



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

April 15, 2014

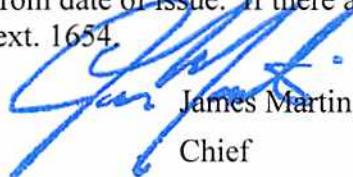
WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-4301224, 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.

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. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalties being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.



James Martin
Chief

Operator's Well No: 808846 (5844)
Farm Name: RUNYON, SANDENA
API Well Number: 47-4301224
Permit Type: Plugging
Date Issued: 04/15/2014

Promoting a healthy environment.

PERMIT CONDITIONS

West Virginia Code § 22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

1. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
2. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
3. Well work activities shall not constitute a hazard to the safety of persons.

FORM WW-4 (B)
Observe
File Copy
(Rev. 2/01)

1) Date: 4/2/2014
2) Operator's Well No. 808446 P&A
3) API Well No. 47-043-01224

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

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

4) Well Type: Oil _____ Gas X Liquid injection _____ Waste disposal _____
 (Is Gas, Production X or Underground storage _____) Deep _____ Shallow X

5) Location: Elevation 810' Watershed Steer Fork of Fourteenmile Creek
 District Laurel Hill County Lincoln Quadrangle Ranger, WV 7.5'
05 43 568

6) Well Operator Chesapeake Appalachia, L.L.C. 7) Designated Agent Eric B. Gillespie
 Address P.O. Box 18496 Address P.O. Box 6070
Oklahoma City, OK 73154-0496 Charleston, WV 25362

8) Oil and Gas Inspector to be notified 9) Plugging Contractor
 Name Ralph Triplett Name Chesapeake Appalachia, L.L.C.
 Address 5539 McClellan Highway Address P.O. Box 18496
Branchland, WV 25506 Oklahoma City, OK 73154-0496

10) Work Order: The work order for the manner of plugging this well is as follows:

See Attached Sheet

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WV Department of
Environmental Protection

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

Work Order approved by Inspector Ralph D. Triplett

Date April 9, 2014

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WV Department of
Environmental Protection

808446 P&A Procedure

- 1) Prepare road and location, MIRU service rig
- 2) Attempt to pull 2 3/8" tubing and packer
 - A) If successful
 - a) RIH with tools to find top of fill at approximately 2100'
 - b) Run W.S. to top of fill, load hole with gel
 - c) Spot 100' cement plug on top of fill (approximately 2100'-2000'), pull W.S. to 1650'
 - d) Spot 100' cement plug 1650'-1550', pull W.S. to 1450'
 - e) Spot 100' cement plug 1450'-1350', pull W.S.
 - f) Proceed to step #3
 - B) If unsuccessful
 - a) Cut 2 3/8" at free-point (approximately 1410') and pull
 - b) Run W.S. to top of packer at 1440', load hole with gel
 - c) Spot 150' cement plug 1440'-1290', pull W.S.
 - d) Proceed to step #3
- 3) RIH to check top of plug (If TOC is below 1360', then reset plug)
- 4) Cut 7" at free-point (approximately 775') and pull
- 5) Run W.S. to 775', load hole with gel
- 6) Spot 150' cement plug 775'-625', pull W.S.
- 7) Attempt to pull 8 5/8" casing
 - A) If successful
 - a) Run W.S. to 215'
 - b) Spot 215' cement plug 215' – surface
 - c) Proceed to step #8
 - B) If unsuccessful
 - a) Run W.S. to 250'
 - b) Spot 100' cement plug 250'-150', pull W.S.
 - c) Cut 8 5/8" at free-point (approximately 140') and pull
 - d) Run W.S. to 140', spot gel
 - e) Spot 140' cement plug 140' – surface
 - f) Proceed to step #8
- 8) Pull W.S. and top off with cement
- 9) Erect monument and reclaim as prescribed by law

RDT

4301224 P



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION 5

Quadrangle Midkiff

WELL RECORD

Permit No. LIN-1224

Oil or Gas Well Gas
(KIND)

