



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: 47-4300583, 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.

James Martin
Chief

Operator's Well No: 554
Farm Name: HUNTINGTON DEV & GAS
API Well Number: 47-4300583
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

5 263

- 1) Well Operator CHESAPEAKE APPALACHIA, L.L.C. 494477557 Lincoln Laurel Hill Branchland, WV
Operator ID County District Quadrangle
- 2) Operators Well Number: 805554 WO 3) Elevation: 785'
- 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: 1251' - 1427'
- 6) Proposed Total Depth: 1600' Formation at proposed Total Depth: Slate and Shells
- 7) Approximate fresh water strata depths: Behind Existing Casing
- 8) Approximate salt water depths: Behind Existing Casing
- 9) Approximate coal seam depths: 160'
- 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"			29	29	Existing Casing
Fresh Water						
Coal	8 1/4"			302	302	Existing Casing
Intermediate	6 5/8"			1261	1261	Existing Casing
Production	4 1/2"	M-65	9.5		1600	65
Tubing	2 3/8"	J	4.6	AS	NEEDED	
Lining						

PACKERS: Kind Hookwall
Sizes 4 1/2" x 6 1/4
Depths set Approximately 1600'

RDT
07/07/14

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WV Department of
Environmental Protection 08/08/2014

805554 WORKOVER PROCEDURE

- 1) Safety first! Hold PJSA before all jobs
- 2) Prepare road and location, MIRU Service Rig
- 3) Pull 2 3/8" tubing and packer, check TD with 6" bit on tools
- 4) Run open hole logs and evaluate to be sure project is economic
- 5) Run 4 1/2" casing with appropriate float equipment to approximately 1550'
- 6) Cement 4 1/2" casing from shoe to approximately 1060', 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

RDT
07/07/14

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Well 805554 WO
 API 47-043-00583W



STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION



Page 7 of 2
 Midkiff

WELL RECORD

Permit No. LIN-583

Oil or Gas Well. GAS (KIND)

Company UNITED FUEL GAS COMPANY
 Address Box 1273, Charleston 25, West Virginia
 Farm Huntington Dev. & Gas Co. Acres 17,696
 Location (waters) Six Mile Creek
 Well No. 5554 Elev. 800
 District Laurel Hill County Lincoln
 The surface of tract is owned in fee by _____
 Address _____
 Mineral rights are owned by Huntington Dev. & Gas Co.
 Address Charleston, W. Va.
 Drilling commenced 2-27-45
 Drilling completed 5-23-45
 Date Shot 5-24-45 From 1983 To 3246
 With 12,200# Det.
 Open Flow /10ths Water in _____ Inch
/10ths Merc. in _____ Inch
 Volume Gas Well _____ Cu. Ft.
 Rock Pressure _____ lbs. _____ hrs.
 Oil _____ bbls., 1st 24 hrs.
 Fresh water No Record feet _____ feet
 Salt water " " feet _____ feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16			Kind of Packer _____
18			
10	29	29	Size of _____
8 3/4	302	302	
6 3/4	1261	1261	Depth set _____
5 3/16			
3			Perf. top _____
2			Perf. bottom _____
Liners Used _____			Perf. top _____
			Perf. bottom _____

CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date _____
 COAL WAS ENCOUNTERED AT 160 FEET 48 INCHES
 _____ FEET _____ INCHES FEET _____ INCHES
 _____ FEET _____ INCHES FEET _____ INCHES

Formation	Color	Hard or Soft	Top.	Bottom	Oil, Gas or Water	Depth Found	Remarks
Clay			0	40			
Slate			40	70			
Sand			70	160			
Coal			160	164			
Slate			164	170			
Sand			170	240			
Slate			240	260			
Sand			260	315			
Slate			315	370			
Sand			370	430			
Slate			430	550			
Lime Shells			550	575			
Salt Sand			575	1030			
Slate			1030	1050			
Red Rock			1050	1055			
Lime			1055	1090			
Sand			1090	1125			
Red Slate			1125	1130			
Blue Slate			1130	1140			
Lime Shell			1140	1170			
Red Rock			1170	1180			
Lime Shell			1180	1200			
Slate			1200	1205			
Maxon Sand			1205	1215			
Black Lime			1215	1245			
Pencil Cave			1245	1251			
Big Lime			1251	1412	Gas		
Keener Sand			1412	1447			
Red Rock			1447	1456			
Injun Sand			1456	1487	Gas		
Blue Slate			1487	1515			
Gray Sand			1515	1586			
Slate & Shells			1586	1800			
Blue Slate			1800	1927			
Slate & Shells			1927	1942			
Coffee Shale			1942	1980			
Berea			1980	2000			
Slate & Lime Shells			2000	2650			

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 1350 Blinn Drive
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 WV Department of Environmental Protection

08/08/2014

WV 805554

ATI
47-043-00583 W

Page 2 of 2

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Brown Shale			2650	2940			
Black Shale			2940	3145	Gas	3025	
White Slate			3145	3150	Gas	3185-3200	
Black Shale			3150	3226			
White Slate			3226	3246			
Total Depth				3246 SIM			

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Date June 22, 1940

APPROVED UNITED FUEL GAS COMPANY Owner

By *G. Cunningham* 08/08/2014
(Title) *Sr*

WW2-A
(Rev. 6-07)

