



**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

May 08, 2014

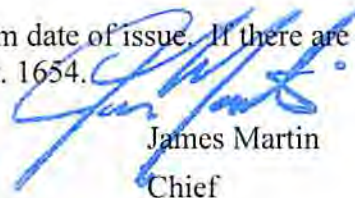
**WELL WORK PLUGGING PERMIT**

**Plugging**

This permit, API Well Number: 47-1501727, 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: R.R. LOCKHART #506  
Farm Name: BULLARD, RODNEY  
**API Well Number: 47-1501727**  
**Permit Type: Plugging**  
Date Issued: 05/08/2014

Promoting a healthy environment.

05/09/2014

4701501727

## 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

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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.

05/09/2014

1) Date January 30, 2014  
2) Operator's  
Well No. R.R. Lockhart # 506  
3) API Well No. 47-015 - 01727

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 1334' GPS Watershed Right Fork of Camp Run  
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!*  
*10% gel between all plugs*

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

Work order approved by inspector



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Date 2/4/14  
WV Department of  
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(2014)

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

Well Name : R.R. Lockhart # 506

Permit Number: 47-015-01727

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. *(BHP 2344' - 2094')*
6. Pull 2 3/8" tubing OOH.
7. RIH with casing cutter tool, check depth of 1<sup>st</sup> 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. *Elev. Plug (1384' - 1284')*
13. Displace cement through casing with gel water. *300 100 ft plug across bottom of surface eq - 550 to 450*
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.

Plug Summary

( Plug Name )	( Thickness )	( Cement Type )	( Sacks )	( Cubic Feet )
1. Bottom Hole	250 ft.	Class A	20	23.6
2. Cut Plug	100 ft.	Class A	30	35.4
3. Elevation Plug	100 ft.	Class A	30	35.4
4. Surface Plug	100 ft.	Class A	30	35.4
5. Totals:			<b>110 sacks</b>	<b>129.8 cu. ft.</b>

140

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Big Inflow 2250'

ELEV 1334'





STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
Oil and Gas Division

WELL RECORD

Rotary \_\_\_\_\_ Oil \_\_\_\_\_  
Cable \_\_\_\_\_ Gas \_\_\_\_\_  
Recycling \_\_\_\_\_ Comb. \_\_\_\_\_  
Water Flood  Storage \_\_\_\_\_  
Disposal \_\_\_\_\_ (Kind) \_\_\_\_\_

Quadrangle Newton 7.5'

Permit No. Permit No. 47-015-1727-LI

Company <u>Pennzoil Company</u>	Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Address <u>P. O. Box 1588, Parkersburg, WV 26101</u>				
Farm <u>R. R. Lockhart</u> Acres <u>142.6</u>	Size			
Location (waters) <u>Charleston Fork</u>	20-16			
Well No. <u>506</u> Elev. <u>142.6</u>	Cond.			
District <u>Henry</u> County <u>Clay</u>	13-10"			
The surface of tract is owned in fee by <u>Roy Rogers</u>	9 5/8			
Address <u>Valley Fork, WV</u>	8 5/8	503	503	300 sks
Mineral rights are owned by <u>Kanawha Banking &amp; Trust Co.</u> Address <u>P.O. Box 393, Charleston, WV</u>	7			
Drilling Commenced <u>7-8-80</u>	5 1/2			
Drilling Completed <u>7-14-80</u>	4 1/2	2337	2337	75 sks
Initial open flow _____ cu. ft. _____ bbls.	3			
Final production _____ cu. ft. per day _____ bbls.	2			
Well open _____ hrs. before test _____ RP.	Liners Used			

Attach copy of cementing record.

Well treatment details:  
Water Injection Well

Coal was encountered at \_\_\_\_\_ Feet \_\_\_\_\_ Inches  
Fresh water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Producing Sand \_\_\_\_\_ Depth \_\_\_\_\_

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Sand & Shale			0	68		
Shale			68	416		
Sand			416	441		
Shale & Sand			441	2064		
Little Lime			2064	2102		
Blue Monday			2102	2148		
Big Lime			2148	2176		
Loyalhanna			2176	2242		
Keener			2242	2250		
Big Injun			2250	2280		
Shale			2280	2303		
Squaw			2303	2316		
Shale			2316	2344		
Total Depth				2344		

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Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks

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05/09/2014

Date 1-16 WV Department of  
PENNZOIL Environmental Protection  
Guertin & Puccia 19 21  
Civil Eng. Dept. Owner

