



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

September 06, 2013

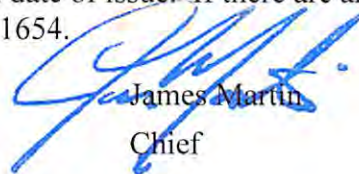
WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-4300464, issued to EQT PRODUCTION COMPANY, 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: 9
Farm Name: CANTERBURY, L
API Well Number: 47-4300464
Permit Type: Plugging
Date Issued: 09/06/2013

4300464P

cc 16364
\$400.00
(4 Permits)

Form WW-4 (B)
Permit Copy
Rev 2/01)

Date: August 13, 2013
Operator's Well
Well No. 011450 Lincoln Mineral #9
API Well No.: 47 043 - 00464

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

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

4) Well Type: Oil Gas Liquid Injection Waste Disposal:
 If Gas, Production Or Underground storage Deep Shallow

5) Elevation: 796.21 Watershed: Beech Branch
 Location: Washington County: Lincoln Quadrangle: Alum Creek
 District: _____

3) Well Operator EQT Production Company
120 Professional Place
 Address: Bridgeport, WV 26330

7) Designated Agent: Rex C. Ray
 Address: 120 Professional Place
Bridgeport, WV 26330

3) Oil & Gas Ralph Triplett
 Name: 5539 McCellan Hwy
 Address: Branchland, WV 25506

9) Plugging Contractor:
 Name: HydroCarbon Well Service
 Address: PO BOX 995
Buckhannon, WV 26201

10) Work Order: The work order for the manner of plugging this well is as follows:
See Attachment for details and procedures.

RECEIVED
Office of Oil and Gas
AUG 27 2013
WV Department of
Environmental Protection

OFFICE USE ONLY

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 August 21, 2013

09/06/2013

PLUGGING PROGNOSIS

Lincoln Mineral #9 (011450)

Lincoln County, West Virginia
API # 47-043-00464
District: Washington

BY: Craig Duckworth
DATE: 8/12/13

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CURRENT STATUS:

- 10 3/4" csg @ 21'
- 8 5/8" csg @ 383'
- 6 5/8" csg @ 1678'
- 3 1/2" csg @ 3940'
- 1 1/4" tbg @ 3940'

TD @ 3949'

Elevation @ 776.16'

Fresh Water @ 45' Salt Water @ none reported

Salt Sand @ 1217' Coal @ 371' - 375'

Gas shows @ 3200', 3365', 3406', 3485', 3500, 3520', 3865', 3908', 3921'

Oil Shows @ 3487'-3500'

Stimulation: @ shot 3130' to 3940' with 5400# Atlas Gelatin

OK
RDT

1. Notify State Inspector, Ralph Triplett 304-389-0350, and 24 hrs prior to commencing operations.
2. TOOH w/ 1 1/4" tbg, Attempt to pull 3", Check free point if unable to pull cut & pull 3".
3. TIH w/ tbg @ 3940'; Set 140' CIA Cement Plug @ 3940' to 3800' (Gas shows 3921', 3908', 3865')
4. TOOH w/ tbg @ 3800'; Gel hole @ 3800' to 3570'
5. TOOH w/ tbg @ 3570'; Set 420' CIA Cement Plug @ 3570' to 3150' (Gas Shows 3520', 3485', 3406', 3365', 3200') (Oil Show 3487' - 3500')
6. TOOH w/ tbg @ 3150'; Gel hole @ 3150' to 2325'
7. TOOH w/ tbg @ 2325'; Set 100' CIA Cement Plug @ 2325' to 2225' (Safety Plug)
8. TOOH w/ tbg @ 2225'; Gel hole @ 2225' to 1728'
9. TOOH w/ tbg to check free point on 7" csg, cut & pull at free point
10. TIH w/ tbg @ 1728'; Set 100' CIA Cement Plug @ 1728' to 1628' (7" csg)
11. Set a 100' CIA Cement Plug 50' In/Out of cut. Perf all FW, Coal, Oil and Gas shows below 7" cut. Do not omit any plugs
12. TIH w/ tbg @ 1628'; Gel hole @ 1628' to 1217'
13. TOOH w/ tbg @ 1217'; Set 100' CIA Cement Plug @ 1217' to 1117' (Salt Sand Top @ 1217')
14. TIH w/ tbg @ 1117'; Gel hole @ 1117' to 433'
15. TOOH w/ tbg @ 433'; Set 100' CIA Cement Plug @ 433' to 333' (8 5/8" csg & Coal @ 371' - 375')
16. TOOH w/ tbg to check free point on 8 5/8". Cut & pull at free point
17. Set a 100' CIA Cement Plug 50' In/Out of cut. Perf all FW, Coal, Oil and Gas shows below 8 5/8" cut. Do not omit any plugs
18. TOOH w/ tbg @ 333'; Gel hole @ 333' to 200'