- 1) Date: June 20, 2014
- 2) Operators Well Number 805554 WO
State County Permit
- 3) API Well Number 47 - 043 - 00583 W

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

- 4) Surface owner(s) to be served:
- (a) Name: Jerry Chapman ✓
Address: P.O. Box 142
Midkiff, WV 25540
 - (b) Name: Joe McCallister ✓
Address: 188 Coon Creek
Culloden, WV 25510
 - (c) Name: See Attached Page
Address:
- 5) (a) Coal Operator:
Name: None
Address:
- b) Coal Owner(s) with Declaration: ✓
Name: Pocahontas Land Corp.
Address: 800 Princeton Avenue
Bluefield, WV 24701
- (c) Name:
Address:
- 6) Inspector:
Name: Ralph Triplett
Address: 5539 McClellan Highway
Branchland, WV 25506
Telephone: 304-389-0350
- (c) Coal Lessee with Declaration:
Name: None
Address:

*OK #5165459
\$1650.00*

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

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

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)
- 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
Phyllis A. Copley 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.

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08/08/2014

WW2-A

Operator's Well Number: 805554 WO

API Well Number: 47 - 043 - 00583 W

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

- (c) Steven Rothbard
2516 South Bonarden Lane
Tempe, AZ 85282 ✓
- (d) Sandra Miller ✓
437 Six Mile Road
Branchland, WV 25506

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Well 805554 WO
 API 47-043-00583 W

7012 3460 0000 4499 2890

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CERTIFIED MAIL™ RECEIPT
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For delivery information visit our website at www.usps.com

MIDKIFF WV 25540

OFFICIAL USE

Postage	\$ 11.82	0523
Certified Fee	3.30	01
Return Receipt Fee (Endorsement Required)	12.70	Postmark Here
Restricted Delivery Fee (Endorsement Required)	0.00	
Total Postage & Fees	\$ 17.82	07/07/2014

Sent To: **805554 WO**
 Jerry Chapman ✓
 P.O. Box 142
 Midkiff, WV 25540

PS Form 38

7012 3460 0000 4499 2920

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CULLODEN WV 25510

OFFICIAL USE

Postage	\$ 11.82	0523
Certified Fee	3.30	01
Return Receipt Fee (Endorsement Required)	12.70	Postmark Here
Restricted Delivery Fee (Endorsement Required)	0.00	
Total Postage & Fees	\$ 17.82	07/07/2014

Sent To: **805554 WO**
 Joe McCallister ✓
 188 Coon Creek
 Culloden, WV 25510

PS Form 38

7012 3460 0000 4499 2937

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BLUEFIELD WV 24701

OFFICIAL USE

Postage	\$ 11.82	0523
Certified Fee	3.30	01
Return Receipt Fee (Endorsement Required)	12.70	Postmark Here
Restricted Delivery Fee (Endorsement Required)	0.00	
Total Postage & Fees	\$ 17.82	07/07/2014

Sent To: **805554 WO**
 Pocahontas Land Corp. ✓
 800 Princeton Avenue
 Bluefield, WV 24701

PS Form 38

7012 3460 0000 4499 2913

U.S. Postal Service™
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TEMPE AZ 85282

OFFICIAL USE

Postage	\$ 11.82	0523
Certified Fee	3.30	01
Return Receipt Fee (Endorsement Required)	12.70	Postmark Here
Restricted Delivery Fee (Endorsement Required)	0.00	
Total Postage & Fees	\$ 17.82	07/07/2014

Sent To: **805554 WO**
 Steven Rothbard ✓
 2615 South Bonarden Lane
 Tempe, AZ 85282

PS Form 38

7012 3460 0000 4499 2906

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

BRANCHLAND WV 25506

OFFICIAL USE

Postage	\$ 11.82	0523
Certified Fee	3.30	01
Return Receipt Fee (Endorsement Required)	12.70	Postmark Here
Restricted Delivery Fee (Endorsement Required)	0.00	
Total Postage & Fees	\$ 17.82	07/07/2014

Sent To: **805554 WO**
 Sandra Miller ✓
 437 Six Mile Road
 Branchland, WV 25506

PS Form 38

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 WV Department of
 Environmental Protection

Operators Well Number: 805554 WO

API Well Number: 47- 043 - 00583

**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 overrules, 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:

Chesapeake Appalachia, LLC
David Gocke
Manager – Operations, Appalachia South

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WV Department of Environmental Protection

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) Horseshoe Branch of Sixmile Creek Quadrangle Branchland, WV 7.5'

Elevation: 785' County Lincoln District Laurel Hill

Description of anticipated using more than 5,000 bbls of water to complete the proposed well wor: Yes ___ No X

Will a pit be used for drill cuttings? Yes ___ No X (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.? 6 20MIL

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.

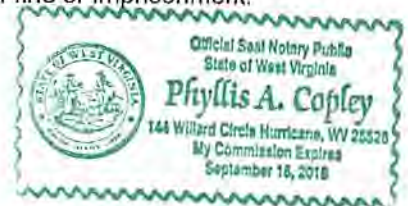
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining The information, I believe that the information is 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 *David Gocke*

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

Subscribed and sworn before me this 30th day of June 2014

Phyllis A. Copley



Notary Public

My Commission expires September 16, 2018

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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.

