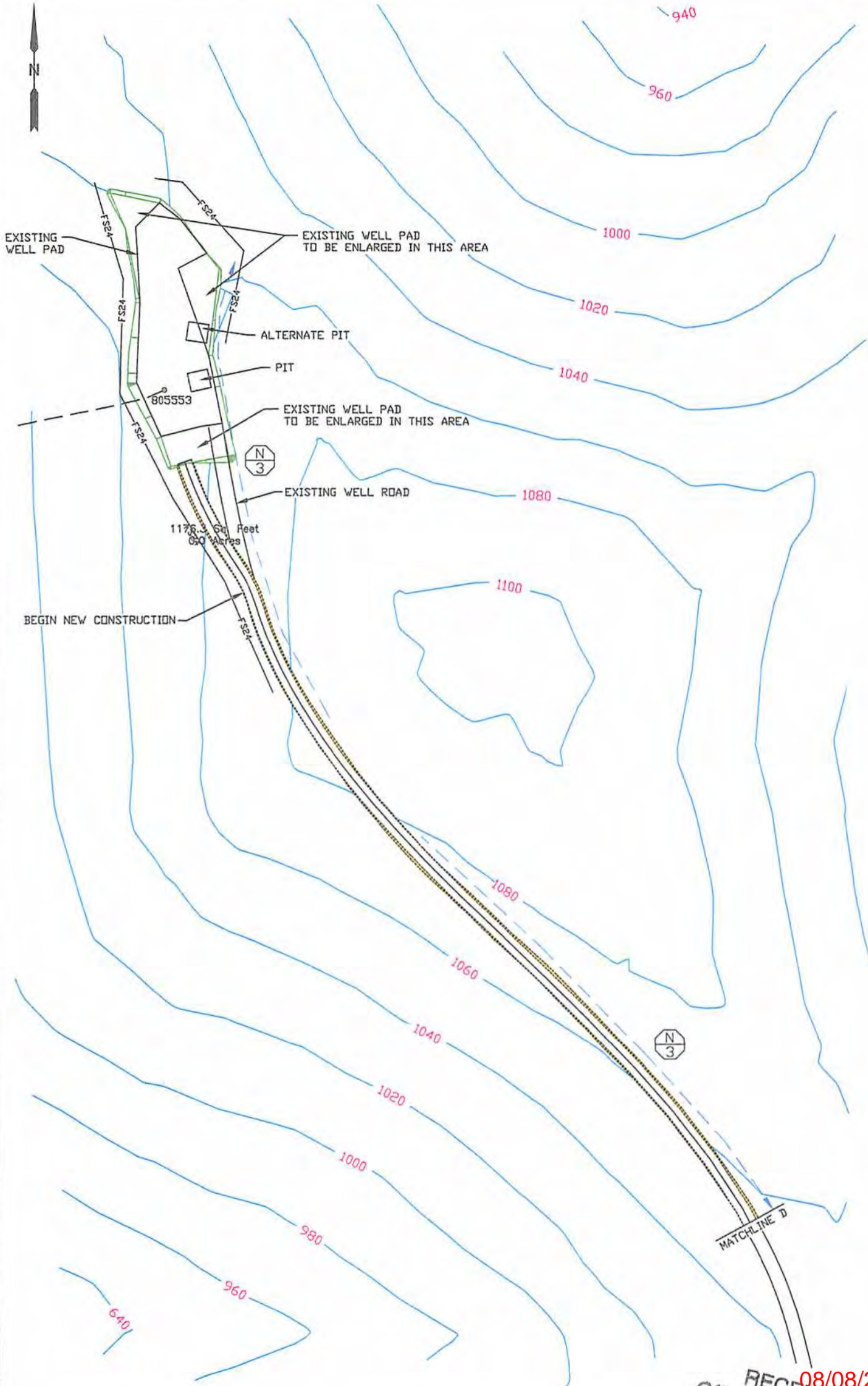
EROSION AND SEDIMENT CONTROL PLAN

CHESAPEAKE APPALACHIA, L.L.C.
 PROPOSED WORK OVER WELL 14
 LAUREL HILL DISTRICT, LINCOLN COUNTY
 BRANCLAND QUAD, WV 7.5'

Environmental Department of State Protection

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PAGE 4 OF 5



LEGEND	
	PROVIDE FLEXTERRA HIGH PERFORMANCE FLEXIBLE GROWTH MEDIUM (HP-FLM) ON CUT AND FILL SLOPES
	LEVEL SPREADER
	DIVERSION DITCH
	BERM OUTLET

	STREAM
	PROPERTY LINE
	SLOPE AREA
	WETLAND
	24' COMPOST FILTER SOCK AS REQUIRED

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EROSION AND SEDIMENT CONTROL PLAN