APPROVED

4701501727



# Basin Surveys, Inc.

## COMPENSATED DENSITY LOG

FILING NO.	COMPANY <u>PENNZOIL COMPANY</u>		
PERMIT No.	WELL <u>R.R. LOCKHART WIW #506</u>		
<u>47-012-17274</u>	FIELD <u>HENRY DISTRICT</u>		
	COUNTY <u>CLAY</u>	STATE <u>W.VA.</u>	
LOCATION: <u>CHARLESTON FORK</u>		OTHER SERVICES:	
<u>QUAD: NEWTON 75'</u>			
SEC _____	TWP _____	RGE _____	

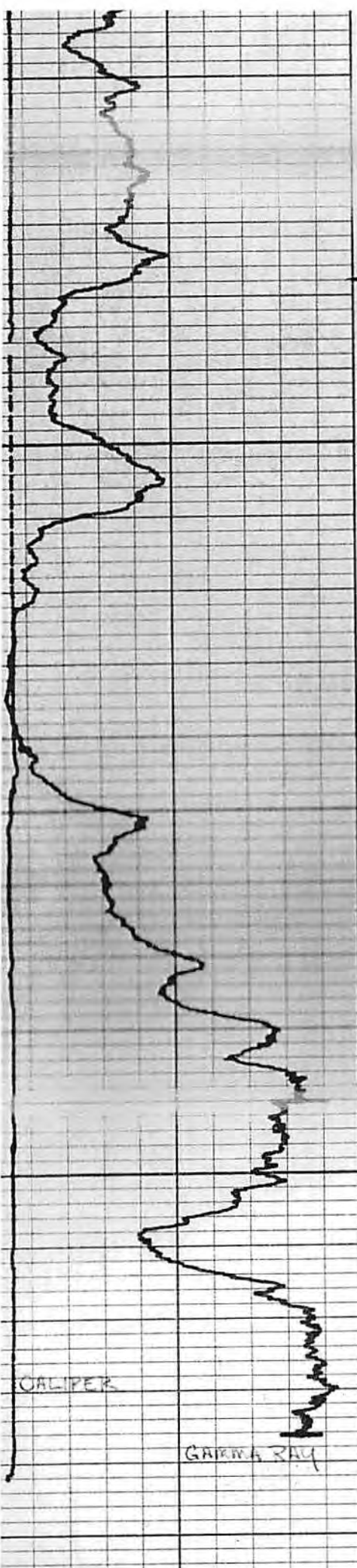
Permanent Datum: GROUND LEVEL ; Elev. 1316.62 Elev. K.B. 326.09  
 Log Measured From KELLY BUSHING 10 Ft. Above Perm. Datum DF 1335.07  
 Drilling Measured From KELLY BUSHING G.L. 1316.61

Date	<u>13 July 80</u>
Run No.	<u>ONE</u>
Type Log	<u>GR-CAL-CDL</u>
Depth—Driller	<u>2340</u>
Depth—Logger	<u>2344</u>
Bottom logged interval	<u>2342</u>
Top logged interval	<u>2300 GR TO SURFACE</u>
Type fluid in hole	<u>H<sub>2</sub>O-MUD</u>
Salinity, PPM Cl.	<u>NA</u>
Density	<u>NA</u>
Level	<u>NA</u>
Max rec. temp., deg F.	<u>NA</u>
Operating rig time	<u>2 HRS.</u>
Recorded by	<u>R. BEINCKE</u>
Witnessed by	<u>R. HELDMAN</u>

Run No.	Bit	Bore-Hole Record			Casing Record		
		From	To	Size	Wgt	From	To
<u>ONE</u>	<u>G74</u>		<u>T.O.</u>	<u>3 7/8</u>		<u>SURFACE</u>	<u>420</u>