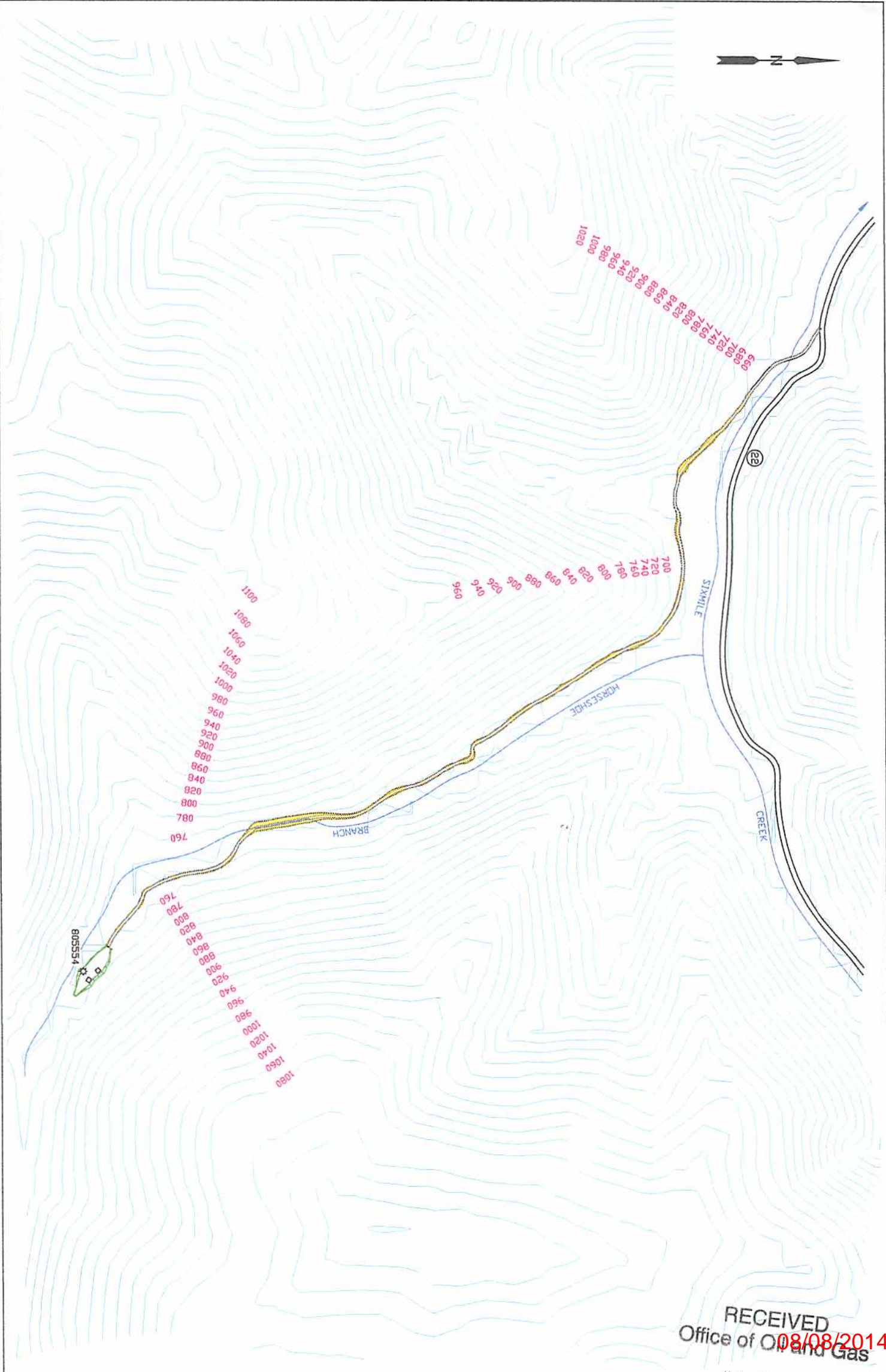
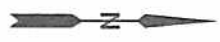
Plan Approved: Ronald D. Tripodi

Comments:

Title: District Inspector Date: 07/07/14

Field Reviewed? Yes No

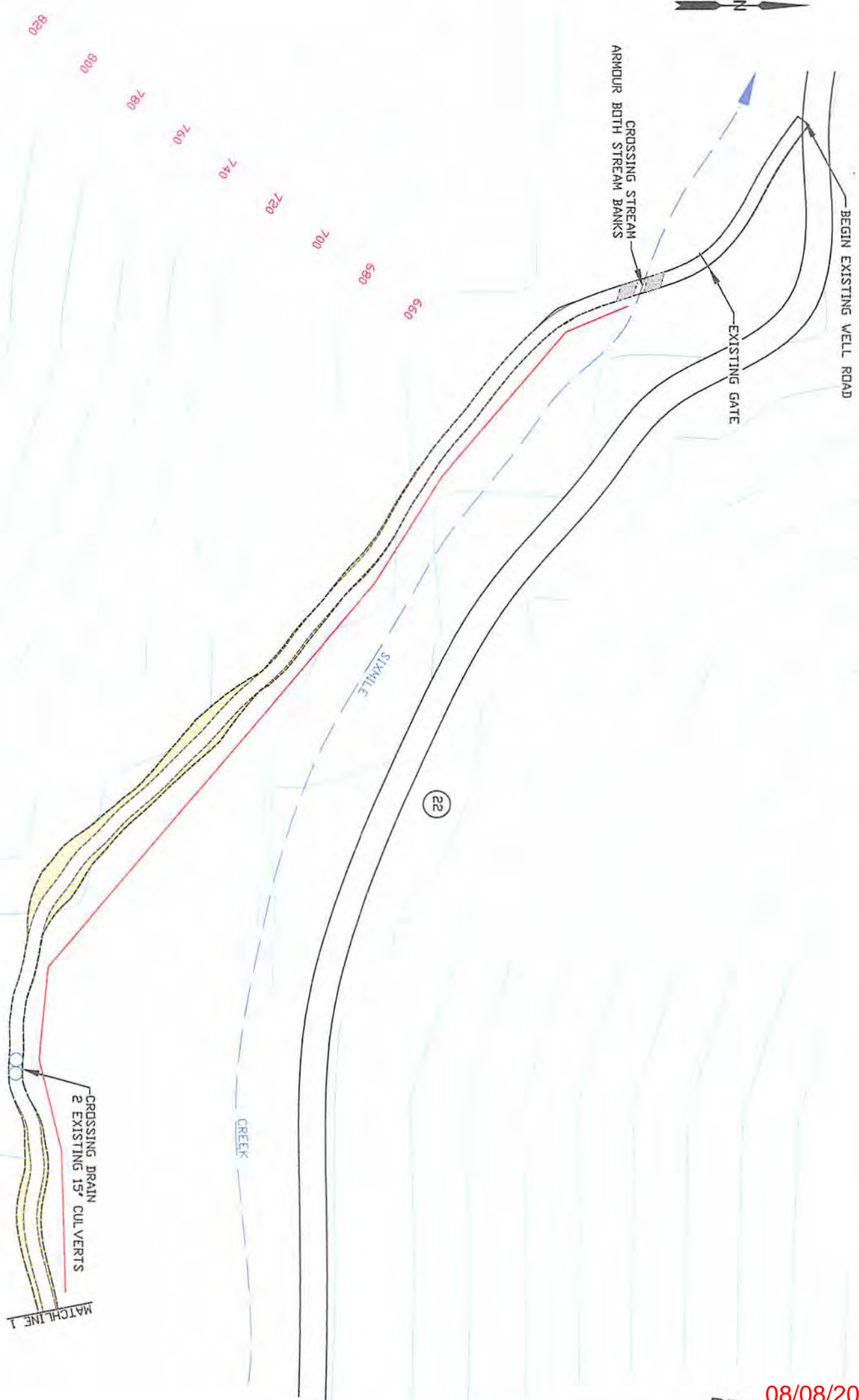
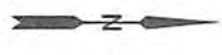
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SITE PLAN

DISTURBED AREAS		LEGEND		SITE PLAN	
EXISTING WELL PAD	0.25 AC.		STREAM	CHESAPEAKE APPALACHIA, L.L.C. PROPOSED WORKS LAUREL DISTRICT, LINCOLN COUNTY BRANCHLANDS SUBDIVISION	
EXISTING ACCESS ROAD TO BE UPGRADED	1.47 AC.		PROPERTY LINE	MAY 14, 2014	
ADDITIONAL CLEARING			SLOPE AREA	TRUE LINE SURVEYING 6211 FAIRVIEW DR. HUNTINGTON, WV 25705	
			WETLAND	PAGE 1 OF 1	
TOTAL DISTURBED AREA	1.72 AC		BUFFER AREA		



CROSSING DRAIN
2 EXISTING 15" CULVERTS

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

08/08/2014

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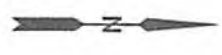
EROSION AND SEDIMENT CONTROL PLAN

CHESAPEAKE APPALACHIA, L.L.C.
PROPOSED WORKOVER WELLS 005554
LAUREL HILL DISTRICT, LINCOLN COUNTY
BRANCHLAND QUAD, WV 7.5'