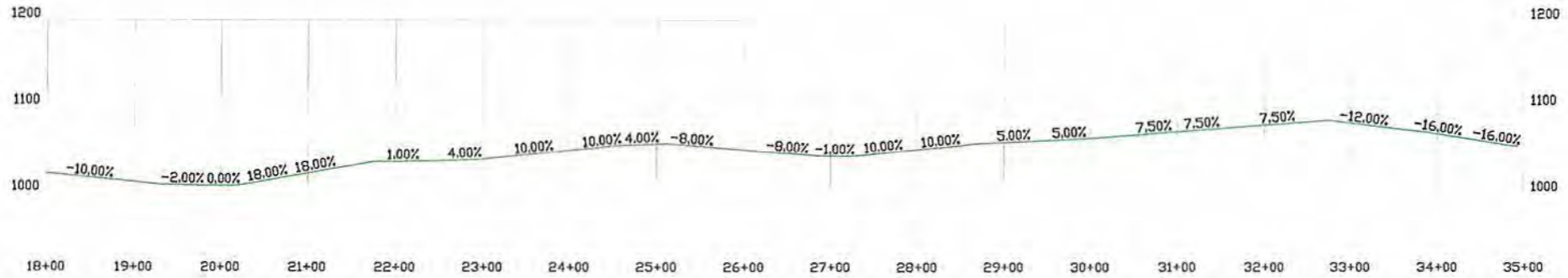
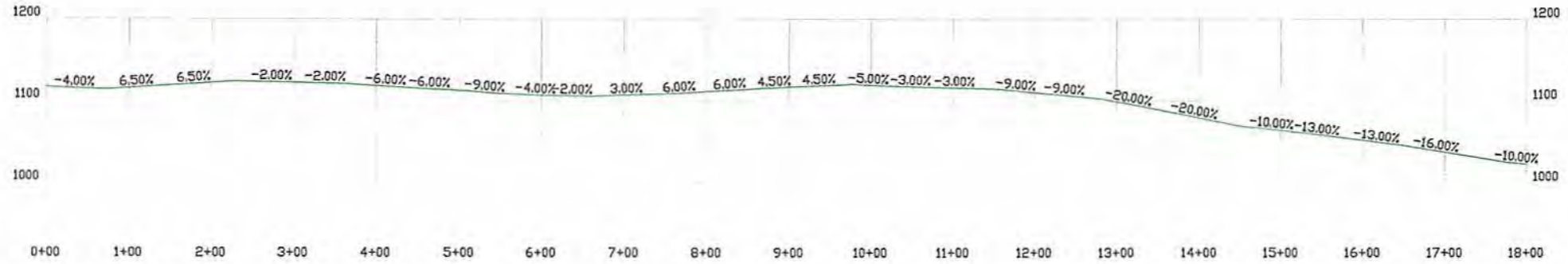
CHESAPEAKE APPALACHIA, L.L.C.
PROPOSED WORK OVER WELL # 805553
LAUREL HILL DISTRICT, LINCOLN COUNTY
BRANCH AND QUAD, WV 7.5'

