



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

February 23, 2015

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-4302056, 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: 4417
Farm Name: ADKINS, VIOLA
API Well Number: 47-4302056
Permit Type: Plugging
Date Issued: 02/23/2015

Promoting a healthy environment.

02/27/2015

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.

Inspector's
Signature Sheets

4302056P

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

1) Date: 11/12/2014
2) Operator's Well No. 804417 P&A
3) API Well No. 47-043-02056

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

CK 5215703
100⁰⁰

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 682' Watershed Mud River
District Union County Lincoln Quadrangle Hager, WV 7.5'
- 6) Well Operator Chesapeake Appalachia, L.L.C. 7) Designated Agent Jessica Greathouse
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

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 November 25, 2014

Received
Office of Oil & Gas

DEC 03 2014

02/27/2015

804417 P&A Procedure

TD WAS 2079

NOTE: 2" tubing is parted at 1690' and pulled

- 1) RIH with tools to confirm top of tubing at 1690'
- 2) Run W.S. to 1680', spot gel
- 3) Spot 200' cement plug 1680'-1480', pull W.S. to 1385'
- 4) Spot 100' cement plug 1385'-1285', pull W.S.
- 5) RIH with tools to check top of plug (If TOC is below 1310' then re-spot plug)
- 6) Cut 6 5/8" at free-point (approximately 650') and pull
- 7) Run W.S. to 650', spot gel
- 8) Spot 150' cement plug 650'-500', pull W.S. to 350'
- 9) Spot 100' cement plug 350'-250', pull W.S. to 150'
- 10) Spot 150' cement plug 150' – surface
- 11) Pull W.S. and top off with cement
- 12) Set monument and reclaim as prescribed by law

RPT
11/25/14

GEL SPACER w/ MINIMUM 6% BENTONITE BY WEIGHT
IN FRESH WATER SHALL BE PLACED BETWEEN
EACH PLUG.

gmm

UNITED FUEL GAS COMPANY

Well 804417 P+A
API: 47-043-02056P

SERIAL WELL NO. 4417 LEASE NO. 34726 MAP SQUARE 36-47

RECORD ON WELL No. 1 on the Viola Adkins Farm of 35 Acres in Laurel Hill District Lincoln County Field, State of West Va.		CAVING AND TUBING SIZE USED IN DRILLING LEFT IN WELL 16 19 19 13 1336 1336 10 19 19 8 1/4 6 5/8 1336 1336 5 3/16 4 7/8 4 3 2 2081		TEST BEFORE SHOW 3 of Water in 2 inch 10 hrs. of Merc. in inch 10 hrs. Volume 23,010 Cu. ft. TEST AFTER SHOW 14 of Water in 2 inch 10 hrs. of Merc. in inch 10 hrs. Volume 74,560 Cu. ft. Rock Pressure Date Shot May 2-1925 Size of Torpedo 80# Oil Blowed 100 lbs. 1st 24 hrs. Oil Pumped 100 lbs. 1st 24 hrs. Well abandoned and Plugged 193 Set at 1716'	
Rlg Commenced 193 Rlg Completed 193 Drilling Commenced March 5th, 1925 Drilling Completed April 9th, 1925 Drilling to cost per foot Contractor Is: Address: Owned by Superior Oil & Gas Co Sold to United Fuel Gas Company Driller's Name September 2nd, 1930		SHUT IN Date Tubing or Casing Size of Packer 2 X 6 5/8 Kind of Packer Anchor 1st Perf. Set from 2nd Perf. Set from			

El. 687B

DRILLER'S RECORD

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Coal	595	600	5	
Salt Sand	660	1050	400	
Slate-Lime Shells	1050	1245	195	
Maxon Sand	1245	1295	50	
Little Lime	1295	1323	28	
Pencil Cave	1323	1327	4	
Big Lime	1331	1523	192	Show of gas and oil at 1401' - 2/11/17 (6/17)
Red Rock	1523	1555	32	
Big Injun Sand	1555	1575	20	
Lime Shells	1575	1750	175	
Berea Sand	2040	2057	17	Gas 2042-2056
Slate (Total depth)	2079			

RDT

RECEIVED
NOV 10 1930
WORK IN PROGRESS
DEPARTMENT



Received
Office of Oil & Gas
DEC 03 2014

02/27/2015

WW4-A
Revised
2/01

1) Date: 11/12/2014
2) Operator's Well No. 804417 P&A
3) API Well No. 47-043-02056