WV Department of
Environmental Protection

MAY 23 2014
PROF. SURVEYING
6211 FAIRVIEW DR.
HUNTINGTON, WV 25705

PAGE 1 OF 5



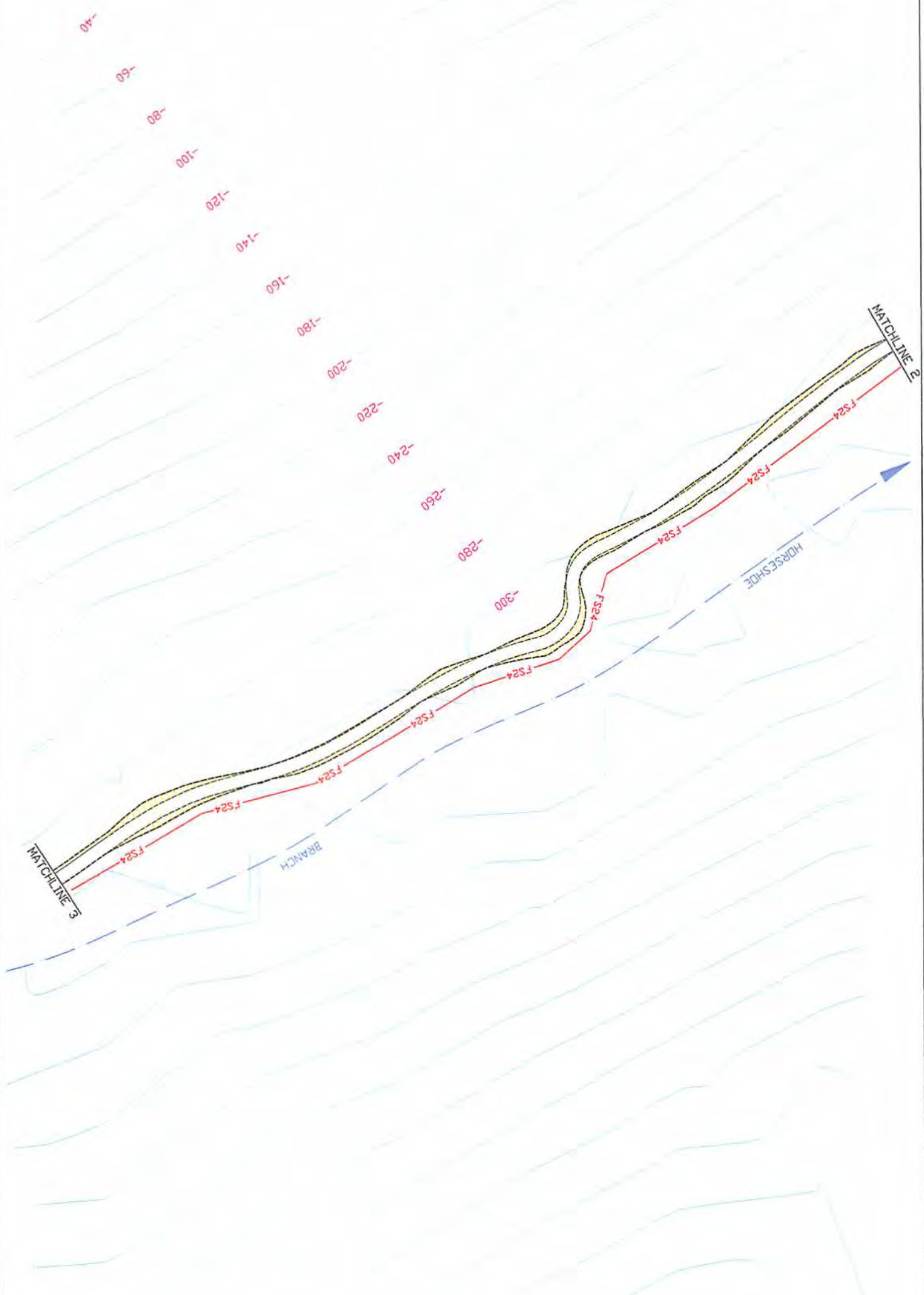
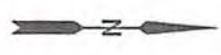
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LEGEND

- 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

WV Department of Environmental Protection
EROSION AND SEDIMENT CONTROL PLAN
PROJECT: APPALACHIA, L.L.C.
PROPOSED WORK AREA # 805554
LAUREL HILL DISTRICT, LINCOLN COUNTY
BRANCHLAND QUAD, WV 7.5'
MAY 15, 2014
TRUE LINE SURVEYING
6211 FAIRVIEW DR.
HUNTINGTON, WV 25705
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Office of Oil and Gas