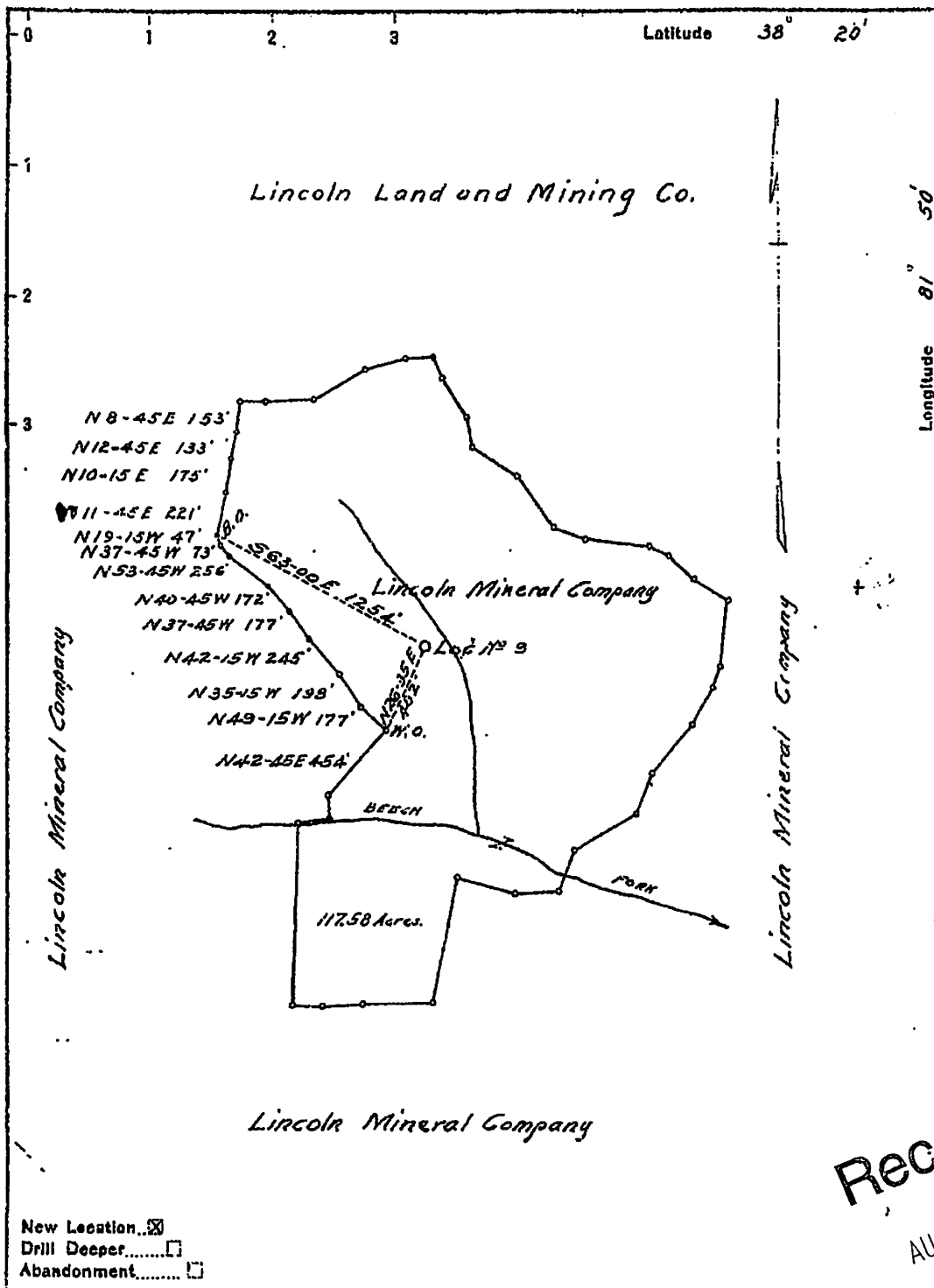
19. TOOH w/ tbg @ 200'; Set 200' C1A Cement Plug @ 200' to surface (Fresh Water @ 45')
20. Top off if necessary
21. Set Monument to WV-DEP Specifications
22. Reclaim Location & Road to WV-DEP Specifications