05/09/2014

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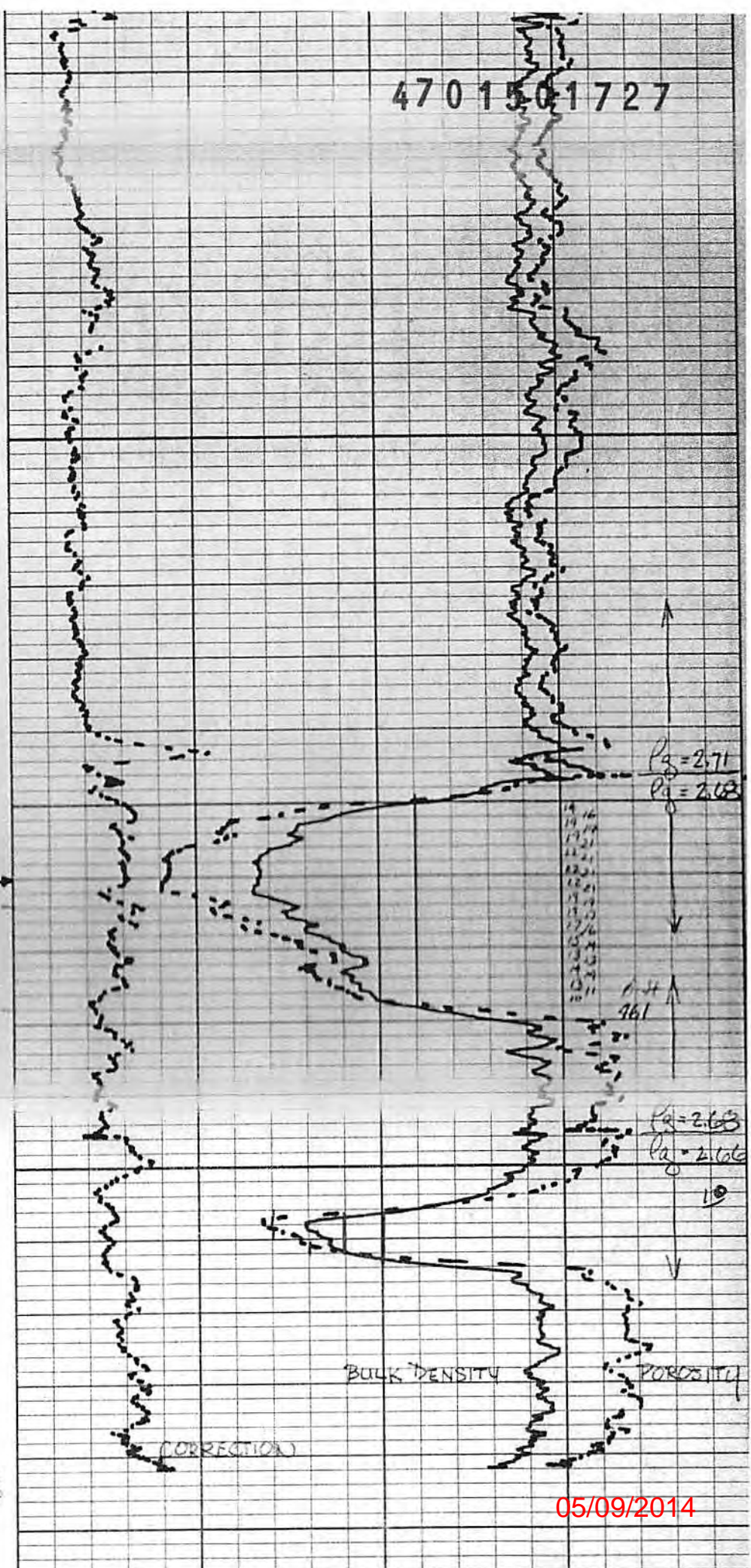


2200

Sand Notch 2260'