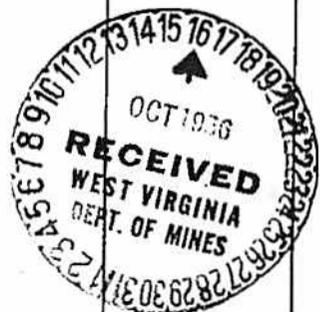
Company United Fuel Gas Company
 Address P. O. Box 1273; Charleston 25, W. Va.
 Farm United Fuel Gas Co. Min. Tr. #1 Acres 24, 293.44
 Location (waters) Fourteen Mile Creek
 Well No. 8446 Elev. 803.44
 District Laurel Hill County Lincoln
 The surface of tract is owned in fee by _____
 Address _____
 Mineral rights are owned by United Fuel Gas Co. 7
 Address Charleston, W. Va.
 Drilling commenced July 20, 1956
 Drilling completed September 15, 1956
 Date Shot 9-17-56 From 2202 To 3353
 With 7800# Gelatin
 Open Flow 4 /10ths Water in 2 Inch
 _____ /10ths Merc. in _____ Inch
 Volume 84,000 Cu. Ft.
 Rock Pressure 380 lbs. 72 hrs.
 Oil _____ bbls., 1st 24 hrs.
 Fresh water _____ feet _____ feet
 Salt water _____ feet _____ feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			
10 3/4		20'	Size of
8 5/8		214	
7 3/4		1398	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 103 FEET 60 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	15	Show gas	1485'	
Slate			15	40			
Sand			40	103	Show oil	1600'	
Coal			103	108			
Sand			108	212	Gas	2222' 3/10 W 1" 18 M	
Slate			212	225		blew down to 1/10 W 1" 11 M	
Sand			225	300			
Slate			300	400	Gas	3080' increased to 3/10 W 1" 18 M	
Sand			400	453			
Slate			453	480	Test before shot	2/10 W 1" 15 M	
Sand			480	563	Shot 9-17-56 with 7800# Gelatin from		
Slate			563	585	2202-3353'		
Sand			585	610	Test 2 hours after shot	22/10 W 2" 198 M	
Slate			610	645	Test 16 hours after shot	4/10 W 2" 84 M	
Sand			645	745			
Slate			745	752			
Salt Sand			752	1120	FINAL OPEN FLOW - 84 M Br. Shale		
Slate & Shells			1120	1190	72 Hr. R.P. 380#.		
Sand			1190	1314			
Slate			1314	1330	Shut in 9-18-56 in 7" casing.		
Maxon Sand			1330	1347			
Little Lime			1347	1381			
Pencil Cave			1381	1386			
Big Lime			1386	1578			
Keener Sand			1578	1595			
Injun Sand			1595	1630			
Shells			1630	1640			
Slate & Shells			1640	1838			
Big Shell			1838	1978			
Slate			1978	2164			
Brown Shale			2164	2184			
Berea Sand			2184	2197			
Slate & Shells			2197	2790			
White Slate			2790	3062			



Formation	Color	Hard or Soft	Top ζ	Bottom	Oil, Gas or Water	Depth Found	Remarks
Brown Shale White Slate Total Depth			3062 3335 3353'	3335 3353			

Date... October 15 , 19 56

APPROVED UNITED FUEL GAS COMPANY , Owner

By *S.R. Ferrell*
 (Title)
 Supt., Civil Engineering Department

UNITED FUEL GAS COMPANY
COMPANY

Well 4704301224P
API 47-043-01224
Page 1 of 2

ERIAL WELL NO. 8446

LEASE NO. Ref. 24689

MAP SQUARE 30-39

RECORD OF WELL NO. <u>8446</u> on the UG Co. Min. Tr. # <u>1</u> farm of <u>24,293.44</u> in <u>Laurel Hill</u> District <u>Lincoln</u> County	CASING AND TUBING				TEST BEFORE SHOT
	SIZE	WEIGHT	USED IN DRILLING	LEFT IN WELL	
State of: <u>West Virginia</u>	<u>10-3/4"</u>	<u>40#</u>	<u>20'</u>	<u>20'</u>	<u>2</u> /10 of Water in <u>1"</u> inch /10 of Merc. in _____ inch Volume <u>14.90</u> MCF Cu. ft.
Field: <u>Central Division</u>	<u>8-5/8"</u>	<u>24#</u>	<u>214'</u>	<u>214'</u>	TEST AFTER SHOT <u>4</u> /10 of Water in <u>2"</u> inch /10 of Merc. in _____ inch Volume <u>84</u> MCF Cu. ft.
Rig Commenced <u>July 14,</u> 19 <u>56</u>	<u>7"</u>	<u>20#</u>	<u>1409'</u>	<u>1409'</u>	<u>16</u> Hours After Shot
Rig Completed <u>July 19,</u> 19 <u>56</u>					Rock Pressure <u>72 Hr. 380#</u>
Drilling Commenced <u>July 20,</u> 19 <u>56</u>					Date Shot <u>9-17-56</u>
Drilling Completed <u>September 15,</u> 19 <u>56</u>					Size of Torpedo <u>7800# Gelatin</u>
Drilling to cost _____ per foot					Oil Flowed _____ bbls. 1st 24 hrs.
Contractor is: <u>R. H. Adkins</u>					Oil Pumped _____ bbls. 1st 24 hrs.
Address: <u>H amlin, W. Va.</u>	SHUT IN Date <u>9-18-56</u>				
Driller's Name <u>E. E. White</u>	<u>7"</u> in. Casing	Tubing or Casing			
<u>G. P. Pinkerton</u>	Size of Packer <u>7"X8-5/8"</u>				Well abandoned and
	Kind of Packer <u>Bottom Hole</u>				Plugged _____ 19 _____
	Ist. Perf. Set _____ from _____				
Elevation: <u>803.44'</u>	2nd Perf. Set _____ from _____				

