



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 23, 2014

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-1501595, issued to TRIAD HUNTER, LLC, 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: J.B. CASTO #122
Farm Name: HANSHAW, CAROLYN
API Well Number: 47-1501595
Permit Type: Plugging
Date Issued: 04/23/2014

Promoting a healthy environment.

04/25/2014

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.

1501595P

(2014)

Plugging Procedure Attachment (Wells with 8 5/8" Casing)

Well Name : J.B. Casto # 122

Permit Number: 47-015-01595

District: Henry

County: Clay

MIIRU service rig and flowback tank; blow well down.

1. Pull tubing and rods OOH.
2. Check total depth with sandpump; clean out hole below bottom perforation.
3. Run 2 3/8" tubing below bottom perforation.
4. (Bottom Hole Plug) Mix/Pump 20 sacks Class A cement,(23.6 cu. ft.), ¼ lb.flocele/sk., no CaCl.
5. Displace cement through tubing with gel water.
6. Pull 2 3/8" tubing OOH.
7. RIH with casing cutter tool, check depth of 1st plug and find 4 ½" cement top (free pipe).
8. Cut-off 4 ½" casing just above the cement top, break circulation, and pull one jt. of casing OOH.
9. (Cut Plug) Mix/Pump 30 sacks Class A cement, (35.4 cu. ft.), ¼ lb. flocele/sk.,no CaCl.
10. Displace cement through casing with gel water.
11. Pull 4 ½" casing up to the subsea elevation depth.
12. (Elevation Plug) Mix/Pump 30 sacks of Class A cement,(35.4 cu. ft.), ¼ lb. flocele/sk., no CaCl.
13. Displace cement through casing with gel water.
14. Pull 4 ½" casing to 100 feet below surface.
15. (Surface Plug) Mix/Pump 30 sacks of Class A cement,(35.4 cu. ft.), ¼ lb. flocele/sk., no CaCl.
16. Circulate cement to surface.
17. Pull remaining joints of 4 ½" casing OOH. Top load annulus with Class A cement to surface.
18. Weld a three foot monument pipe on to the existing casing. Fill monument pipe with cement and attach identification plate to monument pipe.
19. RDMO service rig and supporting equipment.
20. Reclaim well site and lease road.

Elev 1057'

(Elev. Plug 1107' - 1007')

get 100 ft plug bottom surface elev. 260 - 160

Plug Summary

(Plug Name)	(Thickness)	(Cement Type)
1. Bottom Hole	250 ft.	Class A
2. Cut Plug	100 ft.	Class A
3. Elevation Plug	100 ft.	Class A
4. Surface Plug	100 ft.	Class A
5. Totals:		

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 Office of Oil and Gas
 FEB 20 2014
 WV Department of Environmental Protection
 110 sacks 129.8 cu. ft.
 190

PERFORATIONS: 1954' - 1964' (10)

04/25/2014

1) Date January 30, 20 14
2) Operator's
Well No. J.B. Casto # 122
3) API Well No. 47-015 - 01595

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 ___ / Liquid injection X / Waste disposal ___ /
(If "Gas, Production X or Underground storage ___) Deep ___ / Shallow X

5) Location: Elevation 1057' GPS Watershed Grannys Creek
District Henry 02 County Clay 15 Quadrangle Newton 512

6) Well Operator Triad Hunter, LLC 7) Designated Agent Kim Arnold
Address 125 Putnam Street Address P.O. Box 154
Marietta, Ohio 45750 Waverly, W.V. 26184

8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name Ed Gainer Name N/A
Address P.O.Box 821 Address _____
Spencer, W.V. 25276

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

(SEE ATTACHED SHEET)

See changes!