Received

AUG 15 2013

Office of Oil and Gas
WV Dept. of Environmental Protection

09/06/2013



New Location...
 Drill Deeper.....
 Abandonment.....

Company United Carbon Company
 Address Charleston, W.V.A.
 Farm Lincoln Mineral Company
 Tract N 93 Acres 3052 Lease No. 3945
 Well (Farm) No. 9 Serial No. 1045
 Elevation (Spirit Level) _____
 Quadrangle St. Albans
 County Lincoln District Washington
 Engineer E. W. Withrow
 Engineer's Registration No. _____
 File No. _____ Drawing No. _____
 Date Nov 1943 Scale 1" = 660'

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

WELL LOCATION MAP
 FILE NO. LIN-464

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.
 - Denotes one inch spaces on border line of original tracing.

Received
 AUG 15 2013

Office of Oil and Gas
 WV Dept. of Environmental Protection

WEST VIRGINIA DEPARTMENT OF MINES
OIL & GAS DIVISION
W E L L R E C O R D

Permit No. Lin 464
St. Albans Quad.
Company
Address
Farm
Location
Well No
District
Surface
Mineral
Commenced
Completed
Date shot

Open flow
Volume
Rock Proccuro
Fresh Water

United Carbon Company
Box 1913, Charleston, 27, W.Va.
Lincoln Mineral Company A- 3052
Beech Fork
9 (1145) Elev. 776.16'
Washington Lincoln County
Lincoln Mineral Co., Charleston, W.Va.
Same
Nov. 20, 1943
March 15, 1944
4-5-44 Depth 3130' to 3940'
with 5400# Atlas Gelatin
69/10ths W in 3"
788,000 C.F.
345 lbs. 96 hrs.
45' H.F.

Gas Well
CASING & TUBING
10 1/2 21'10 21'10
8 5/8 363' 363'
6 5/8 1678' 1678'
3 1/2 3940' 3940'
2 1/2 Syphon 3940' 3940'
OW Comb. Well &
Anchor Packer
Depth 1785'

Coal at 371' 48"

Clay	Y	0	40
Sand	Wh	40	48
Clay	R	48	60
Slate	Bl	60	238
Sand	Wh	238	335
Slate & Shells		335	371
Coal		371	375
Slate & Shells		375	953
Gas Sand		953	995
Bottling Sand		995	1174
Slate & Shells		1174	1217
Sand - Salt		1217	1270
Slate & Shells		1270	1305
Sand, Salt		1305	1330
Slate	Dk	1330	1344
Sand, Salt		1344	1449
Slate & Shells		1449	1461
Sand, Salt		1461	1502
Slate & Shells		1502	1526
Red Rock		1526	1534
Slate & Shells		1534	1560
Maxon Sand		1560	1592
Little Lime		1592	1612
Slate	Bl	1612	1618
Lime	Gr	1618	1647
Poncil		1647	1649
Dig Limo		1649	1317
Injun Sand		1317	1872
Slate & Shells		1872	2291
Shale	Dk	2291	2303
Berea Sand		2303	2325
Slate & Shells		2325	3500
Shale	Dr	3500	3576
Shale	Gr	3576	3760
Shale	Dr	3760	3775
Shale	Gr	3775	3812
Shale	Dr	3812	3936
Slate	Wh	3936	3944
TOTAL DEPTH			3949

Gas 3200' Show
Gas 3365' 21 MCF
Gas 3406' 26 MCF
Gas 3485' 32 MCF
Gas 3500' 58 MCF
Oil 3487-3500
Gas 3520' 73 MCF
Gas 3665 189 MCF
Gas 3908 133 MCF
Gas 3921 158 MCF
Gas 3921 179 MCF

