



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

July 11, 2013

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-1500168, 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.

A blue ink signature of James Martin.

James Martin
Chief

Operator's Well No: WV 412581 (THOMPSON #39)

Farm Name: BLOCH , STEPHANIE , ET AL

API Well Number: 47- 1500168

Permit Type: Plugging

Date Issued: 07/11/2013

Promoting a healthy environment.

07/12/2013

Date: May 21, 2013
Operator's Well _____
Well No. WV 412581 (Thompson#39)
API Well No.: 47 015 - 00168

**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 X Liquid Injection _____ Waste Disposal: _____
If Gas, Production X Or Underground storage _____ Deep _____ Shallow X

5) Elevation: 1300' Watershed: Charley Branch
Location: Pleasant County: Clay Quadrangle: Elkhurst 7.5'
District: _____

6) 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

8) Oil & Gas Ed Gainer
Name: P.O. Box 821
Address: Spencer, WV 25276

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.

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Office of Oil & Gas

MAY 29 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 [Signature] Date 5/28/13

PLUGGING PROGNOSIS

Thompson Land & Coal "T" 39 (412581)

CLAY, COUNTY, WEST VIRGINIA

API # 47-015-00168

Clay N.W. Quad

Elevation: 1304'

BY: Craig Duckworth

DATE: 01/07/13

CURRENT STATUS:

10" csg @ 537'
8 1/4" csg @ Pulled
6 5/8" csg @ Pulled
5 1/16" csg @ 2104'
2" tbg @ 2294' Packer @ 2191' 2 x 5 3/16
TD @ 2271

Fresh Water @ None Reported

Salt Water @ 1297'

1st Salt Sand @ 1153'

Coal @ 514'-517'

Gas shows @ Gas Sand 1088' & 1st Salt Sand 1185' & Injun Sand 2229'

Oil Shows @ 1197'-1205'

Stimulation: Shot 11/22/39 @ 2218' - 2251' 90 qts.

1. Notify State Inspector, Ed Gainer 304-389-7582, 24 hrs prior to commencing operations.
2. Attempt to pull 2" tbg and packer set @ 2191'. If tbg and packer will not pull TIH w/ wireline to 2191' and cut 2" tbg @ 2191'. TOOH w/ tbg and check condition.
3. TIH w/ tbg @ 2191'; Set 100' C1A Cement Plug @ 2191' to 2091' (Packer, Injun Sand)
4. TOOH w/ tbg @ 2091'; gel hole @ 2091' to 2069'
5. Attempt to pull 5 3/16" csg. If csg will not pull, cut/shoot at freepoint 5 3/16"
6. Set a 100' C1A Cement Plug 50' In/Out of cut. Perf all FW, Coal, Oil and Gas shows below 5 3/16" cut. Do not omit any plugs
7. TOOH w/ tbg @ 2069'; Set 100' C1A Cement Plug @ 2069' to 1969' (5 3/16" csg.)
8. TOOH w/ tbg @ 1880'; gel hole @ 1969' to 1297'
9. TOOH w/ tbg @ 1297'; Set 259' C1A Cement Plug @ 1297' to 1038' (SW @ 1297', 1st Salt Sand 1153'; Gas Show 1185'; Oil Show 1205'; Gas Show 1088).
10. TOOH w/ tbg @ 1038'; gel hole @ 1038' to 587'.
11. Set a 100' C1A Cement Plug 50' In/Out of cut. Perf all FW, Coal, Oil and Gas Shows below 10". Do not omit any plugs.
12. TOOH w/ tbg @ 587'; Set 123' C1A Cement Plug @ 587' to 464' (Coal 514'-517' & 10" @ 537')
13. TOOH w/ tbg @ 467'; gel hole @ 464' to 200'
14. TOOH w/ tbg @ 200'; Set 200' C1A Cement Plug @ 200' to 0 (Surface)
15. Top off as needed
16. Set Monument to WV-DEP Specifications
17. Reclaim Location & Road to WV-DEP Specifications

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5/28/13

07/12/2013

15 00 168P

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

Permit No. Cla-168
Clay Quad.