6% gel between all plugs

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Office of Oil and Gas

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

FEB 20 2014

Work order approved by inspector



WV Department of
Environmental Protection

1501595P

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

2-4-80, 19

FORM IV-35 (Obverse)

Operator's Well No. J. B. Casto 122 API Well No. 47 - 015-1595-1 State County Per

[08-78]

WELL OPERATOR'S REPORT OF DRILLING, FRACURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas / Liquid Injection XX / Waste Disposal (If "Gas", Production / Underground storage / Deep / Shallow)

LOCATION: Elevation: 1025.98' Watershed: Grannys Creek District: Henry County: Clay Quadrangle: Newton 7.5'

WELL OPERATOR Pennzoil Company DESIGNATED AGENT James A. Crews Address P. O. Box 1588 Parkersburg, WV 26101

PERMITTED WORK: Drill X / Convert / Drill deeper / Redrill / Fracture or stimulate Plug off old formation / Perforate new formation Other physical change in well (specify)

PERMIT ISSUED ON 3-20-79, 19 OIL & GAS INSPECTOR FOR THIS WORK: Name Martin Nichols Address Clendenin, WV

GEOLOGICAL TARGET FORMATION: Big Injun Depth 2006 feet Depth of completed well, 2030 feet Rotary X / Cable Tools Water strata depth: Fresh, salt, Coal seam depths: Is coal being mined in the area? No Work was commenced 6-22, 1979, and completed 12-27, 1979

CASING AND TUBING PROGRAM

Table with columns: CASING OR TUBING TYPE, SPECIFICATIONS (Size, Grade, Weight, New, Used), FOOTAGE INTERVALS (For drilling, Left in well), CEMENT FILL-UP OR SACKS (Cubic feet), PACKERS (Kinds, Sizes, Depths set, Perforations: Top, Bottom)

OPEN FLOW DATA

Producing formation: Water Injection Pay zone depth feet Gas: Initial open flow, Mcf/d Oil: Initial open flow, Bbl/d Final open flow, Mcf/d Final open flow, Bbl/d Time of open flow between initial and final tests, hours Static rock pressure, psig (surface measurement) after hours shut in

[If applicable due to multiple completion--]

Second producing formation: Pay zone depth feet Gas: Initial open flow, Mcf/d Oil: Initial open flow, Bbl/d Final open flow, Mcf/d Final open flow, Bbl/d Time of open flow between initial and final tests, hours Static rock pressure, psig (surface measurement) after hours shut in

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FORM IV-35
(Reverse)

[08-78]

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Fractured w/ 160BW, 250 gals. 15% HCL, 1000# 20/40 sd.

WELL LOG

FORMATION	Color	Hard or Soft	Feet		Remarks Including indication of all fresh and salt water, coal, oil and gas
			Top	Bottom	
Silt			0	111	
Sand			111	162	
Siltstone			162	228	
Sand			228	359	
Shale			359	366	
Sand			366	376	
Shale			376	400	
Sand			400	448	
Sand & Siltstone			448	484	
Sand			484	503	
Shale			503	555	
Sand			555	572	
Shale & Siltstone			572	601	
Sand			601	609	
Shale & Siltstone			609	650	
Sand			650	657	
Shale			657	668	
Shale			668	675	
Sand			675	682	
Shale			682	689	
Sand			689	814	
Shale & Siltstone			814	878	
Sand			878	900	
Shale & Siltstone			900	964	
Sand			964	972	
Shale & Siltstone			972	1024	
Sand			1024	1034	
Shale & Siltstone			1034	1124	
Sand			1124	1136	
Shale & Siltstone			1136	1158	
Sand			1158	1203	
Shale			1203	1207	
Sand			1207	1222	
Shale			1222	1228	
Sand			1228	1250	
Shale & Siltstone			1250	1292	
Sand			1292	1455	

(Attach separate sheets to complete as necessary)

Pennzoil Company
Well Operator

By _____ RECEIVED 04/25/2014
Civil Engineering Dept of Oil and Gas

FEB 20 2014

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Environmental Protection

NOTE: Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic, detailed geological record of all formations, including coal, encountered in the drilling of a well."

[08-78]

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all free and salt water, coal, oil and gas
Shale			1455	1474	
Sand			1474	1513	
Shale			1513	1528	
Sand			1528	1542	
Shale			1542	1557	
Sand			1557	1600	
Shale			1600	1612	
Sand			1612	1680	
Shale			1680	1732	
Sand			1732	1744	
Shale			1744	1760	
Little Lime			1760	1790	
Blue Monday			1790	1828	
Big Lime			1828	1870	
Loyalhanna			1870	1937	
Keener			1937	1946	
Pocono Big Injun			1946	1972	
Shale			1972	2006	
Squaw			2006	2016	
Shale			2016	2030	
Total Depth				2030	

Noted 3-12-80

(Attach separate sheets to complete as necessary)

Pennzoil Company
Well Operator

By Curtis A. Luman
Civil Engineering Dept.