2300

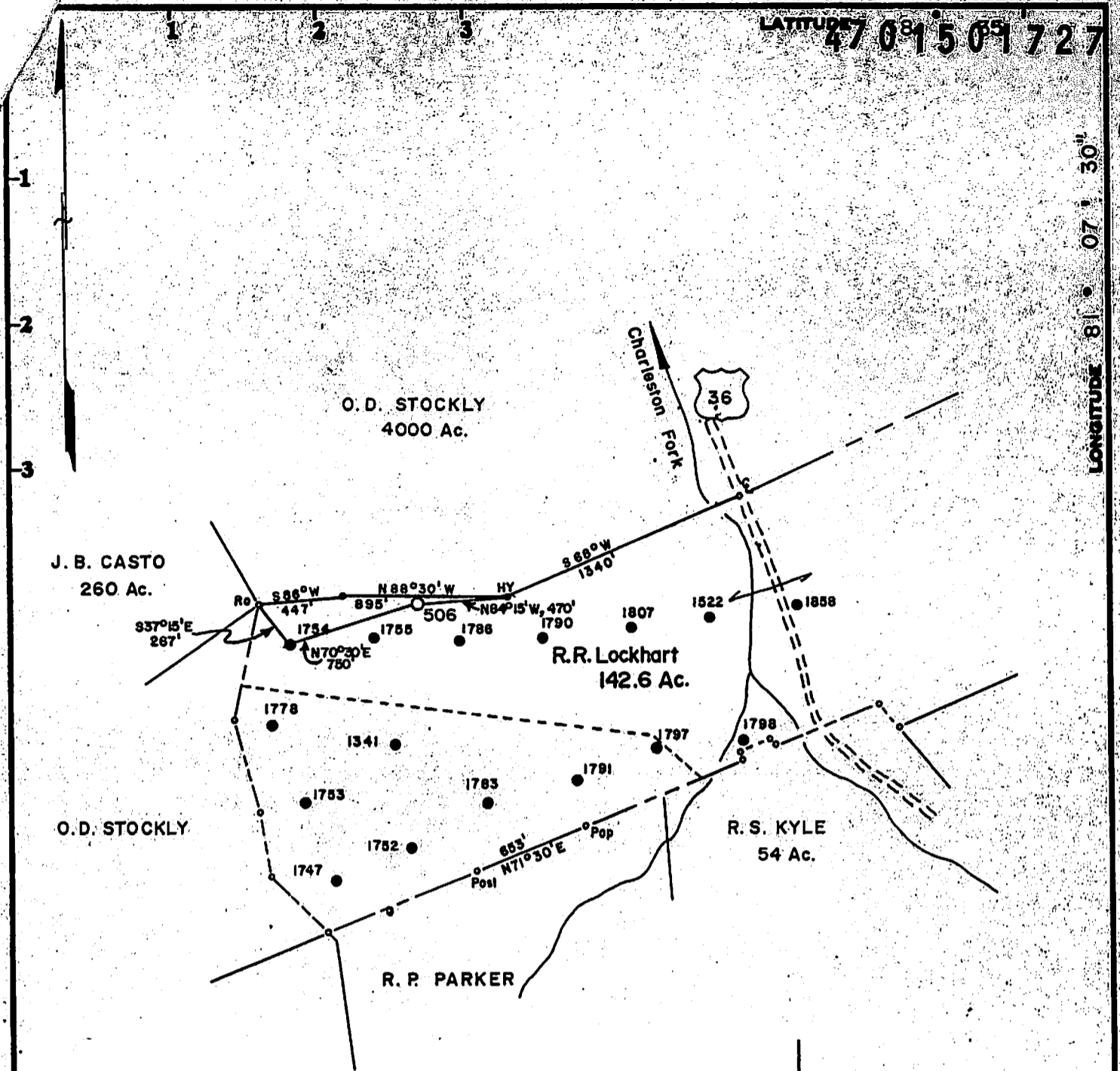
2342 FR  
2344 TD





LATITUDE 37° 01' 50" N 72° 7'

LONGITUDE 81° 07' 30" W



South 14,850'  
West 4,350'

7.5' TOPO

Minimum Error of Closure 1 in 200

Source of Elevation U.S.G.S. B.M. 46 JEA 1963, Elev. - 833.00'

SURFACE-  
Roy Rogers  
Valley Fork, WV

Fracture.....  
New Location..... Injection Well  
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 862 E W31

Company	PENNZOIL COMPANY	
Address	P. O. Box 1588, Parkersburg, W. Va. 26101	
Farm	R. R. LOCKHART	
Tract	Acres 142.6	Lease No. 46486-00
Well (Farm) No.	506	Serial No.
Elevation (Spirit Level)	1316.69	
Quadrangle	NEWTON 7.5'	
County	CLAY	District HENRY
Surveyor	CURTIS A. LUCAS	
Surveyor's Registration No.	275	
File No.	1659	Drawing No.
Date	2/12/80	Scale: 1" = 800'

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

WELL LOCATION MAP

FILE NO. \_\_\_\_\_

+ Denotes location of well on United States Topographic Maps, scale 1:62,500. Latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on original tracing.

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WV Department of Environmental Protection

BRUNING 44-131 27198

WW-4A  
Revised 6-07

1) Date: January 30, 2014  
2) Operator's Well Number  
R.R. Lockhart # 506

3) API Well No.: 47 - 015 - 01727

**STATE OF WEST VIRGINIA  
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>Rodney Bullard</u> Address <u>207 White Road</u> <u>Wallback, W.V. 25285</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, W.V. 25276</u> Telephone <u>( 304 ) 389-7582</u></p>	<p>5) (a) Coal Operator</p> <p>Name <u>N/A</u> Address _____</p> <p>(b) Coal Owner(s) with Declaration</p> <p>Name <u>N/A</u> Address _____</p> <p>Name _____ Address _____</p> <p>(c) Coal Lessee with Declaration</p> <p>Name <u>N/A</u> Address _____</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.