Gas Well
CASING & TUBING

Company	Thompson Gas Co.	13-1/2	20	20
Address	Box 1358, Charleston, W. Va.	10	343	537
Farm	Thompson Land & Coal Co. ACRES 5,000	8-1/4	1757	ulled
Well No.	T-39 ELEV. 1304-62	6-5/8	2010	ulled
District	Pleasant - Clay County	5-3/16	2104	2104
Mineral	Thompson Land & Coal Co.	2	2294	2271
Address	State College, Pa.			
Commenced	Aug. 31, 1939			
Completed	Nov. 30, 1939			
Shot	11/22/39 - Depth 2210-2251			
Volume	169,000 c.f. (24 hrs.)			
Rock Pressure	515 lbs. 48 hrs.			
Salt Water	1297 and 1430			

Packer - 07 Gas packer
Size - 2x5-3/16x16
Depth set - 2191
Perf. ton - 2233
" bot - 2251

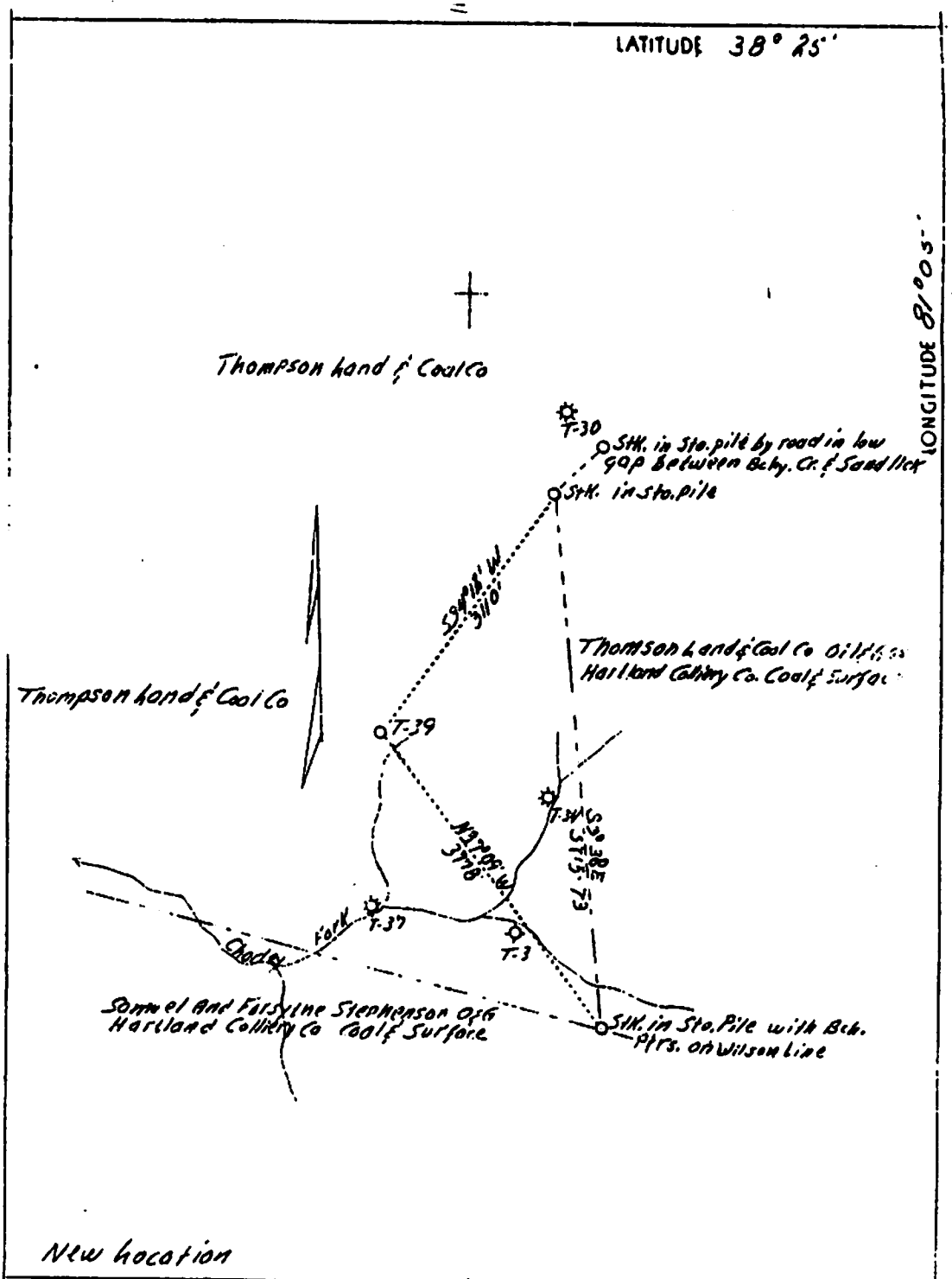
Coal at:
514' 36"