DRILLER'S RECORD

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Clay	0	15	15	
Slate	15	40	25	
Sand	40	103	63	
Coal	103	108	5	
Sand	108	212	104	
Slate	212	225	13	
Sand	225	300	75	
Slate	300	400	100	
Sand	400	453	53	
Slate	453	480	27	
Sand	480	563	83	
Slate	563	585	22	
Sand	585	610	25	
Slate	610	645	35	
Sand	645	745	100	
Slate	745	752	7	
Salt Sand	752	1120	368	

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WV Department of
Environmental Protection

WW4-A
Revised
2/01

1) Date: 4/2/2014
2) Operator's Well No. 808846 P&A
3) API Well No. 47-043-01224

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

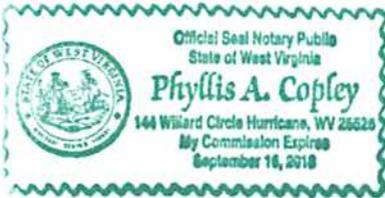
<p>4) Surface Owner(s) to be served:</p> <p>(a) Name <u>Sandena Runyon</u> Address <u>P.O. Box 395</u> <u>Ranger, WV 25557</u></p> <p>(b) Name _____ Address _____</p> <p>(c) Name _____ Address _____</p> <p>6) Inspector <u>Ralph Triplett</u> Address <u>5539 McClellan Highway</u> <u>Branchland, WV 25506</u></p> <p>Telephone <u>304-389-0350</u></p>	<p>5) Coal Operator</p> <p>(a) Name <u>Argus Energy WV, LLC</u> Address <u>9104 Twelve Pole Creek Road</u> <u>Dunlow, WV 25511</u></p> <p>Coal Owner(s) with Declaration</p> <p>(b) Name <u>Pocahontas Land Corporation</u> Address <u>800 Princeton Avenue</u> <u>Bluefield, WV 24701</u></p> <p>Name _____ Address _____</p> <p>Coal Lessee with Declaration</p> <p>(c) Name <u>New Eagle Mining Corp.</u> Address <u>P.O. Box 1048</u> <u>Holden, WV 25625</u></p>
---	--

TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:

- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
- (2) The plat (surveyor's map) showing the well location on Form WW-6.

The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed the Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of the Notice, the Application, and the plat have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.



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

Subscribed and sworn before me this 3rd day of April the year of 2014

Phyllis A. Copley Notary Public
My Commission Expires September 16, 2018

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APR 10 2014
WV Department of Environmental Protection

4704301224 P
477043 01/224

OK 513720\$
100000

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Total Postage & Fees	\$ 7.40	04/09/2014

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P.O. box 395
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Restricted Delivery Fee (Endorsement Required)	\$0.00	
Total Postage & Fees	\$ 7.40	04/09/2014

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Argus Energy-WV, LLC
9104 Twelve Pole Creek Road
Dunlow, WV 25511

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Total Postage & Fees	\$ 7.40	04/09/2014

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808446 P&A
Pocahontas Land Corp.
800 Princeton Avenue
Bluefield, WV 24701

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Restricted Delivery Fee (Endorsement Required)	\$0.00	
Total Postage & Fees	\$ 7.40	04/09/2014

Sent To
808446 P&A
New Eagle Mining Corp.
P.O. Box 1048
Holden, WV 25625

PS Form 3800

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM
GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Name Chesapeake Appalachia, L.L.C. OP Code 494477557
Watershed Steer Fork of fourteenmile Creek Quadrangle Ranger, WV 7.5'
Elevation 810' County Lincoln District Laurel Hill

Description of anticipated Pit Waste: Plugging Returns/Cement

Will a synthetic liner be used in the pit? Yes 20 MIL.