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

4) Surface Owner(s) to be served:
(a) Name Davis Sias
Address P.O. Box 484
Branchland, WV 25506

(b) Name Gary D. Moore
Address 138 Bellomy Road
Branchland, WV 25506

(c) Name _____
Address _____

6) Inspector Ralph Triplett
Address 5539 McClellan Highway
Branchland, WV 25506

Telephone 304-389-0350

5) Coal Operator
(a) Name None
Address _____

Coal Owner(s) with Declaration
(b) Name Please see attached sheet
Address for Coal Owners

Name _____
Address _____

Coal Lessee with Declaration
(c) Name None
Address _____

Name _____
Address _____

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: R.E. Schmitz
Its: Completion Superintendent, Appalachia South
Address: P.O. Box 18496
Oklahoma City, OK 73154-0496
Telephone: 405-935-4073

Subscribed and sworn before me this 12th day of November the year of 2014
Phyllis A. Copley Notary Public
My Commission Expires September 16, 2018

Operator's Well Number: 804417

API Well Number: 47 - 043 - 02056 P

5) b) Coal Owner(s) with Declaration:

- 1) David Sias ✓
P.O. box 484
Branchland, WV 25506
- 2) H3 LLC ✓
1483 Johns Creek Road
Milton, WV 25541
- 3) Brian Keith Bellomy ✓
145 Bethesda Drive
Ona, WV 25545
- 4) Larry Adkins ✓
P.O. Box 421
West Hamlin, WV 25571
- 5) Mervin L. Henson, Jr. ✓
1418 Main Avenue
Nitro, WV 25143
- 6) Illene F. Henson ✓
10 Cardinal Lane
Hurricane, WV 25526

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4302056P

Form WW-9
Rev. 02/01

API Number 47-043-02056
Operator's Well No. 804417 P&A

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 Mud River Quadrangle Hager, WV 7.5'
Elevation 682' County Lincoln District Union

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.

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Office of Oil & Gas
DEC 03 2014

Company Official Signature *R.E. Schindler*

Company Official (Typed Name) Robert E. Schindler

Company Official Title Completion Superintendent, Appalachia South

Subscribed and sworn before me this 12th day of November, 2014.

Phyllis A. Copley Notary Public.

My Commission Expires September 16, 2018

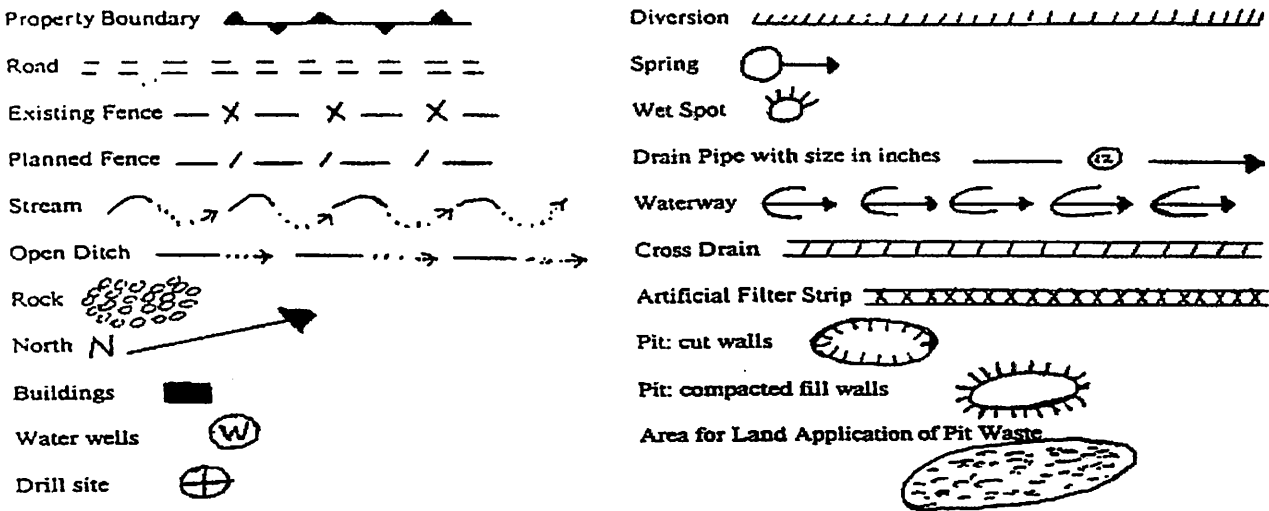


02/27/2015

Attachment #1

API #: 47-043-02056
 Operator's Well No. 804417 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. Triplett