Gravel	0	15
Fire Clay	15	22
Sand	22	51
Slate	51	56
Sand	56	140
Slate	140	146
Sand	146	262
Slate	262	268
Lime	268	328
Slate	328	338
Lime	338	365
Sand	365	415
Slate&Shells	415	433
Black Lime	433	445
Slate	445	446
Sand	446	493
Slate&Shells	493	504
Lime	504	514
Coal	514	517
Sand	517	570
Slate & Shells	570	640
Black Lime	640	666
Gritty Lime	666	700
Slate&Shells	700	739
Gritty Lime	739	757
Slate&Shells	757	981
Sand	981	1045
Black Slate	1045	1048
Sand	1048	1064
Slate	1064	1070
Gas Sand	1070	1125
Slate & Sand Shells	1125	1153
1st Salt Sand	1153	1370
Slate & Shells	1370	1422
2nd Salt Sand	1422	1672
Slate & Shells	1672	1733
Broken Maxon Sand	1733	1792
Hard Maxon Sand	1792	1802
Red Rock & Shells	1802	1875
Slate&Shells	1875	1990
Little Lime	1990	2047
Pencil Cove	2047	2061
Big Lime	2061	2218
Injun Sand	2218	2251
Red Rock	2251	2271
Total Depth	2271	514'

Gas Show 1085
Gas show 1195'. Oil show 1197-1205
Water 1297' - 1 blr. per hr.
Water 1450' - hole full - Settling Sand 1425-1487
Gas well show 2229
Gas 2229-2236 - 89,000 c.f.
Decreased at 2241' to 85,000 c.f.
7 hrs. later - 77,000 c.f.
30 hrs. later - 63,000 c.f.
Initial open flow 169,000 c.f. (24 hrs.)

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MAY 23 2013



New location

Company	Thompson Gas Co.
Address	Charleston, W.Va.
Farm	Thompson Land & Coal Co.
Tract	1
Acres	5000
Lease No.	T - 3
Serial No.	T - 39
Well (Farm) No.	18
El. (S.L.)	1304.62
Quadrangle	Clay N.W.
County	Clay
District	Pleasant
Eng.	D.A. Belcher
Filo No.	546. Sec. 2 - A - 1
Date	8/28/39
Scale	1" - 1320'

STATE OF WEST VIRGINIA
Department of Mines
OIL AND GAS DIVISION
Charleston

WELL LOCATION MAP

Filo No. Clay-168

x Denotes location of well on U.S. 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

MAY 23 2013

Office of Oil and Gas
WV Dept. of Environmental Protection

1500168 P

WW-4-A
Revised 6/07

- 1) Date: May 21, 2013
- 2) Operator's Well Number
WV 412581 (Thompson#39)
- 3) API Well No.: 47 015 - 00168
State County Permit