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

Proposed Work For Which Pit Will Be Used:
 Drilling
 Workover
 Swabbing
 Plugging
 Other (Explain _____)

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on December 31, 1999, 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 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 3rd day of April, 2014

Phyllis A. Copley Notary Public

My Commission Expires September 16, 2018

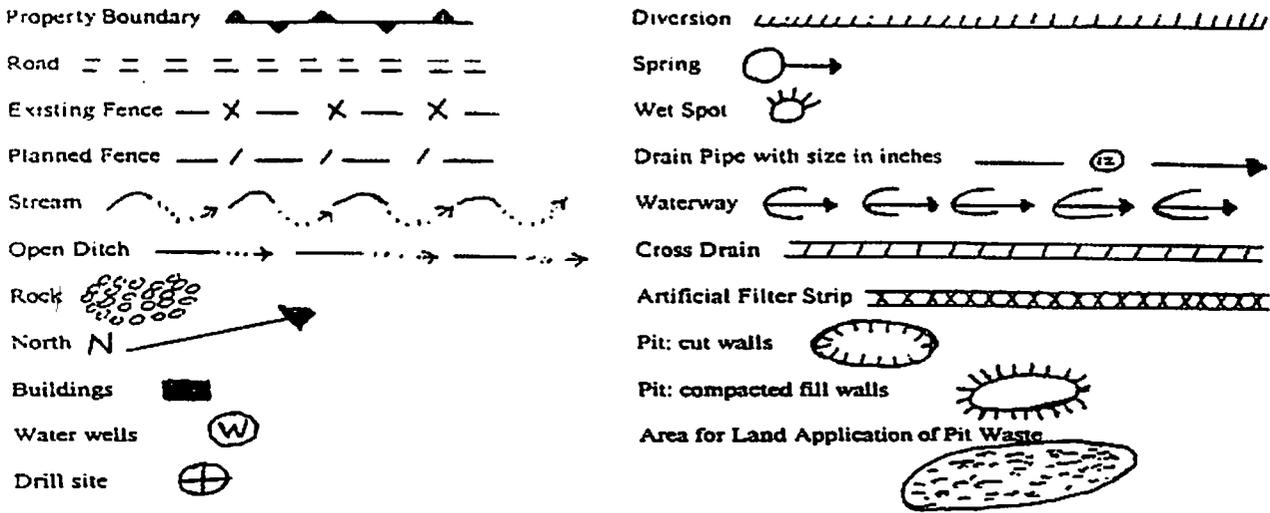
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Attachment #1

API #: 47-043-01224
 Operator's Well No. 808446 P&A

LEGEND



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) 1/3 TON 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 by: Ralph D. Tripodi