JUNE 2014
TRUE ONE SURVEYING
6211 PARKWAY
HUNTINGTON, WV 25701

WV Department of Environmental Protection

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4300576W



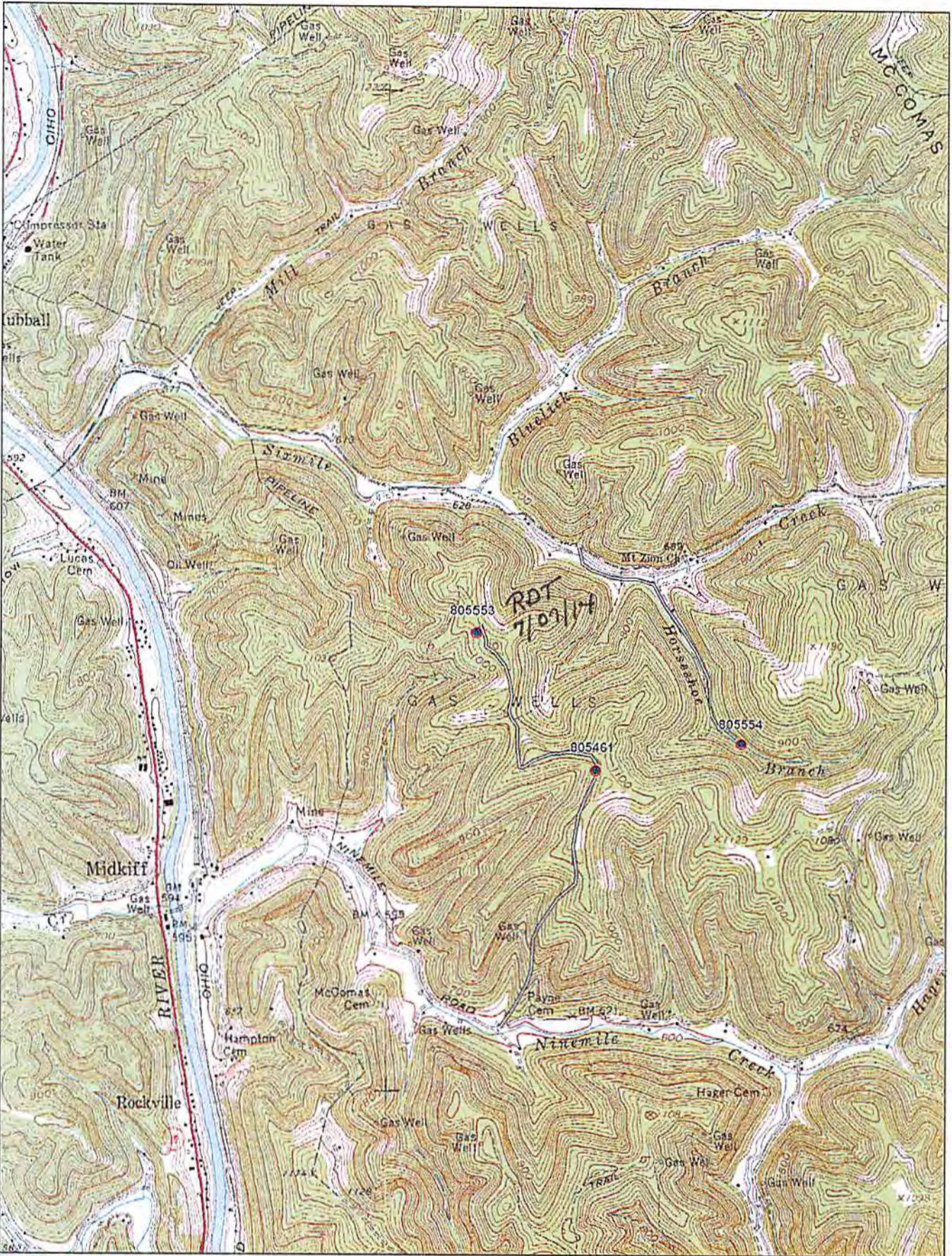
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JUL 08 2014
WV Department of
Environmental Protection

ROAD PROFILE	
CHESAPEAKE APPALACHIA, L.L.C. PROPOSED WORKOVER WELL # 805553 LAUREL HIL DISTRICT, LINCOLN COUNTY BRANCHLAND QUAD, WV 7.5'	
JUNE 4, 2014	
TRUE LINE SURVEYING 6211 FAIRVIEW DR. HUNTINGTON, WV 25705	
PAGE 1 OF 1	



Well 805553

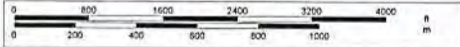
API 47-043-00576 W



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 Zoom Level: 14-0 Datum: WGS84