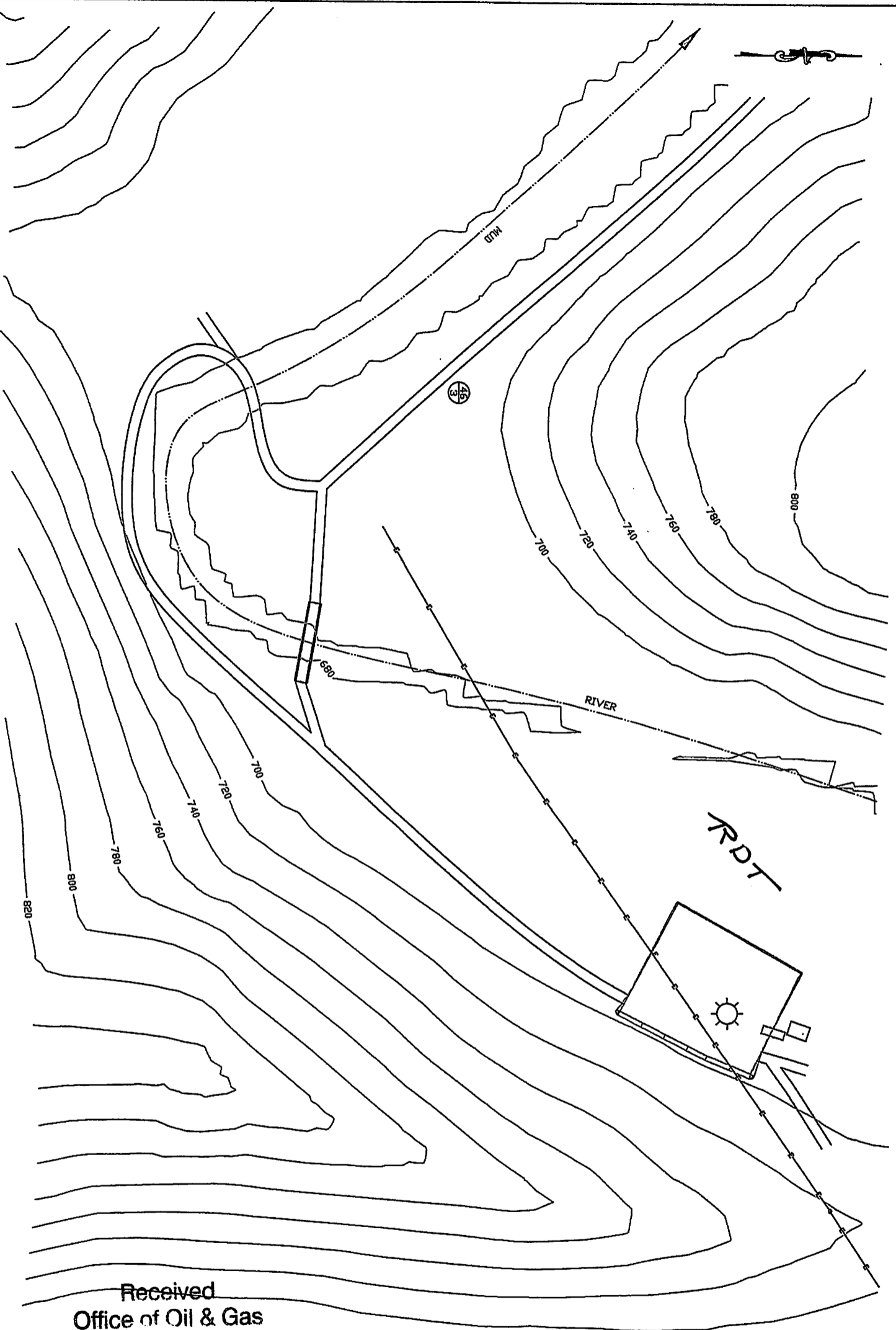
Title: District Inspector

Date: November 25, 2014

Field Reviewed? Yes No

02/27/2015

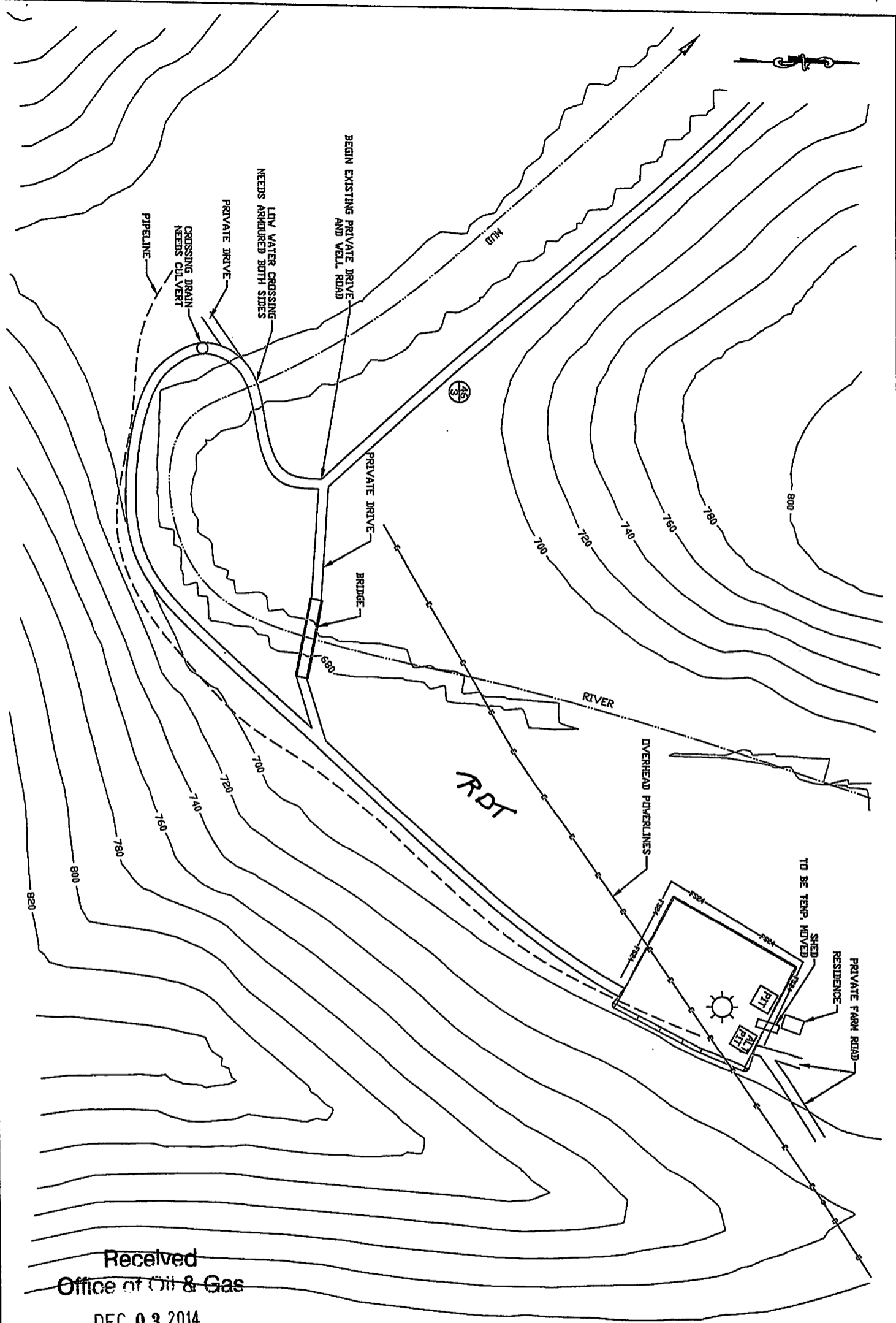
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DISTURBED AREAS		LEGEND		SITE PLAN <i>PHA</i>	
WELL PAD CONSTRUCTION	0.38 AC.		STREAM	CHESAPEAKE APPALACHIA, L.L.C. PROPOSED WORKOVER OF WELL # 804417	
EXISTING ACCESS ROAD	0.25AC.		PROPERTY LINE	UNION DISTRICT, LINCOLN COUNTY HAGER QUAD, WV 7.5'	
ADDITIONAL CLEARING			SLOPE AREA	JUNE 11, 2014	
			WETLAND	TRUE LINE SURVEYING 6211 FAIRVIEW DR. HUNTINGTON, WV 25705	
TOTAL DISTURBED AREA	0.63 AC		BUFFER AREA	PAGE 1 OF 1	