Title: District Inspector

Date: April 9, 2013

Field Reviewed? Yes No

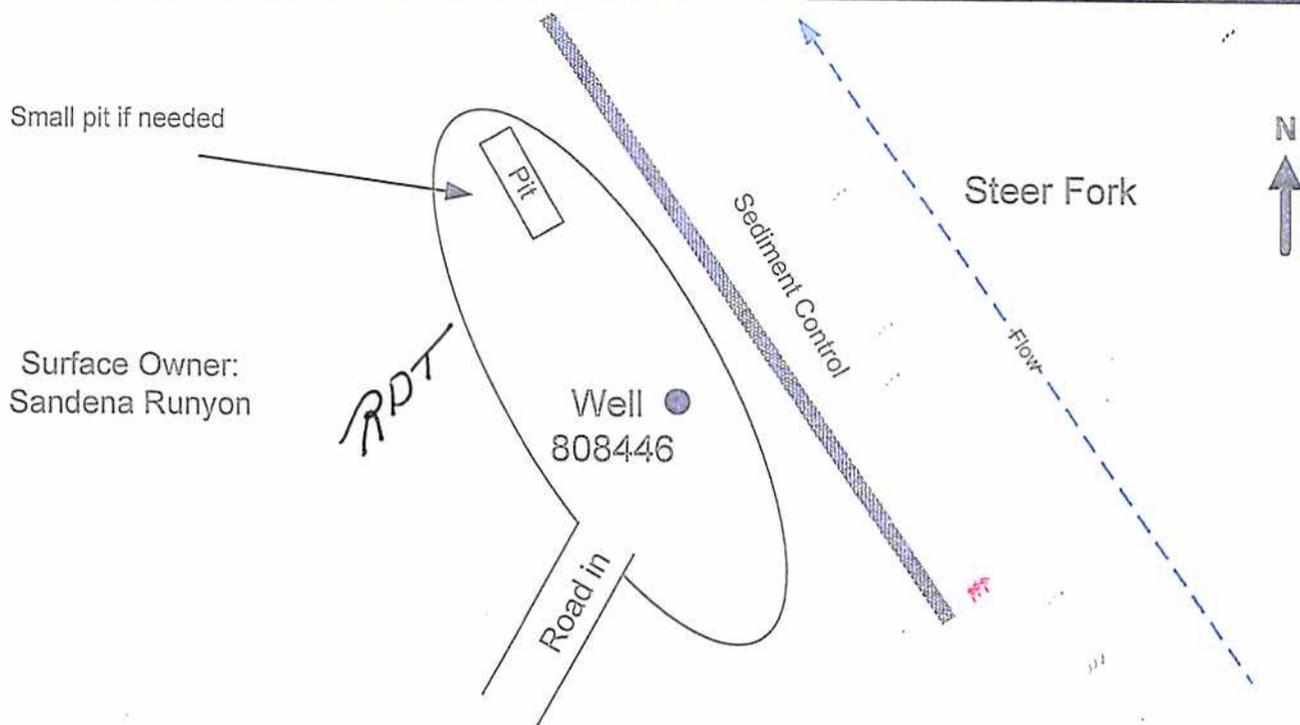
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Diagram of Well 808446

API 47-043-01224

Field Office - Branchland

County - Lincoln



GENERAL NOTES

This drawing is a schematic representation of the well site and access road. Proposed structures such as well site, drilling pit, roadways, culverts sediment barriers etc. are shown in approximate pre-planning configurations.

All culvert pipes will be a minimum of 15 inches in diameter. All culvert pipes installed will be accompanied by an entrance sump with dimensions no less than 3 feet (width) x 3 feet (length) x 4 feet (deep). Culverts will be installed at an angle to ensure proper flow. The out fall of culverts will be protected from erosion and sedimentation using large rocks or other sediment controls deemed necessary in the prevention of erosion and sedimentation. Storm water from the ditches to the culverts will be directed to stable natural vegetative areas. Where culverts are not practical, operator will have other sediment control in place to minimize erosion and sedimentation.

Cross drains, broad based dips, water bars, and diversion ditches will be employed during the construction phase. These erosion and sediment control structures will be used to control erosion and sedimentation during the construction phase, where applicable and areas that will allow. These structures will be considered permanent and used as such.