Received

AUG 15 2013

Office of Oil and Gas
WV Dept. of Environmental Protection

4300464P

WW-4-A
Revised 6/07

1) Date: August 13, 2013
2) Operator's Well Number
011450 Lincoln Mineral #9
3) API Well No.: 47 043 - 00464
State County Permit

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

Check #16364
\$400.00
(4 permits)

4) Surface Owner(s) to be served:
(a) Name L. Canterbury ✓
Address P.O. Box 8694
South Charleston, WV 25303

(b) Name _____
Address _____

(c) Name _____
Address _____

6) Inspector Ralph Triplett ✓
Address 5539 McCellan Hwy
Branchland, WV 25506
Telephone 304-389-0350

5) (a) Coal Operator:
Name None
Address _____

(b) Coal Owner(s) with Declaration
Name Penn Virginia Resources Partners ✓
One Carbon Center
Address Suite 100
Chesapeake, WV 25315

Name _____
Address _____

(c) Coal Lessee with Declaration
Name _____
Address Coal River Mining ✓
P.O. Box 58370
Charleston, WV 25358

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 this 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 Division 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 this 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:
EQT Production Company
Victoria J. Roark
Permitting Supervisor
PO Box 280
Bridgeport, WV 26330
(304) 848-0076

Subscribed and sworn before me this 14 day of Aug., 2013
Pamela Sykes Notary Public
My Commission Expires: 8-24-22

The Office of Oil & 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 Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

Received
AUG 15 2013
09/06/2013
WV Dept. of Environmental Protection
Office of Oil and Gas

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

Operator Name: EQT PRODUCTION COMPANY OP ID: _____

Watershed: Beech Branch Quadrangle: Alum Creek

Elevation: 796.21 County: Lincoln District: Washington

Description of anticipated Pit Waste: Formation Fluids

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes ___ No X

Will synthetic liner be used in the pit? Yes Is so, what ml.? 30 ml

Proposed Disposal Method for Treated Pit Wastes:

- Land Application
- ____ Underground Injection - UIC Permit Number _____
- ____ Reuse (at API Number) _____
- ____ Offsite Disposal Permit #. _____
- ____ Other: Explain _____

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. _____

If oil based, what type? Synthetic, petroleum, etc. _____

Additives to be used? _____

Will closed loop system be used? _____

Drill Cuttings disposal method? Leave in pit, landfill, remove 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 terms 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 *Victoria Roark*

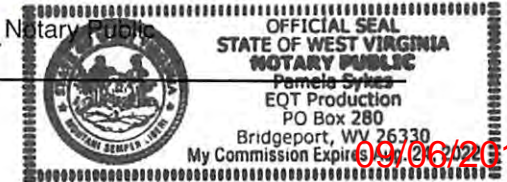
Company Official (Typed or Printed) Victoria Roark