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

EROSION AND SEDIMENT CONTROL PLAN

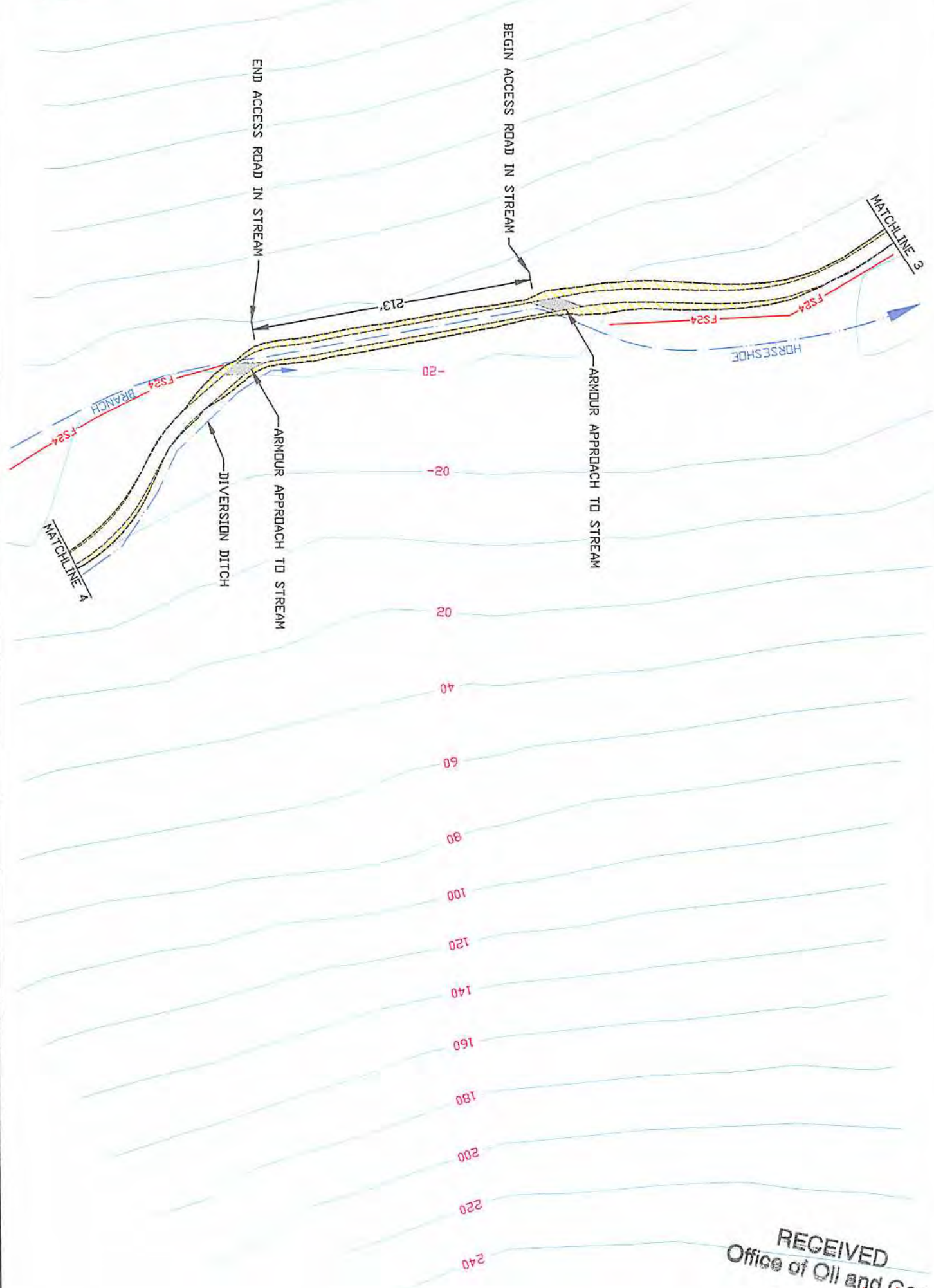
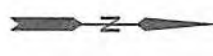
JUL 08 2014

CHESAPEAKE APPALACHIA L.L.C.
PROPOSED WORKOVER WELL # 805554
LAUREL DISTRICT, LINCOLN COUNTY
BRANCHLAND, WV

WV Department of Environmental Protection

TRUE LINE SURVEYING
6211 FAIRVIEW DR.
HUNTINGTON, WV 25705

PAGE 3 OF 5

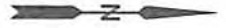


RECEIVED
Office of Oil and Gas
08/08/2014
JUL 08 2014

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

WV Department of Environmental Protection
EROSION AND SEDIMENT CONTROL PLAN
CHESAPEAKE APPALACHIA, LLC
PROPOSED WORKOVER WELLS # 805554
LAUREL HILL DISTRICT, LINCOLN COUNTY
BRANCHLAND QUAD, WV 7.5'
MAY 14, 2014
TRUE LINE SURVEYING
6211 FAIRVIEW DR.
HUNTINGTON, WV 25705
PAGE 4 OF 5



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Office of Oil and Gas
08/08/2014
JUL 08 2014

LEGEND

- PROVIDE FLEXTERRA HIGH PERFORMANCE FLEXIBLE GROWTH MEDIUM (HP-FLM) ON CUT AND FILL SLOPES
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EROSION AND SEDIMENT CONTROL PLAN

WV Department of Environmental Protection

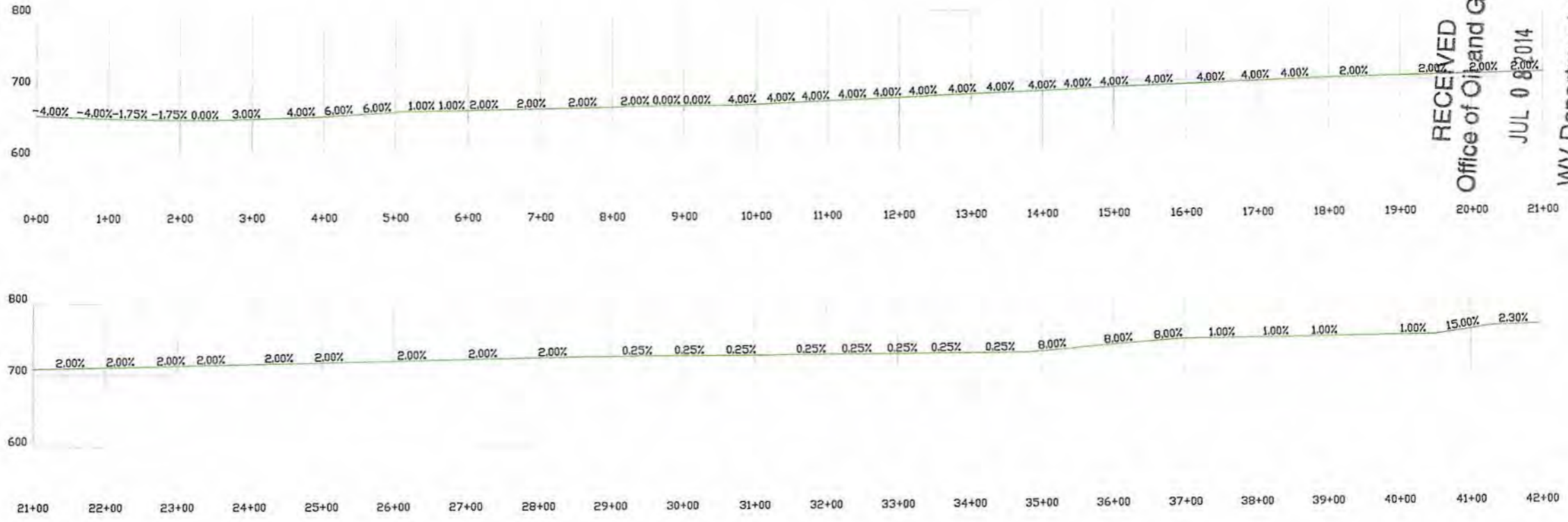
APPALACHIA, L.L.C.
PROPOSED WORKOVER WELLS
LAUREL HILL DISTRICT, LINCOLN COUNTY
BRANCLAND QUAD, WV 7.5'