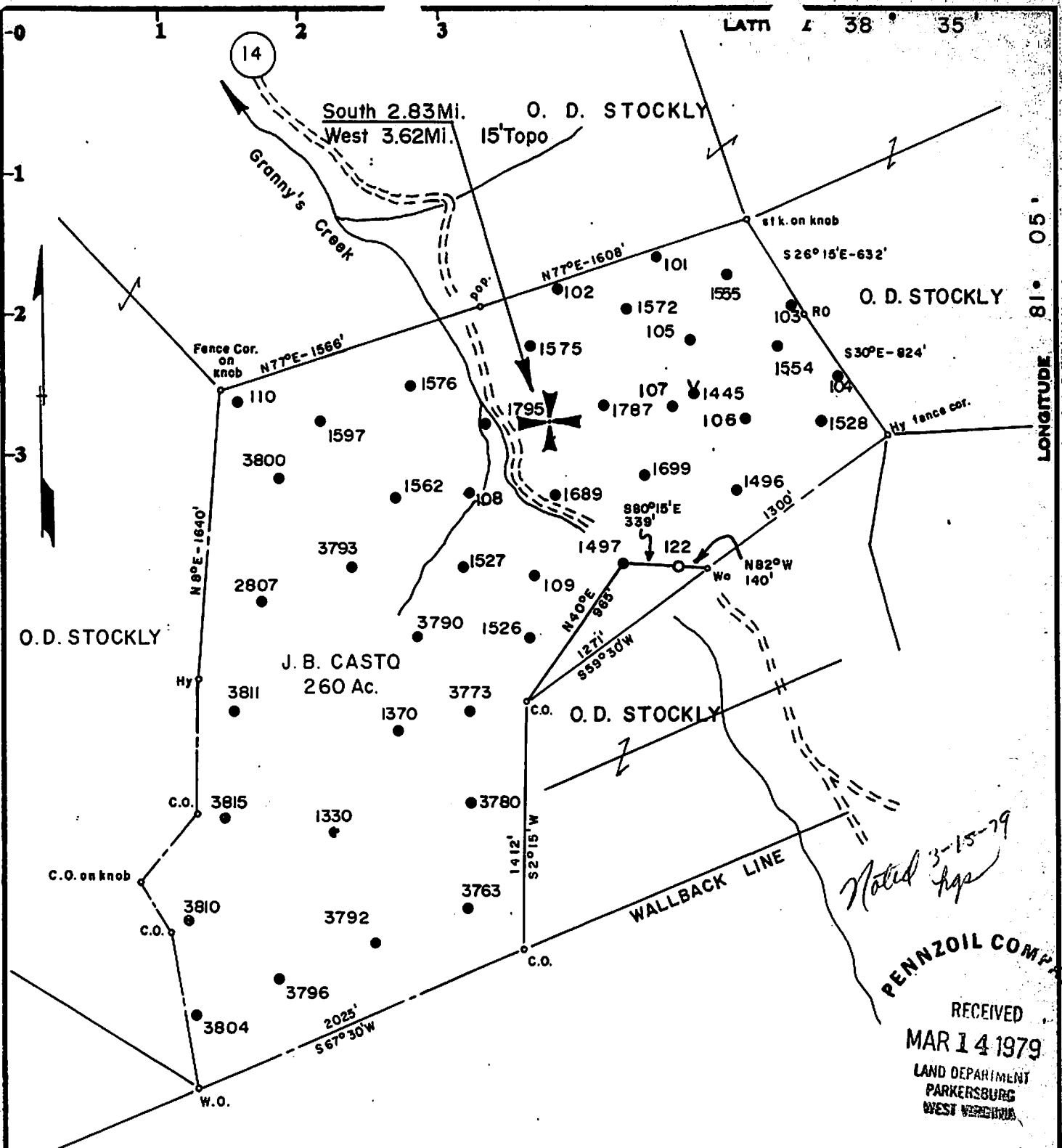
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NOTE: Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic, detailed geological record of all formations, including coal, encountered in the drilling of a well."