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LEGEND

	PROVIDE FLEXTERRA HIGH PERFORMANCE FLEXABLE 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
			FS24

EROSION AND SEDIMENT CONTROL PLAN

HARD ROCK EXPLORATION PROPOSED WELL # HR-483AA	
REEDY DISTRICT, ROANE COUNTY PENIEL QUAD, WV 7.5'	
OCTOBER 21, 2013	
TRUE LINE SURVEYING 6211 FAIRVIEW DR. HUNTINGTON, WV 25705	
PAGE 1 OF 1	

43 02056 P



02/27/2015



West Virginia Department of Environmental Protection
Office of Oil and Gas

WELL LOCATION FORM: GPS

API: 4704302056 WELL NO.: 804417

FARM NAME: Adkins, Viola

RESPONSIBLE PARTY NAME: Rob Schindler

COUNTY: Lincoln DISTRICT: Union

QUADRANGLE: Hager, WV 7.5

SURFACE OWNER: David Sias,

ROYALTY OWNER: Viola Adkins Heirs

UTM GPS NORTHING: 4,226,039.220

UTM GPS EASTING: 405,660.425 GPS ELEVATION: 682'

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements:

1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
2. Accuracy to Datum – 3.05 meters
3. Data Collection Method:

Survey grade GPS : Post Processed Differential
Real-Time Differential

Mapping Grade GPS : Post Processed Differential
Real-Time Differential

4. Letter size copy of the topography map showing the well location.

I the undersigned, hereby certify this data 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 Office of Oil and Gas.