MAY 15 2014

TRUE LINE SURVEYING
6211 FAIRVIEW DR.
HUNTINGTON, WV 25705

PAGE 5 OF 5

4300583W



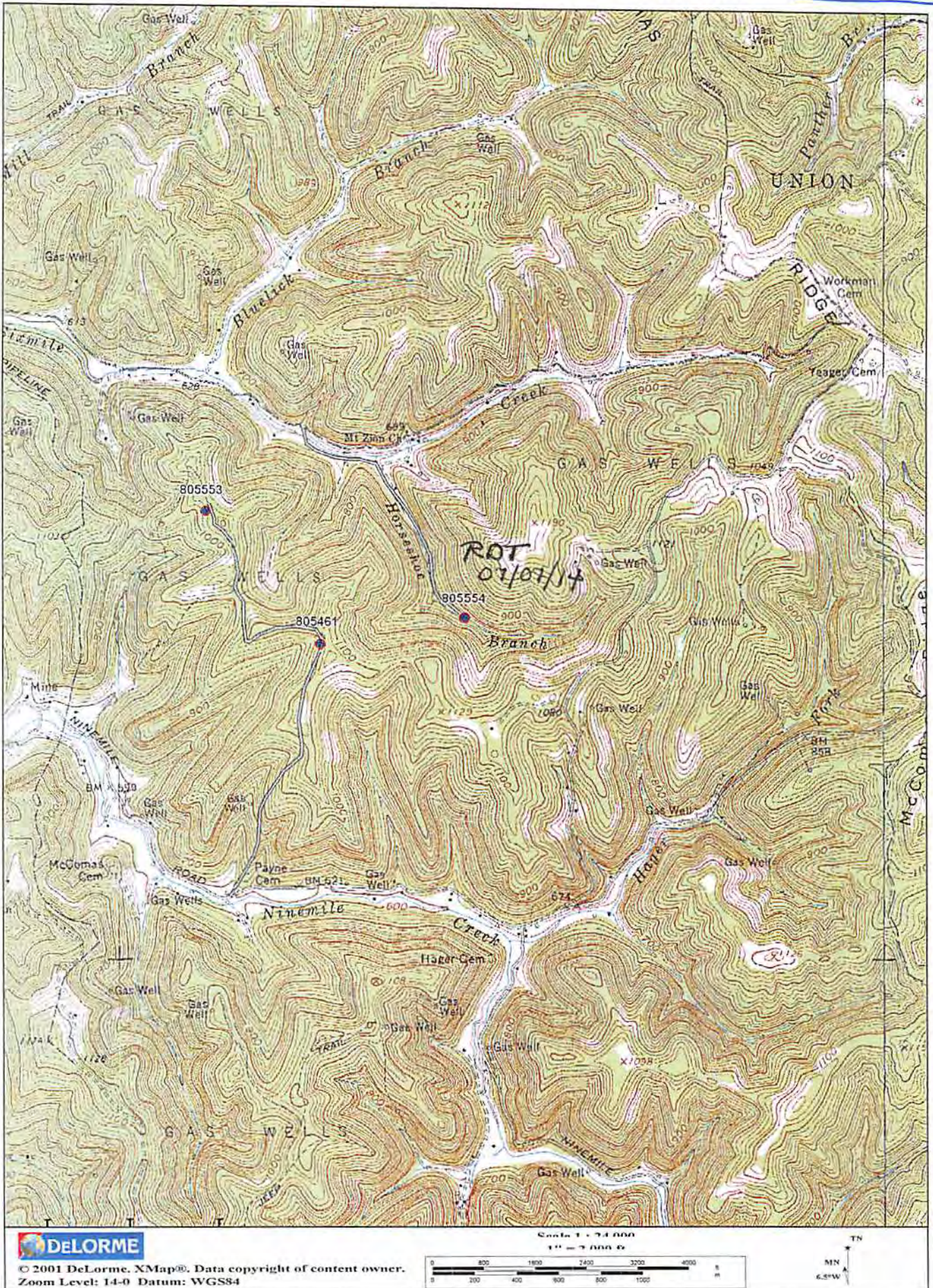
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Office of Oil and Gas
JUL 0 8 2014
WV Department of
Environmental Protection