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1501545P



SURFACE-
Lydia Bullard
Valley Fork, W.Va.

Minimum Error of Closure 1 in 200
Source of Elevation O.D. STOCKLY #4, ELEV-1078.00

Fracture.....
New Location..... Water Injection
Drill Deeper.....
Abandonment.....

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.

Signed: Curtis A. Lucas
Map No. 83 Squares: N 8 62 E W 31, 32

Company	PENNZOIL COMPANY		
Address	P. O. Box 1588, Parkersburg, W. Va. 26101		
Farm	J. B. CASTO		
Tract	Acres	260	Lease No. 46485-up
Well (Farm) No.	122 WIW Serial No.		
Elevation (Spirit Level)	1025.98		
Quadrangle	OTTER 15'		
County	CLAY	District	HENRY
Surveyor	CURTIS A. LUCAS		
Surveyor's Registration No.	275		
File No.	1626	Drawing No.	
Date	3-2-79	Scale	1" = 800'

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

WELL LOCATION MAP

FILE NO. _____ 04/25/2014

RECEIVED
+ Denotes location of well on United States Topographic Map of scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown
FEB 20 1979

- Denotes one inch space on border line of original tracing.
WV Department of Environmental Protection

BRUNING 44-131 27198

N McCullough

BOND CEMENT AND/OR SONIC SEISMOGRAM LOG
 GAMMA RAY

FILING NO.

HBC-GR-SS-98767

COMPANY PENNZOIL COMPANY

WELL J.B. CASTO #122

FIELD HENRY DISTRICT

COUNTY CLAY STATE W. VA.

LOCATION

GRANNY'S CREEK

OTHER SERVICES:

PENNZOIL CO.
 PETROLEUM ENGR. DEPT.
 FILE COPY

SEC. TWP. RGE.

PERMANENT DATUM GL ELEV. 1025.98'

LOG MEASURED FROM KB 8' APD

DRILLING MEASURED FROM KB

ELEVATIONS:
 KB. 1033.98'
 DF. 1032.98'
 GL. 1025.98'

DATE 8-7-79

RUN NO. ONE

TYPE LOG BOND CEMENT-GAMMA RAY-SONIC SEISMOGRAM

DEPTH-DRILLER 2034'

DEPTH-LOGGER 2000.5'

BOTTOM LOGGED INTERVAL 1996'

TOP LOGGED INTERVAL 1520'

TYPE FLUID IN HOLE WATER

SALINITY PPM CL.

DENSITY LB./GAL.

LEVEL FULL

MAX. REC. TEMP. DEG. F.

OPR. RIG TIME 2-1/2 HOURS

RECORDED BY MAYFIELD

WITNESSED BY MR. HELDMAN

RUN BORE HOLE RECORD

CASING RECORD

NO.	BIT	FROM	TO	SIZE	WGT.	FROM	TO
1	7-7/8"	209'		8-5/8"		0	209'
	6-3/4"		TD	4-1/2"		0	TD

THIS HEADING AND LOG CONFORMS TO API RECOMMENDED STANDARD PRACTICE RP-33 (7)