Check # 15539
\$ 200.00


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

<p>4) Surface Owner(s) to be served:</p> <p>(a) Name <u>Mr. Edward Stephenson Jr. et al</u> ✓ Address <u>50 Washington St. 4th Floor</u> <u>Norwalk, CT 06854</u></p> <p>(b) Name _____ Address _____</p> <p>(c) Name _____ Address _____</p> <p>6) Inspector <u>Ed Gainer</u> ✓ Address <u>P.O. Box 821</u> <u>Spencer, WV 25276</u> Telephone <u>304-389-7582</u></p>	<p>5) (a) Coal Operator: Name <u>None</u> Address _____</p> <p>(b) Coal Owner(s) with Declaration Name <u>Mr. Edward Stephenson Jr. et al</u> ✓ <u>50 Washington St. 4th Floor</u> Address <u>Norwalk, CT 06854</u></p> <p>Name _____ Address _____</p> <p>(c) Coal Lessee with Declaration Name <u>None</u> Address _____</p>
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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.

 <p>Subscribed and sworn before me this _____ day of _____, 2013</p> <p>My Commission Expires: <u>8-24-22</u></p>	<p>Well Operator: <u>EQT Production Company</u> By: <u>Victoria J. Roark</u> Its: <u>Permitting Supervisor</u> Address: <u>PO Box 280</u> <u>Bridgeport, WV 26330</u> Telephone: <u>(304) 848-0076</u></p> <p align="right">Notary Public</p>
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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 deprivacyofficer@wv.gov.

Office of Oil and Gas
WV Dept. of Environmental Protection

07/12/2013

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: Charley Branch Quadrangle: Elkhurst 7.5'

Elevation: 1300' County: Clay District: Pleasant

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.

Received

Company Official Signature *Victoria Roark*

Company Official (Typed or Printed) Victoria Roark

Company Official Title Permitting Supervisor-WV Office of Oil and Gas

Subscribed and sworn before me this 21 day of May, 2013

Pamela Sykes Notary Public
My Commission Expires 8-24-20



OPERATOR'S WELL NO.:
WV 412581 (Thompson#39)

LEGEND

Property Boundary		Diversion	
Road		Spring	
Planned Fence		Drain Pipe with size in inches	
Existing Fence		Stream	
Open Ditch		Artificial Filter Strip	
North		Building	
		Water well	
Pit with Cut Walls		Pit with Compacted Walls	
		Area of Land Application of Pit Waste	
		Wet Spot	
		Water Way	
		Cross Drain	
		Rock	
		Drill site	

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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:

Comments: _____

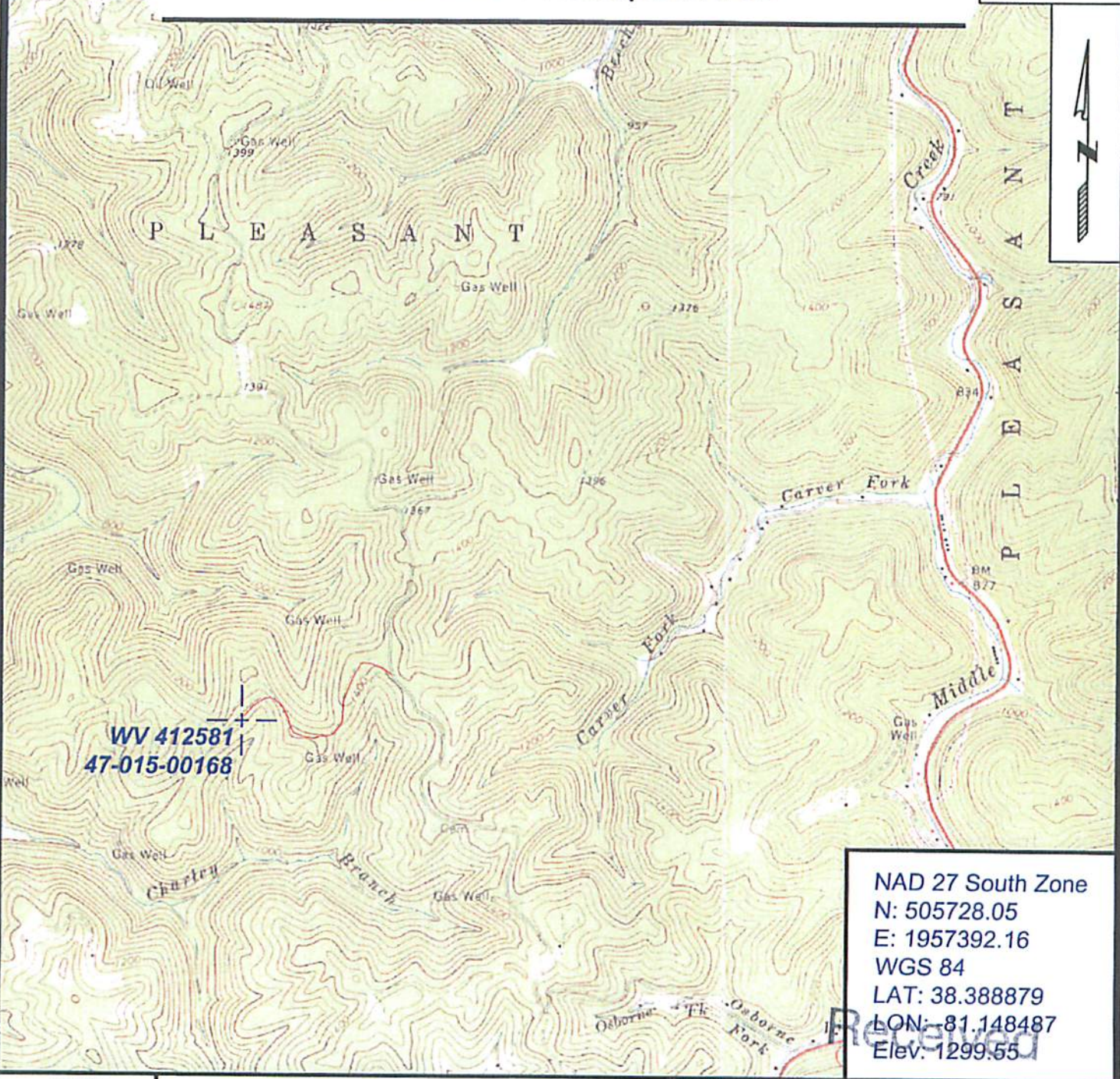
Title: Inspector Date: 5/28/13
Field Reviewed? Yes No

1500168P

Topo Quad: Elkhurst 7.5' Scale: 1" = 2000'
 County: Clay Date: April 26, 2013
 District: Pleasant Project No: 53-04-00-07

WV 412581 Thompson #39

Topo



WV 412581
47-015-00168

NAD 27 South Zone
 N: 505728.05
 E: 1957392.16
 WGS 84
 LAT: 38.388879
 LON: -81.148487
 Elev: 1299.55



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:
 MAY 23 2013
EQT Production Co. Inc.
 1710 Pennsylvania Ave.
 Charleston, WV 25302

07/12/2013

WW-7
8-30-06



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

API: 47-015-00168 WELL NO.: WV 412581 (Thompson #39)

FARM NAME: Thompson

RESPONSIBLE PARTY NAME: EOT Production Company

COUNTY: Clay DISTRICT: Pleasant

QUADRANGLE: Elkhurst 7.5'

SURFACE OWNER: Stephanie Bloch, et al

ROYALTY OWNER: Henry B. Davenport

UTM GPS NORTHING: 4248974

UTM GPS EASTING: 487032 GPS ELEVATION: 396 m (1300 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.

Ben Siefert
Signature

P.S. 2092
Title

4-30-2013
Date

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MAY 23 2013

1500168P

Topo Quad: Elkhurst 7.5'

Scale: 1" = 2000'