Scale 1 : 24,000

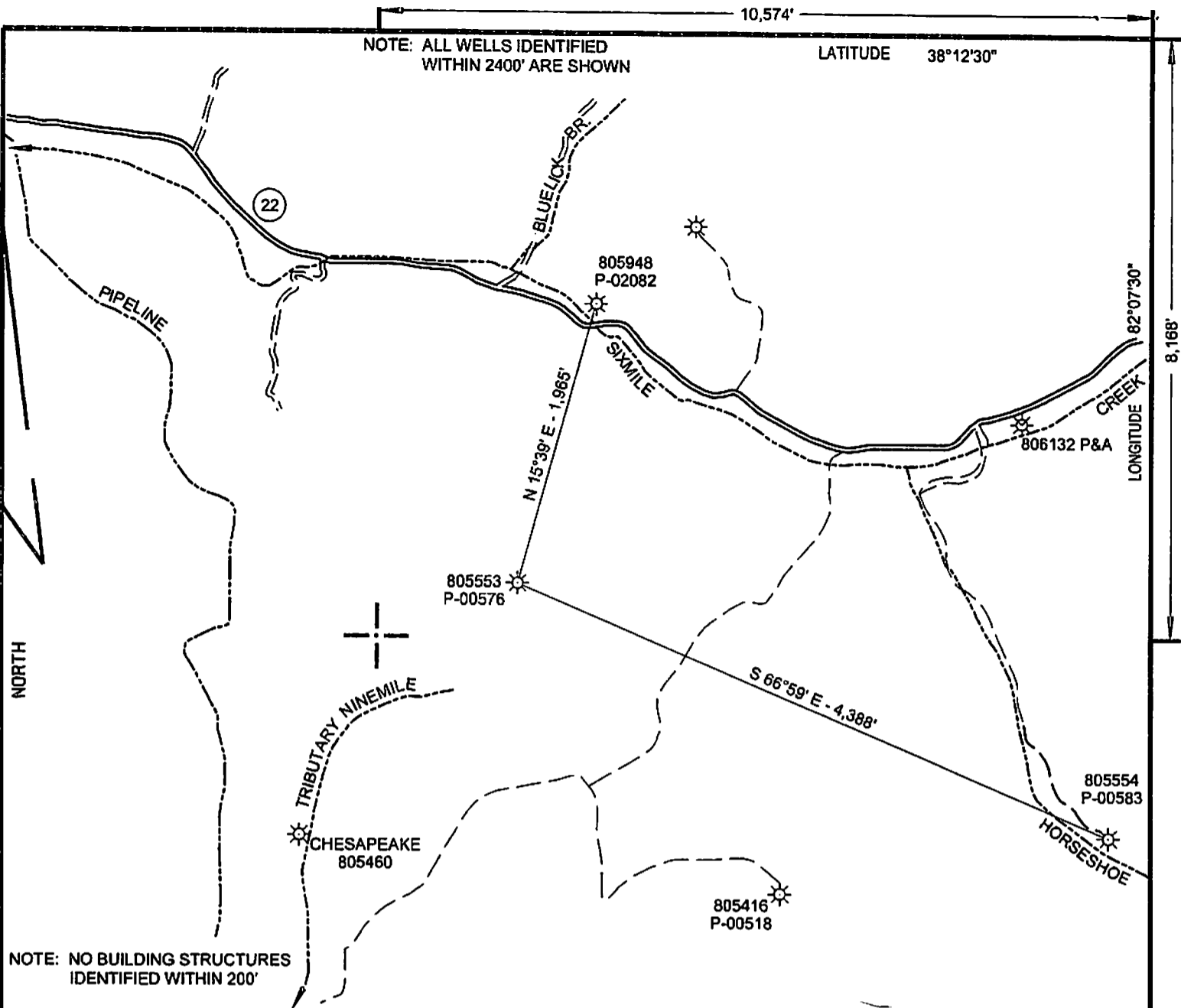
1" = 2,000 ft



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 JUL 08 2014
 WV Department of
 Environmental Protection

NOTE: ALL WELLS IDENTIFIED WITHIN 2400' ARE SHOWN

LATITUDE 38°12'30"



NOTE: NO BUILDING STRUCTURES IDENTIFIED WITHIN 200'

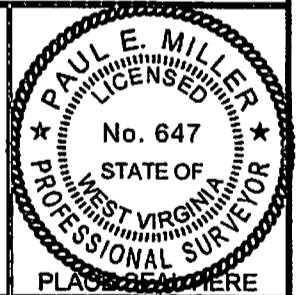
SURFACE HOLE
STATE PLANE WV NORTH/SOUTH ZONE NAD 1927 N - 433,904.31 : E - 1,666,083.58
LATITUDE: (N) 38.1858837 LONGITUDE: (W) 82.1617995
UTM, NAD83 17 - 84W TO 78W, METERS N - 4,227,087.352 : E - 398,265.717

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. 805553WO.DGN
DRAWING NO. 5553 WO
SCALE 1" = 1000'
MINIMUM DEGREE OF
ACCURACY 1:200
PROVEN SOURCE OF
ELEVATION MAPPING GRADE GPS

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

(SIGNED) *Paul E. Miller*
R.P.E. _____ L.L.S. 647



STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
OIL AND GAS DIVISION



DATE MAY 08, 20 14
OPERATOR'S WELL NO. 805553
API WELL NO. _____

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X

47 043 00576 W
STATE COUNTY PERMIT

LOCATION: ELEVATION 1070' WATER SHED SIXMILE CREEK OF GUYAN RIVER
DISTRICT LAUREL HILL COUNTY LINCOLN

QUADRANGLE BRANCLAND, WV 7.5'
SURFACE OWNER HEARTWOOD FORESTLAND ACREAGE _____

OIL & GAS ROYALTY OWNER CHESAPEAKE APPALACHIA L.L.C. LEASE ACREAGE _____

LEASE NO. _____ FEE LAND (GAS) _____

PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR
STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW
FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____ WORKOVER _____

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG _____

TARGET FORMATION _____ ESTIMATED DEPTH _____

WELL OPERATOR CHESAPEAKE APPALACHIA L.L.C. DESIGNATED AGENT ERIC B. GILLESPIE

ADDRESS P.O. BOX 18496, OKLAHOMA CITY, OK 73154-0496 ADDRESS CHESAPEAKE APPALACHIA, L.L.C. PO BOX 6070, CHARLESTON, WV 25382

08/08/2014

FORM WV-6

COUNTY NAME

PERMIT