Permanent seeding: See Attachment #1

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Site Plan

Prepared by: Kris Aldridge
Date: 4/9/2014

No Scale

Topographical Map of Well 808446

and Access Road

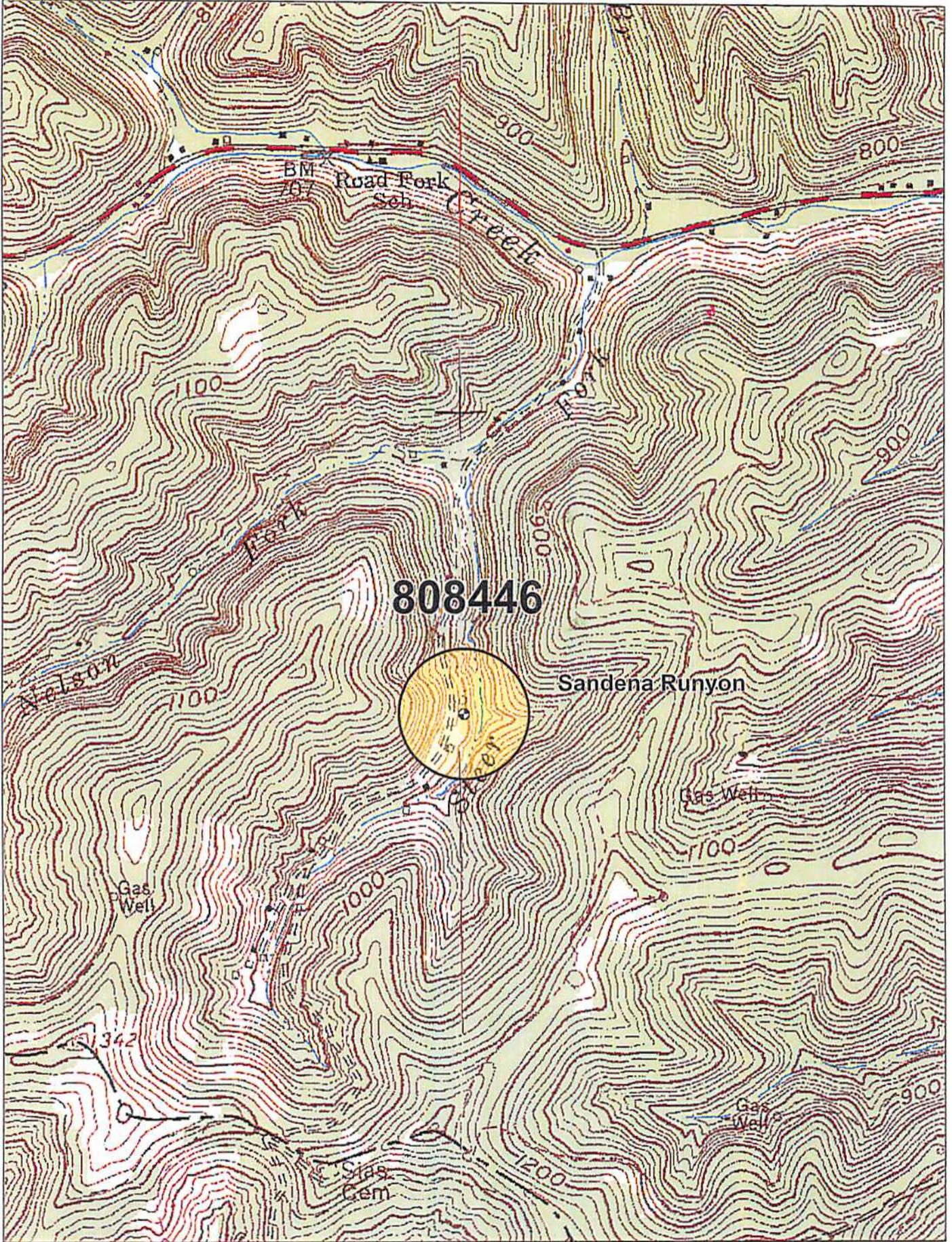
API 47-043-01224

Field Office - Branchland

County - Lincoln



XMap® 7



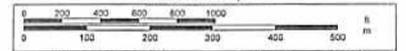
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Scale 1 : 12,000