County: Clay

Date: April 26, 2013

District: Pleasant

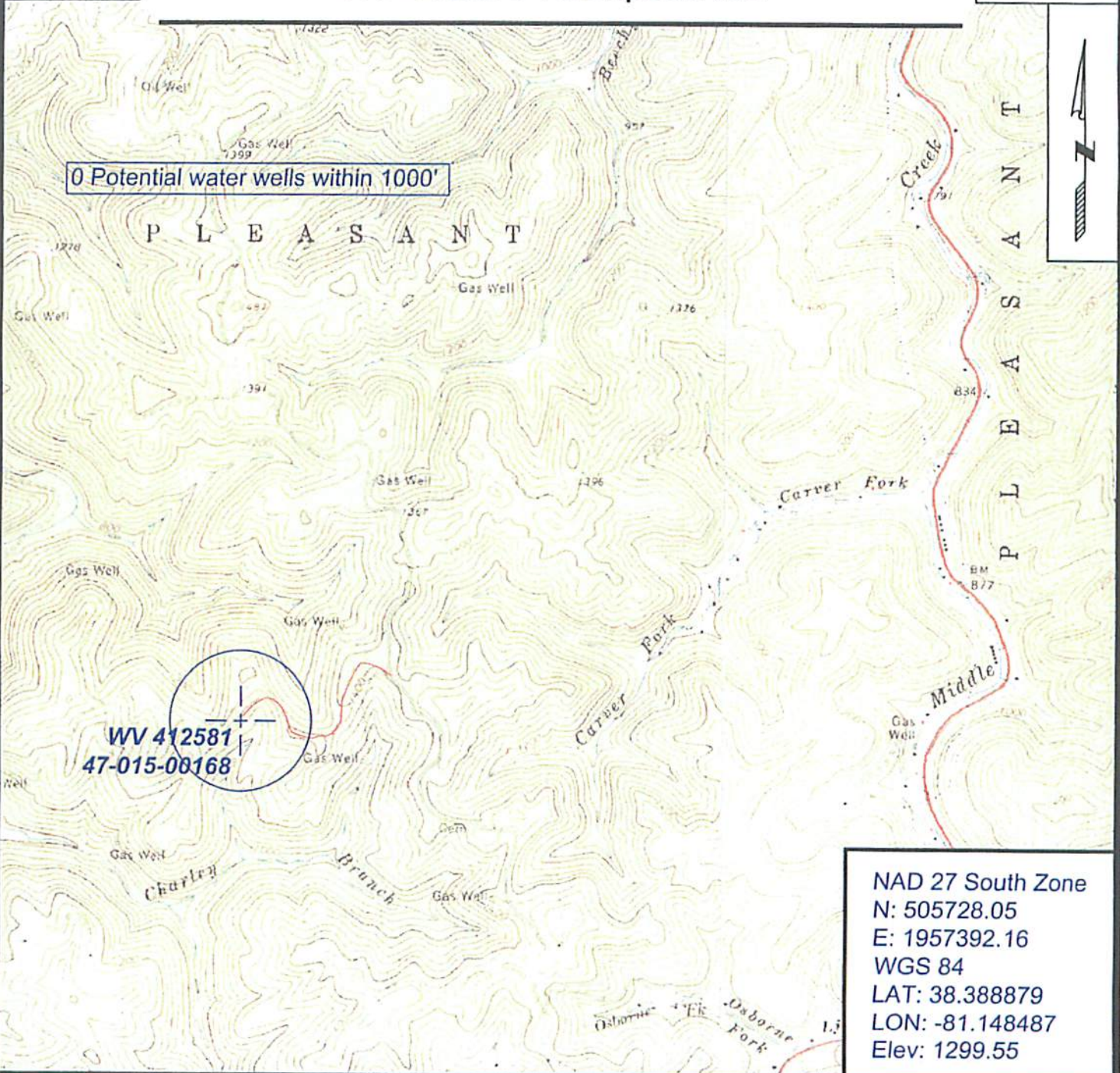
Project No: 53-04-00-07

Water

WV 412581 Thompson #39

Topo

0 Potential water wells within 1000'



WV 412581
47-015-00168

NAD 27 South Zone
 N: 505728.05
 E: 1957392.16
 WGS 84
 LAT: 38.388879
 LON: -81.148487
 Elev: 1299.55



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EQT Production Co. Inc.
 1710 Pennsylvania Ave.
 Charleston, WV 25302

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07/12/2013