Company Official Title Permitting Supervisor-WV

Subscribed and sworn before me this 14 day of Aug., 2013

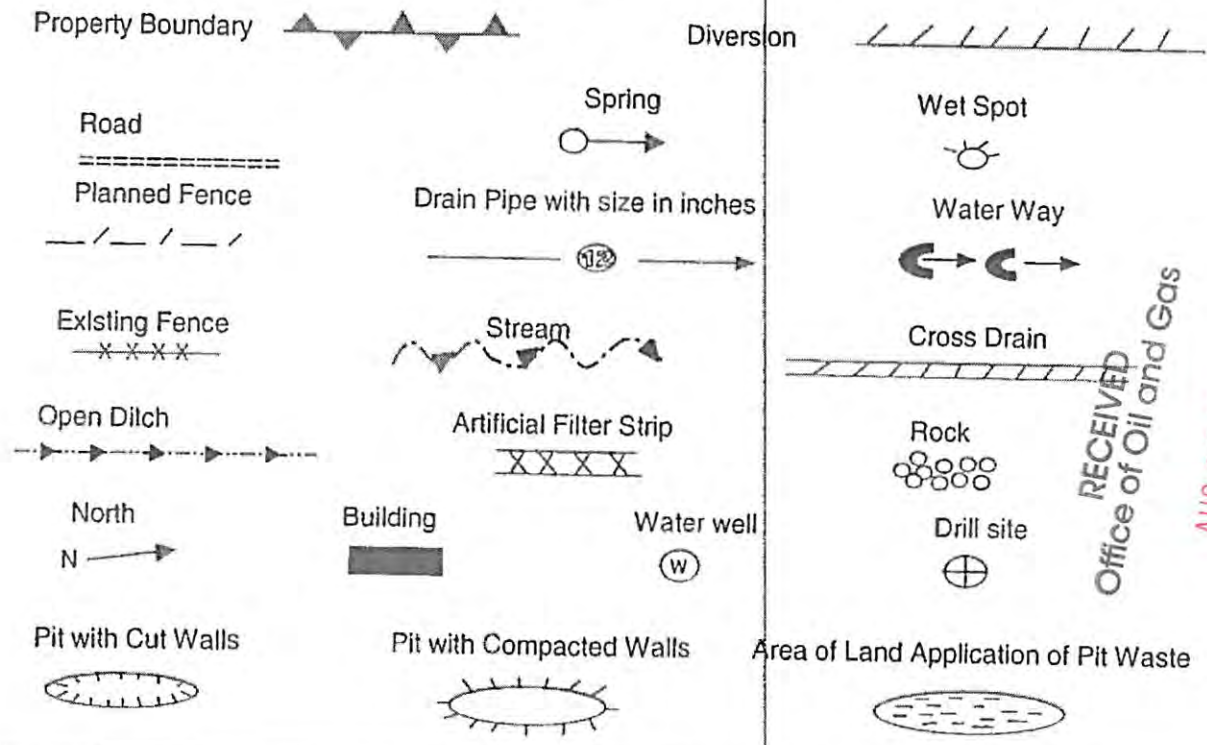
My Commission Expires 8-24-22

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WV Dept. of Environmental Protection



OPERATOR'S WELL NO.:
011450 Lincoln Mineral #9

LEGEND



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 AUG 27 2013
 WV Department of
 Environmental Protection

Proposed Revegetation Treatment: Acres Disturbed: 1± Prevegetation pH 5.8

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 2 Tons/acre or hydroseed.

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.
 Photocopies section of involved 7.5' topographic sheet.

Plan approved by: Ralph D. Tripp

Comments: _____

Title: District Inspector Date: August 21, 2013
 Field Reviewed? Yes No

4300464P

Topo Quad: Alum Creek 7.5'

Scale: 1" = 2000'