1" = 1,000.0 ft

Data Zoom 14-1

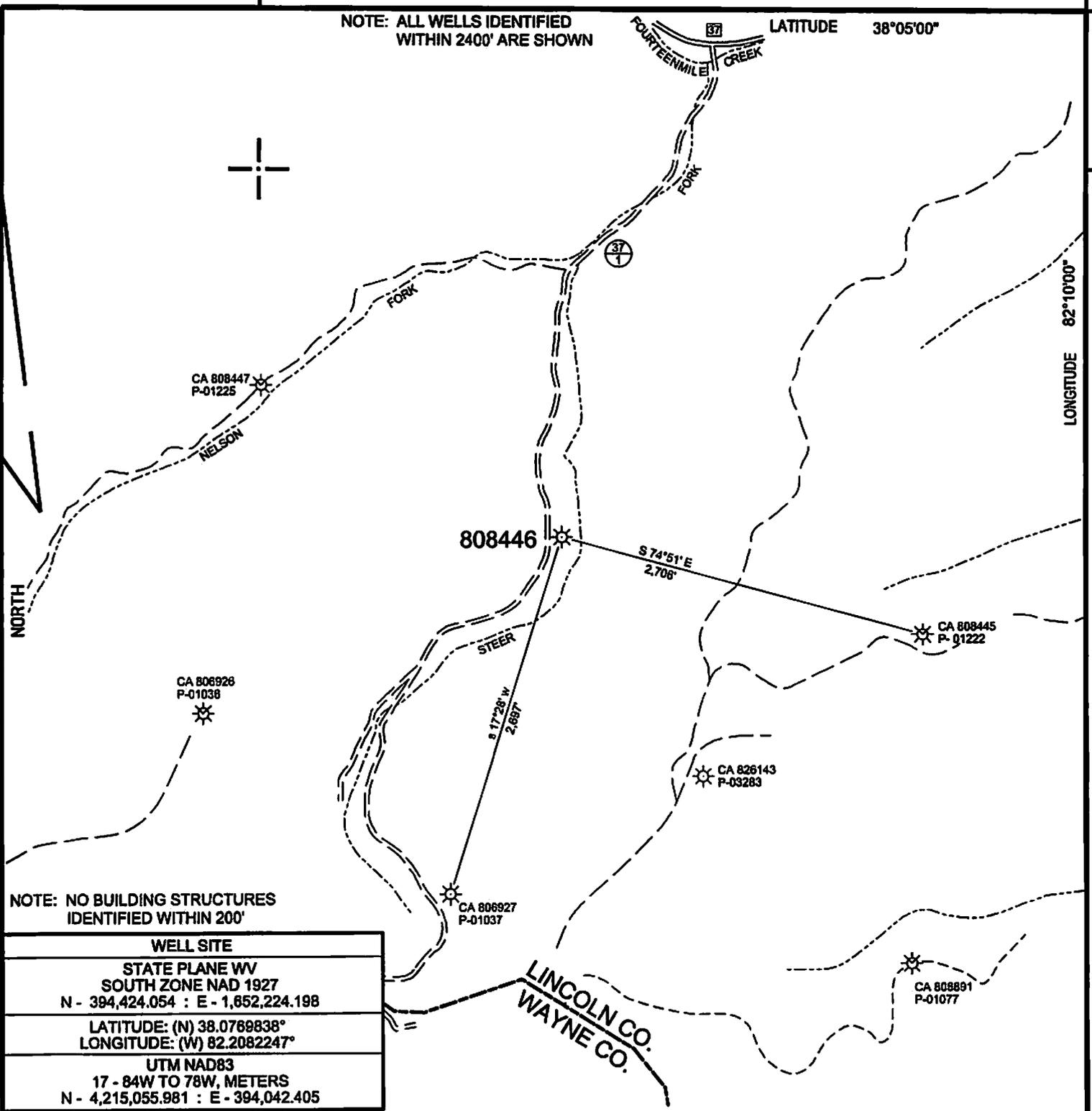
NOTE: ALL WELLS IDENTIFIED WITHIN 2400' ARE SHOWN

11,971'

LATITUDE 38°05'00"

2,305'

LONGITUDE 82°10'00"



NOTE: NO BUILDING STRUCTURES IDENTIFIED WITHIN 200'

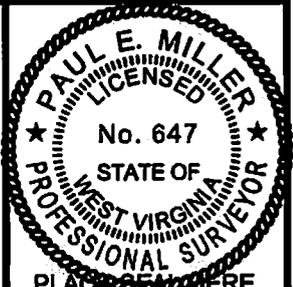
WELL SITE
STATE PLANE WV SOUTH ZONE NAD 1927 N - 394,424.054 : E - 1,852,224.198
LATITUDE: (N) 38.0769838° LONGITUDE: (W) 82.2082247°
UTM NAD83 17 - 84W TO 78W, METERS N - 4,215,055.981 : E - 394,042.405

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

FILE NO.	CA808446P&A.DGN.
DRAWING NO.	CA8448P&A.DGN
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 APRIL 2, 20 14
OPERATOR'S WELL NO. 808446
API WELL NO.

47 043 01224P
STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION STORAGE ___ DEEP ___ SHALLOW
LOCATION: ELEVATION 810' WATER SHED STEER FORK OF FOURTEENMILE CREEK
DISTRICT LAUREL HILL COUNTY LINCOLN
QUADRANGLE RANGER, WV 7.5'

SURFACE OWNER SANDENA RUNYON ACREAGE 22.4
OIL & GAS ROYALTY OWNER CHESAPEAKE APPALACHIA, L.L.C. LEASE ACREAGE -
LEASE NO. ___ FEE LAND ___