R. Schindler
Signature

Comp. Supt
Title

12-5-14
Date

Received

DEC 5 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

4302056P



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 DEC 03 2014

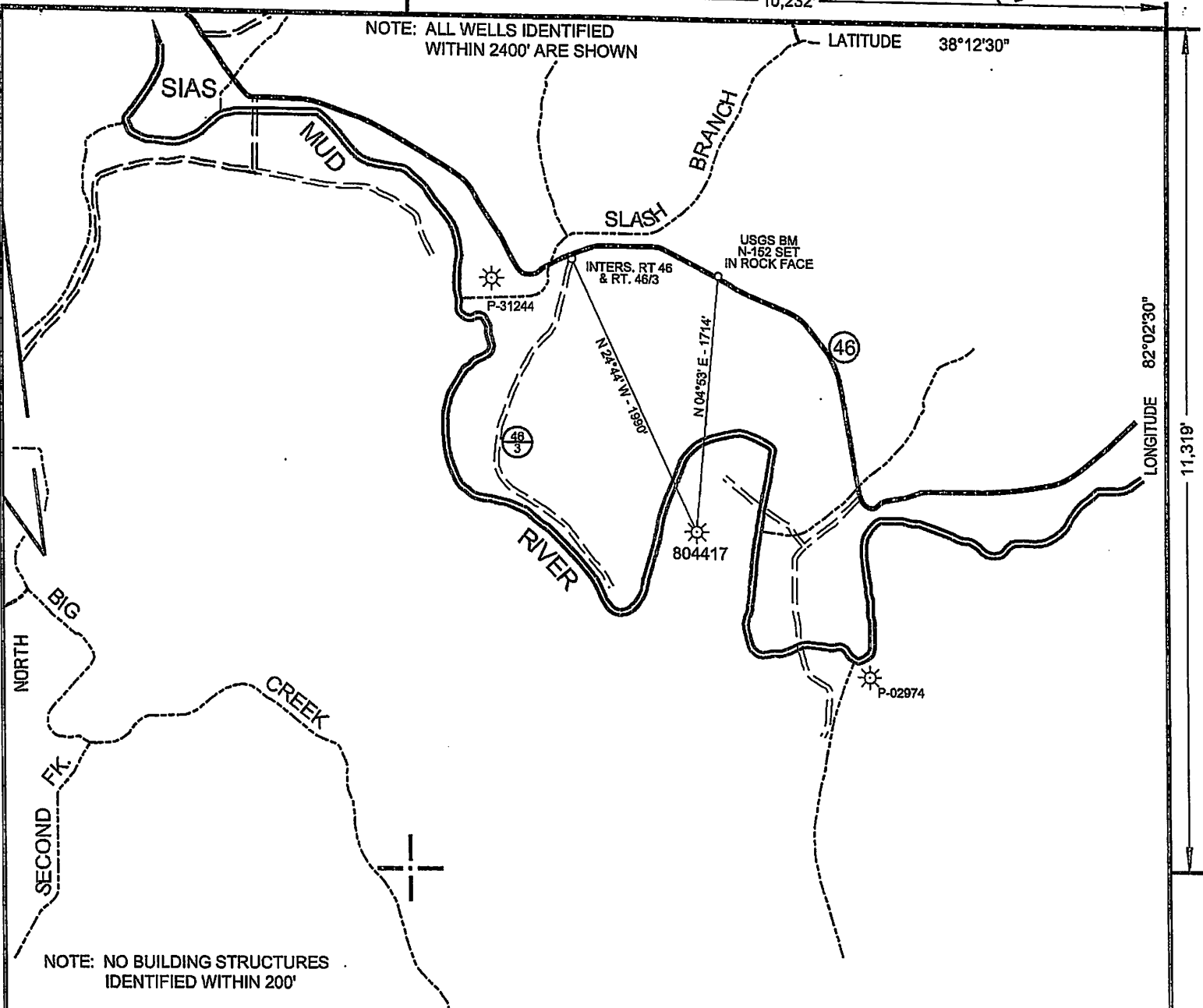
02/27/2015

4302056 P

10,232'

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 - 430,464.15 : E - 1,690,348.79	
LATITUDE: (N) 38.1772419 LONGITUDE: (W) 82.0772421	
UTM, NAD83 17 - 84W TO 78W, METERS N - 4,226,039.220 : E - 405,660.425	

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DEC 03 2014

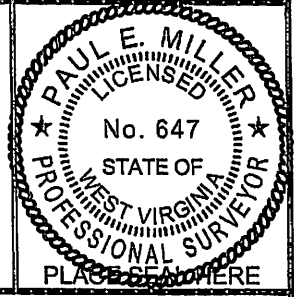
UNION DIST.
JEFFERSON DIST.
P-00281

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

FILE NO.	804417WO.DGN
DRAWING NO.	4417 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 <u>MAY 14</u> , 20 <u>14</u>	
		OPERATOR'S WELL NO. <u>804417</u>	
		API WELL NO. <u>47 043 02056</u>	
WELL TYPE: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> LIQUID INJECTION <input type="checkbox"/> WASTE DISPOSAL <input type="checkbox"/>		STATE	COUNTY
(IF "GAS,") PRODUCTION <input checked="" type="checkbox"/> STORAGE <input type="checkbox"/> DEEP <input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/>		<u>47</u>	<u>043</u>
LOCATION: ELEVATION <u>682'</u> WATER SHED <u>MUD RIVER</u>		PERMIT <u>02056</u>	
DISTRICT <u>UNION</u> COUNTY <u>LINCOLN</u>			
QUADRANGLE <u>HAGER, WV 7.5'</u>			
SURFACE OWNER <u>DAVID SIAS</u> ACREAGE <u>24</u>			
OIL & GAS ROYALTY OWNER <u>VIOLA ADKINS HRS.</u> LEASE ACREAGE <u>25</u>			
LEASE NO. <u>1-034726-000</u>		02/27/2015	
PROPOSED WORK: DRILL <input type="checkbox"/> CONVERT <input type="checkbox"/> DRILL DEEPER <input type="checkbox"/> REDRILL <input type="checkbox"/> FRACTURE OR STIMULATE <input type="checkbox"/> PLUG OFF OLD FORMATION <input type="checkbox"/> PERFORATE NEW FORMATION <input type="checkbox"/> OTHER PHYSICAL CHANGE IN WELL (SPECIFY) <u>WORKOVER PVA</u>			
PLUG AND ABANDON <input type="checkbox"/> CLEAN OUT AND REPLUG <input type="checkbox"/>			
TARGET FORMATION _____ ESTIMATED DEPTH _____			
WELL OPERATOR <u>CHESAPEAKE APPALACHIA L.L.C.</u> DESIGNATED AGENT <u>ERIC B. GILLISPIE</u>			
ADDRESS <u>PO BOX 18496 OKLAHOMA CITY, OK 73154-0496</u>		ADDRESS <u>CHESAPEAKE APPALACHIA LLC PO BOX 6070 CHARLESTON, WV 25362</u>	

FORM WW-6

COUNTY NAME
PERMIT