County: Lincoln

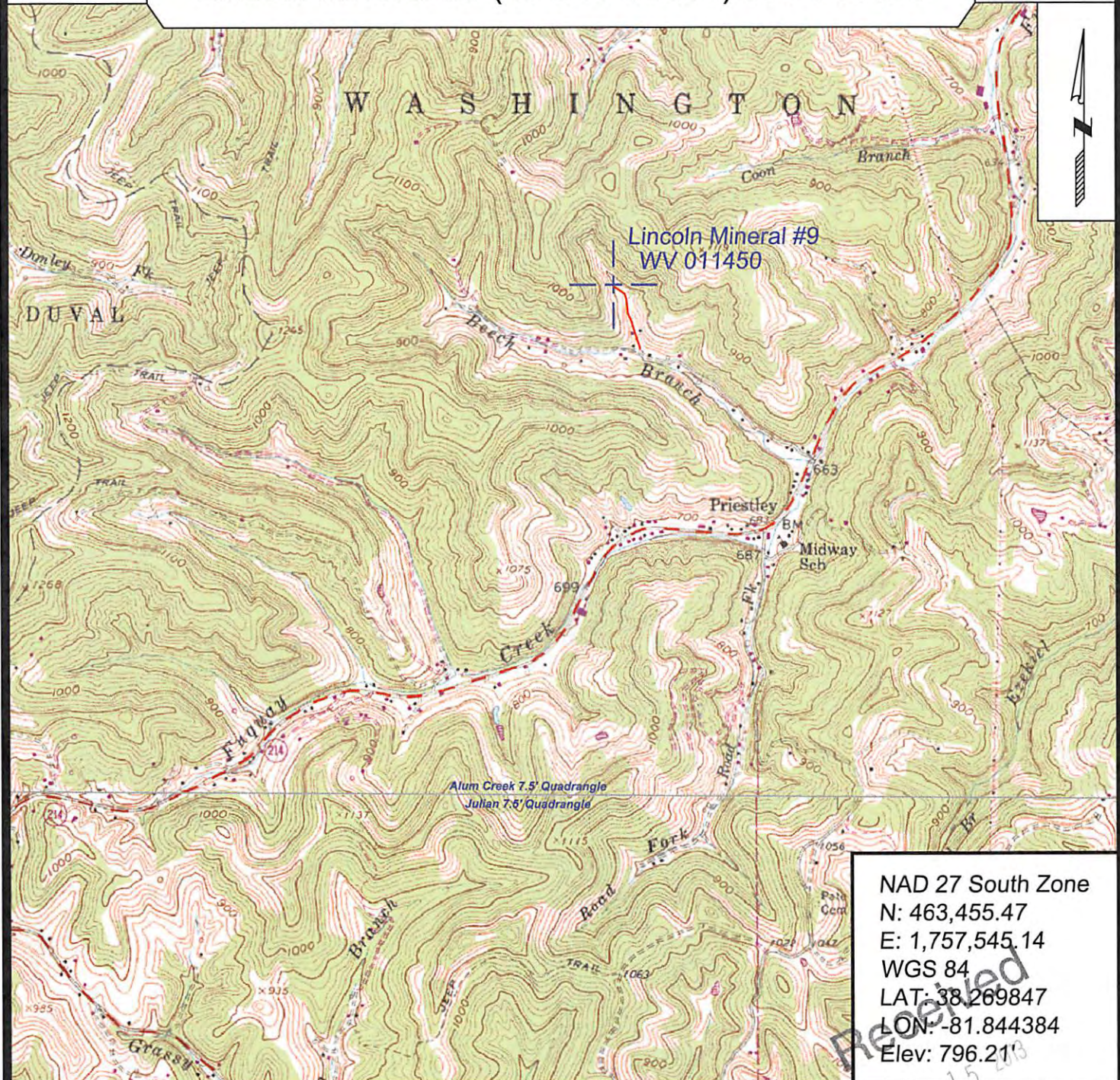
Date: August 1, 2013

District: Washington

Project No: 206-26-S-13

Lincoln Mineral #9 (47-043-00464) WV 011450

Topo



NAD 27 South Zone
 N: 463,455.47
 E: 1,757,545.14
 WGS 84
 LAT: 38.269847
 LON: -81.844384
 Elev: 796.21'



SURVEYING AND MAPPING SERVICES PERFORMED BY:
ALLEGHENY SURVEYS, INC.
 1-800-482-8606
 P.O. BOX 438
 BIRCH RIVER, WV 26610
 PH: (304) 649-8606
 FAX: (304) 649-8608

PREPARED FOR:
EQT Production Company
 P.O. Box 280
 Bridgeport, WV 26330

09/06/2013

WW-7
8-30-06



West Virginia Department of Environmental Protection
Office of Oil and Gas
WELL LOCATION FORM: GPS

API: 47-043-00464 WELL NO.: WV 011450 (Lincoln Mineral #9)

FARM NAME: Lincoln Land

RESPONSIBLE PARTY NAME: EQT Production Company

COUNTY: Lincoln DISTRICT: Washington

QUADRANGLE: Alum Creek 7.5'

SURFACE OWNER: L. Canterbury

ROYALTY OWNER: EQT Production Company

UTM GPS NORTHING: 4236093

UTM GPS EASTING: 426137 GPS ELEVATION: 242 m (796 ft)

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 X: Post Processed Differential X
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.

Stacy Ohm
Signature
8/7/13
Date

PS # 2180
Title

Received
AUG 15 2013
Office of Oil and Gas
West Virginia Dept. of Environmental Protection

Topo Quad: Alum Creek 7.5'

Scale: 1" = 2000'

County: Lincoln

Date: August 1, 2013

District: Washington

Project No: 206-26-S-13

Water

Lincoln Mineral #9 (47-043-00464) WV 011450



NAD 27 South Zone
 N: 463,455.47
 E: 1,757,545.14
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 LAT: 38.269847
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PREPARED FOR:
 WV Dept.
EQT Production Company
 P.O. Box 280
 Bridgeport, WV 26330