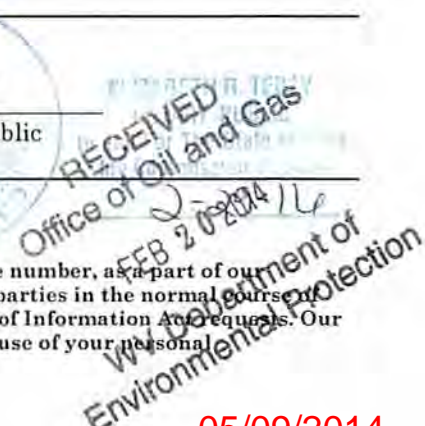
Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental 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  
Its: Senior V.P. Appalachian Operations  
Address 125 Putnam Street  
Marietta, Ohio 45750  
Telephone ( 740 ) 374-2940

Subscribed and sworn before me this 30<sup>th</sup> day of January, 2014  
Elizabeth K. Sub... Notary Public  
My Commission Expires 02-29-16

**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 [depprivacyoffier@wv.gov](mailto:depprivacyoffier@wv.gov).



4701501727

7011 1570 0001 5396 3685

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Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
<b>Total</b>	

Sent to: Rodney Bullard  
 207 White Rd  
 Wallback, WV 25285

PS Form 3800, June 2010

Postmark Here

MARIETTA, OH 45750  
 FEB 19 2014  
 USPS

Instructions

3

O.D. Stockly # 201                      47-015-1728

R.R. Lockhart # 506                      47-015-1727

R.P. Parker # 20694                      47-015-1954

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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 Right Fork of Camp Run Quadrangle Newton

Elevation 1334' 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

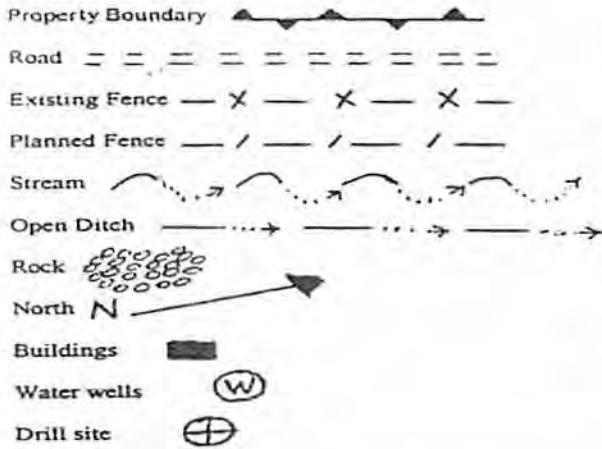
Company Official Title Senior V.P. Appalachian Operations

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

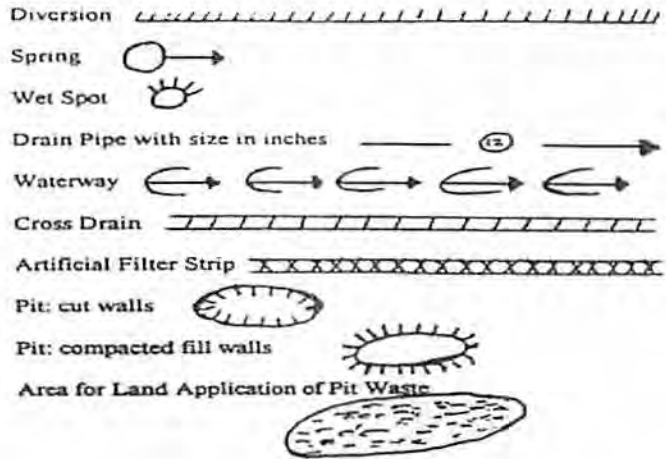
*Elizabeth R. Hubay* Notary Public

My commission expires 2-29-16





**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: [Signature]  
Comments: \_\_\_\_\_

Title: Inspector Date: 2/4/14

Field Reviewed? ( ) Yes ( X ) No



WW-7  
8-30-06

4701501727



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

API: 47-015-01727 WELL NO.: 506

FARM NAME: R.R. Lockhart

RESPONSIBLE PARTY NAME: Triad Hunter, LLC

COUNTY: Clay DISTRICT: Henry

QUADRANGLE: Newton

SURFACE OWNER: Rodney Bullard

ROYALTY OWNER: Black Stone Minerals LLP et al

UTM GPS NORTHING: 4266014

UTM GPS EASTING: 0487807 GPS ELEVATION: 1334'

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 Smeltzer  
Signature

Geologist  
Title

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1/17/14  
FEB 20 2014  
Date

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Environmental Protection  
05/09/2014



4701501727

*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="-81.139913532831"/>	[ >> ]	x (easting) <input type="text" value="0487807"/>	<i>R.R.Lockhart #506</i>
lat <input type="text" value="38.542458668790"/>	[ << ]	y (northing) <input type="text" value="4266014"/>	
		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.*

Chuck Taylor -- ([Copyright](#)) -- ([Contact](#))

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WV Department of  
Environmental ~~05/09/2014~~