FOLD HERE

RECEIVED

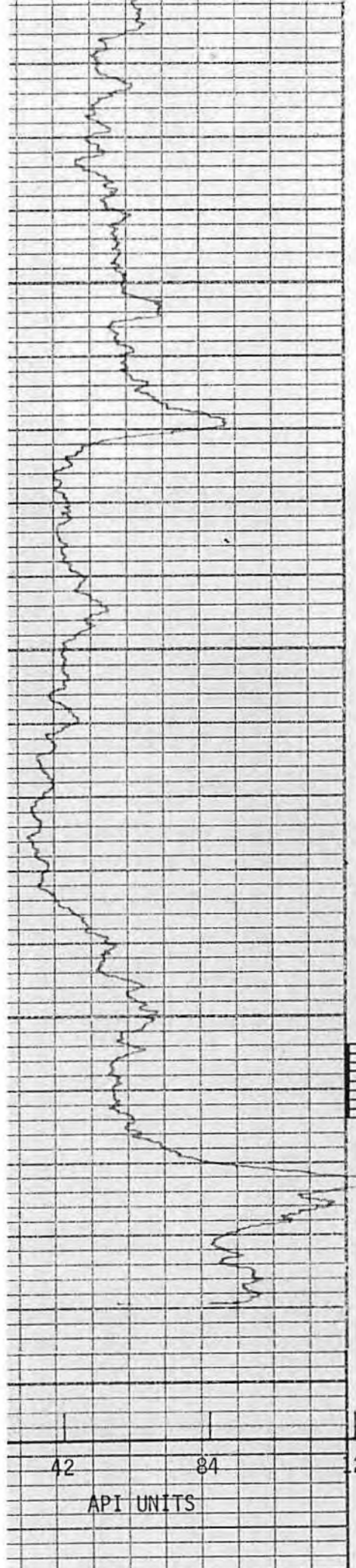
Office of Oil and Gas

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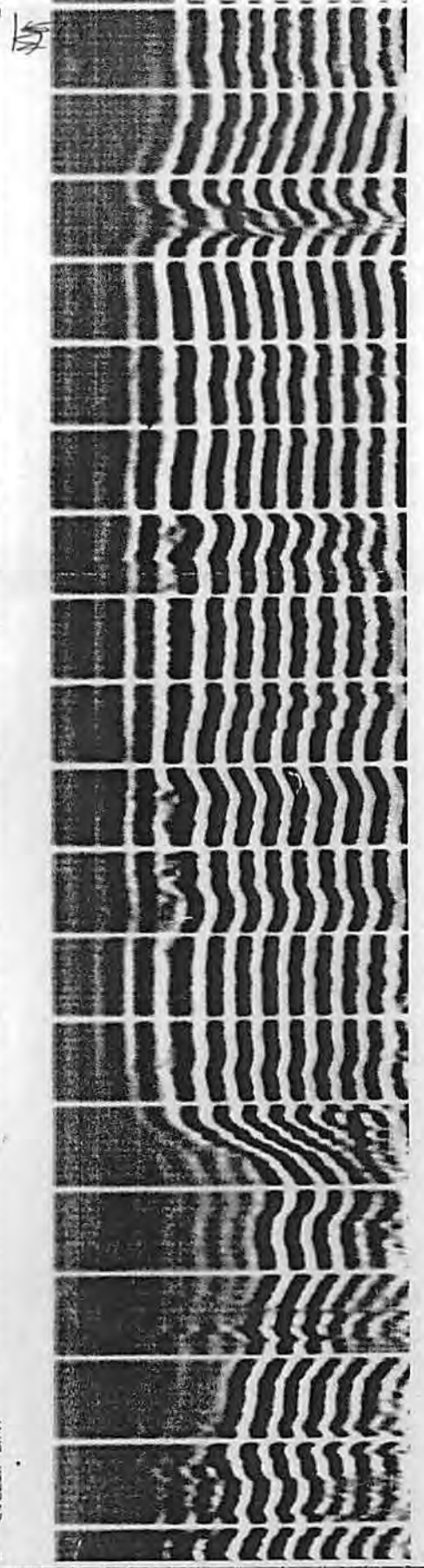
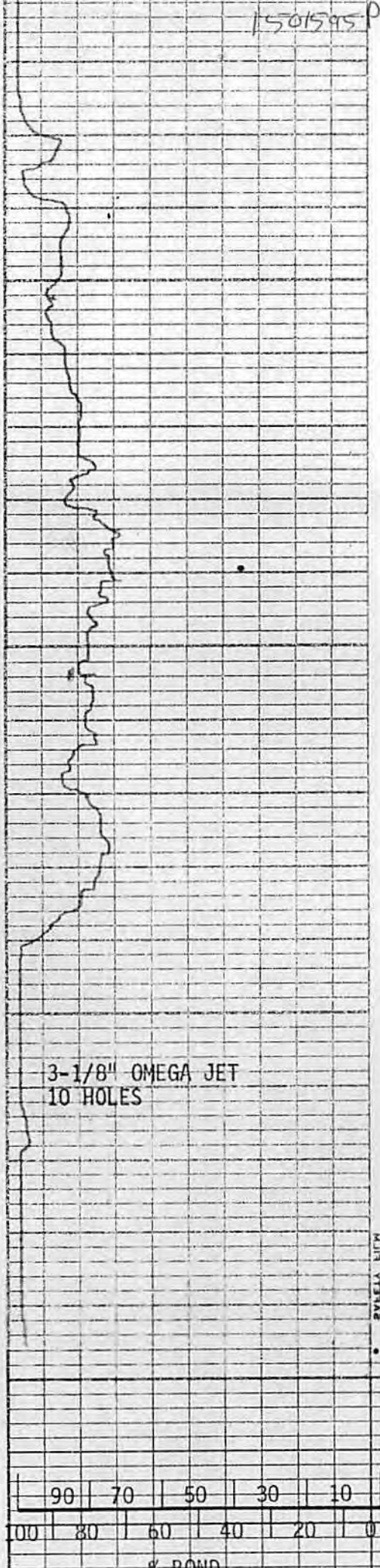
1501595 P