ROAD PROFILE	
CHESAPEAKE APPALACHIA, L.L.C. PROPOSED WORKOVER WELL # 805554 LAUREL HILL DISTRICT, LINCOLN COUNTY BRANCHLAND QUAD, WV 7.5'	
MAY 15, 2014	
TRUE LINE SURVEYING 6211 FAIRVIEW DR. HUNTINGTON, WV 25705	
PAGE	1 OF 1



well 805554

API 47-043-00583W

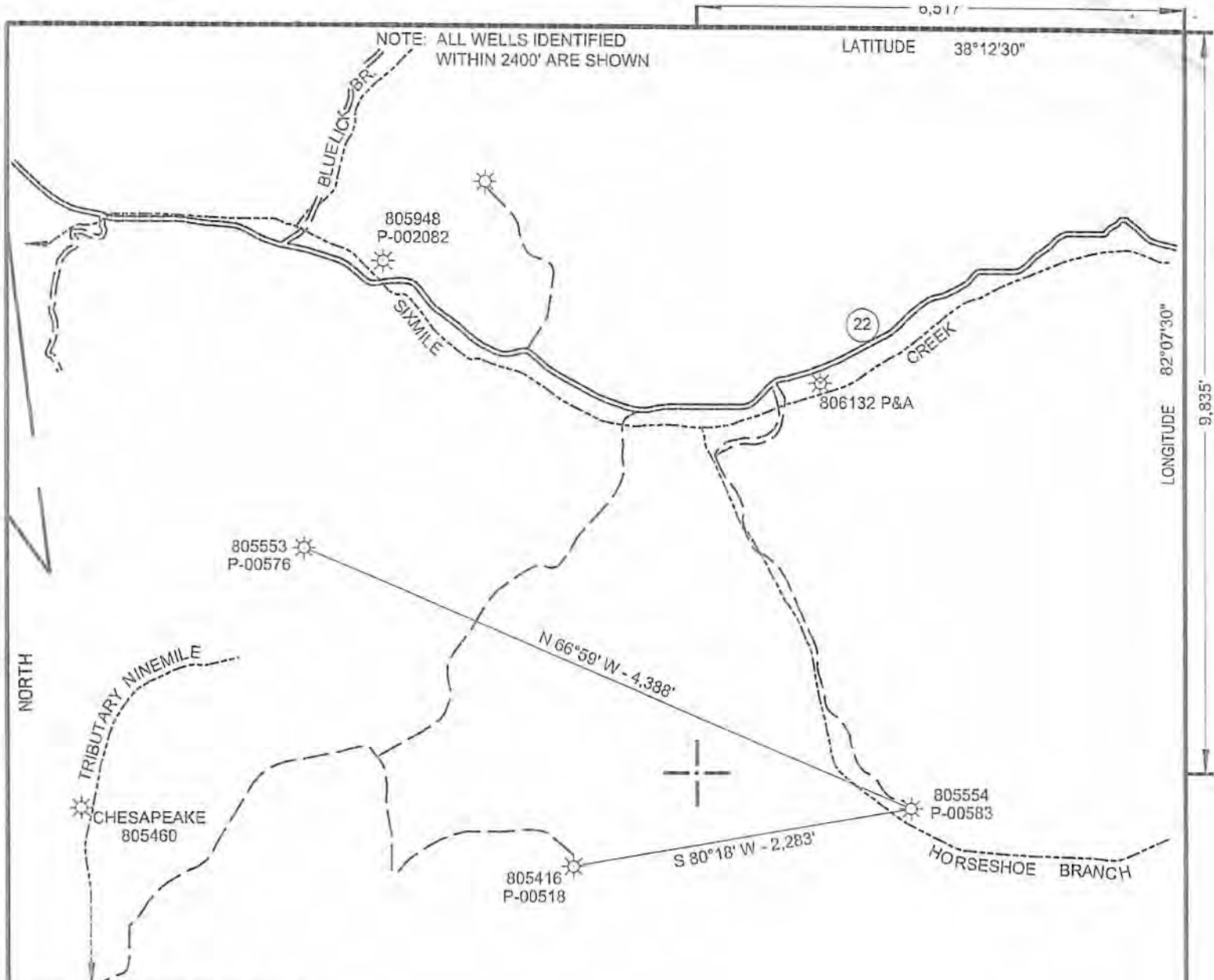


08/08/2014

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Environmental Protection



WELL SITE	
STATE PLANE WV SOUTH ZONE NAD 1927 N - 432,189.33 : E - 1,670,122.17	
LATITUDE: (N) 38.1813126° LONGITUDE: (W) 82.1476756°	
UTM NAD83 17 - 84W TO 78W, METERS N - 4,226,564.766 : E - 399,496.472	

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

FILE NO. CA805554WO.DGN
 DRAWING NO. CA 5554 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 07 20 14
 OPERATOR'S WELL NO. 805554
 API WELL NO. 47 043 00583 W
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION 785' WATER SHED HORSESHOE BR. OF SIXMILE CREEK
 DISTRICT LAUREL HILL COUNTY LINCOLN
 QUADRANGLE BRANCHLAND, WV 7.5'

SURFACE OWNER CONNIE ADKINS 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 25362

08/08/2014

FORM WW-6

COUNTY NAME
 PERMIT