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

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

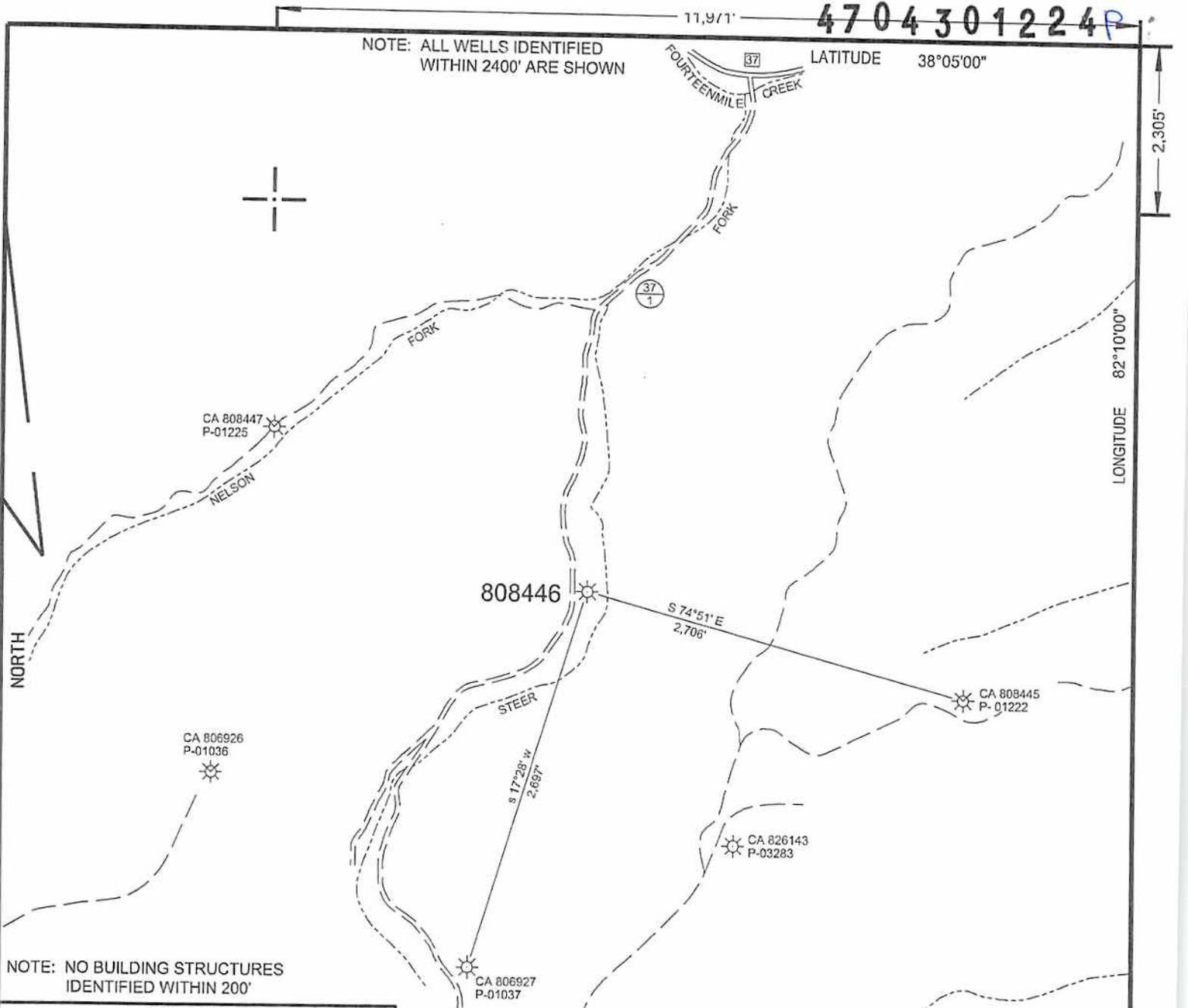
FORM WV-NORTH

COUNTY NAME

PERMIT

NOTE: ALL WELLS IDENTIFIED WITHIN 2400' ARE SHOWN

LATITUDE 38°05'00"



NOTE: NO BUILDING STRUCTURES IDENTIFIED WITHIN 200'

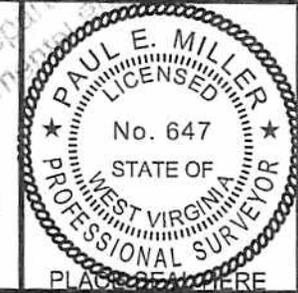
WELL SITE	
STATE PLANE WV SOUTH ZONE NAD 1927	
N - 394,424.054	E - 1,652,224.198
LATITUDE: (N) 38.0769838°	
LONGITUDE: (W) 82.2082247°	
UTM NAD83	
17 - 84W TO 78W, METERS	
N - 4,215,055.981	E - 394,042.405

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

RECEIVED Office of Oil and Gas WV Department of Environmental Protection APR 10 2014

FILE NO. CA808446P&A.DGN.
 DRAWING NO. CA8446P&A.DGN
 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 APRIL 2, 20 14
 OPERATOR'S WELL NO. 808446
 API WELL NO. 47 043 01224 P
 STATE COUNTY PERMIT

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

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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

COUNTY NAME PERMIT