1850

1900

1950



04/25/2014

1501595A

WW-4A
Revised 6-07

1) Date: January 30, 2014
2) Operator's Well Number
J.B. Casto # 122

3) API Well No.: 47 - 015 - 01595

STATE OF WEST VIRGINIA
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:	5) (a) Coal Operator
(a) Name <u>Carolyn Hanshaw</u>	Name <u>N/A</u>
Address <u>142 White Road</u>	Address _____
<u>Wallback, W.V. 25285</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>N/A</u>
_____	Address _____
(c) Name _____	Name _____
Address _____	Address _____
_____	_____
6) Inspector <u>Ed Gainer</u>	(c) Coal Lessee with Declaration
Address <u>P.O. Box 821</u>	Name <u>N/A</u>
<u>Spencer, W.V. 25276</u>	Address _____
Telephone <u>(304) 389-7582</u>	_____

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 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 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 Triad Hunter, LLC

By: Rocky Roberts *Rocky Roberts*

Its: Senior V.P. Appalachian Operations

Address 125 Putnam Street

Marietta, Ohio 45750

Telephone (740) 374-2940

Subscribed and sworn before me this 30th day of January, 2014

Elizabeth I. Suby Notary Public

My Commission Expires 2-29-16

RECEIVED MAY 15 2014
Office of Oil and Gas
My Commission Expires
FEB 29 2014 / to

Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a 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.

04/25/2014

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7011 1570 0001 5396 3586

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Se Carolyn Hanshaw
 St 142 White Rd
 Ci Wallback, WV 25285

PS Instructions

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① ✓

J.B. Casto # 122

47-015-1595

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Se Carolyn Hanshaw
 St 142 White Rd
 Ci Wallback, WV 25285

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 WV Department of
 Environmental Protection

04/25/2014

1501595A

WW-9
Rev. 5/08

Page 1 of 2
API Number 47 - 015 - 01595
Operator's Well No. J.B. Casto # 122

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 Triad Hunter, LLC OP Code _____

Watershed Grannys Creek Quadrangle Newton

Elevation 1057' GPS County Clay District Henry

Description of anticipated Pit Waste: No Pit; fluids will be separated at Ovapa Facility; oil stored and salt water re-injected.

Will a synthetic liner be used in the pit? "No Pit"

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 Swabbing
- Workover Plugging
- Other (Explain _____)

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 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 *Rocky Roberts*

Company Official (Typed Name) Rocky Roberts

Company Official Title Senior V.P. Appalachian Operations

Subscribed and sworn before me this 30th day of January, 2014

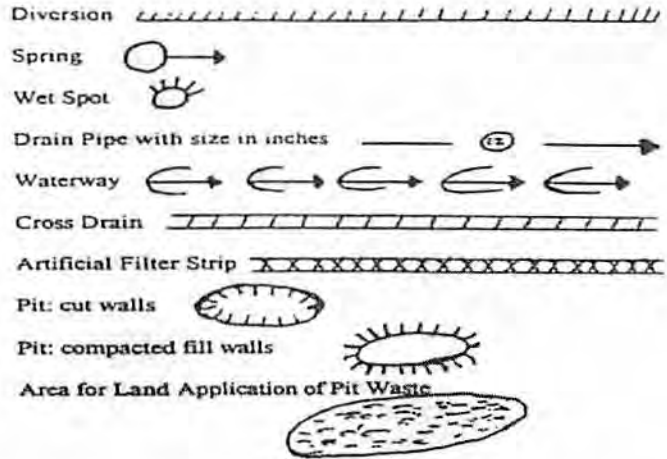
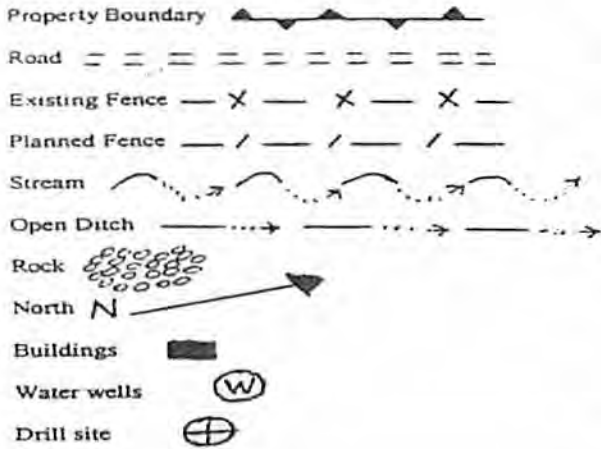
Elizabeth R. Suby Notary Public

My commission expires 2-29-16



04/25/2014

LEGEND



Proposed Revegetation Treatment: Acres Disturbed One (1) Prevegetation pH 5.5
 Lime Two (2) Tons/acre or to correct to pH 6.5
 Fertilizer (10-20-20 or equivalent) 600 lbs/acre (500 lbs minimum)
 Mulch 90 - 100 bales/acre Tons/acre

Seed Mixtures

Seed Type	Area I lbs/acre	Seed Type	Area II lbs/acre
Orchard Grass	30%		
Rye (Annual & BT)	35%		
Timothy (Climax)	25%		
Clover Med. Red)	10%		

Attach:
Drawing(s) of road, location, pit and proposed area for land application.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: 

Comments: _____

Title: Inspector Date: 2/4/14

Field Reviewed? () Yes () No

15 01595A

WW-7
8-30-06



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

API: 47-015-01595 WELL NO.: 122

FARM NAME: J.B. Casto

RESPONSIBLE PARTY NAME: Triad Hunter, LLC

COUNTY: Clay DISTRICT: Henry

QUADRANGLE: Newton

SURFACE OWNER: Carolyn Hanshaw

ROYALTY OWNER: Kanawha Banking and Trust Co. et al

UTM GPS NORTHING: 4265770

UTM GPS EASTING: 0487198 GPS ELEVATION: 1057'

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.

Ben Ametger Geologist 1/16/14
Signature Title Date

04/25/2014

1501595A



Chuck Taylor Toolbox

Geographic/UTM Coordinate Converter

You can convert between geographic coordinates and Universal Transverse Mercator (UTM) coordinates using this form.

Note: This is a JavaScript-powered form. If you have difficulties using this form, check your browser's settings to make sure you have enabled JavaScript.

Programmers: The JavaScript source code in this document may be copied and reused without restriction.

If you have a Java 1.1-compliant browser, and especially if you need to use an ellipsoid model other than WGS84, you may want to try the [Coordinate and Datum Transformations tool](#).

Geographic (degrees decimal)	To/From	UTM	
lon <input type="text" value="-81.146897257261"/>	[>>]	x (easting) <input type="text" value="0487198"/>	J. B. Casto # 122
lat <input type="text" value="38.540251172403"/>	[<<]	y (northing) <input type="text" value="4265770"/>	
		zone <input type="text" value="17"/>	
		hemisphere <input checked="" type="radio"/> N <input type="radio"/> S	

Geographic coordinates are entered and displayed in decimal degrees. Negative numbers indicate West longitudes and South latitudes. UTM coordinates are entered and displayed in meters. The ellipsoid model used for computations is WGS84.

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