



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 09, 2014

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-702378, issued to HARPER, HAYDEN ENERGY KA, 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: TINNEY 1629
Farm Name: BARNETT, JAMES & SHIRLEY
API Well Number: 47-702378
Permit Type: Plugging
Date Issued: 05/09/2014

Promoting a healthy environment.

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.

1) Date November 20, 20 13
2) Operator's
Well No. Tinney 1629
3) API Well No. 47-007 - 02378

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

CK
24752
100' =

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

4) Well Type: Oil ___ / Gas XX / Liquid injection ___ / Waste disposal ___ /
(If "Gas, Production ___ or Underground storage ___) Deep ___ / Shallow XX

5) Location: Elevation 1347.55 Watershed Long Run of Birch River
District Otter 03 County Braxton 7 Quadrangle Herold WV 7 1/2' 397

6) Well Operator Hayden Harper Energy KA, LLC 7) Designated Agent Brett McDonough
Address 1001 Moorehead Square Drive - Suite 350 Address 1001 Moorehead Square Drive - Suite 350
Charlotte, NC 28203 Charlotte, NC 28203

8) Oil and Gas Inspector to be notified Name Bryan Harris
Address P.O. Box 157
Volga WV 26238
9) Plugging Contractor Name Patchwork Oil and Gas
Address 8165 Elizabeth Pike
Elizabeth, WV 26143

10) Work Order: The work order for the manner of plugging this well is as follows:
See attached procedure and diagram on following page "API 47-007-02378 Tinney 1629"

CEMENT PLUGS MUST BE AT LEAST 100' CLASS A
CEMENT WITH NO MORE THAN 3% CaCl₂ AND NO
OTHER ADDITIVES.

GEL SPACERS BETWEEN ALL PLUGS MUST BE FRESH
WATER WITH AT LEAST 6% BENTONITE BY WEIGHT.

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JAN 03 2014
WV Department of
Environmental Protection

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

Work order approved by inspector _____ Date _____

OK gnm 1/09/2014

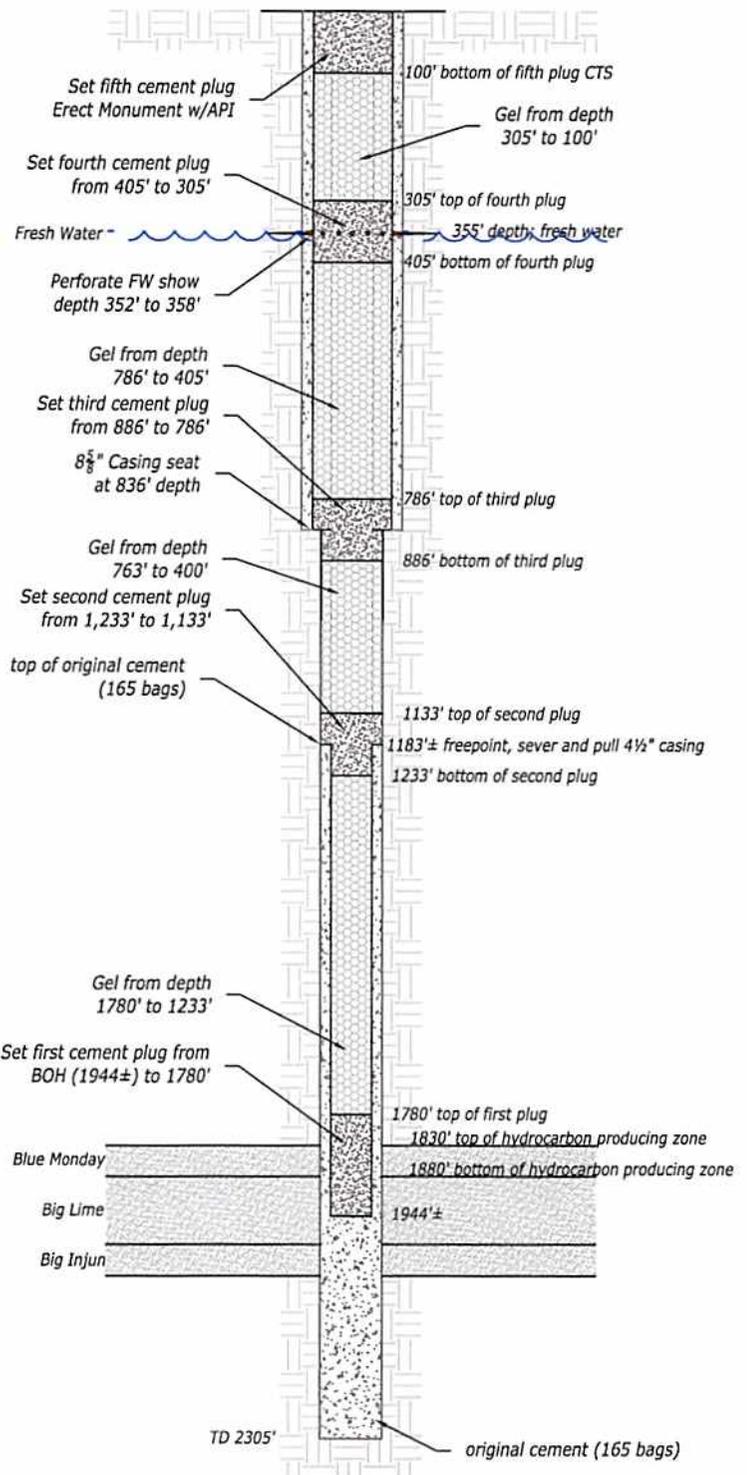
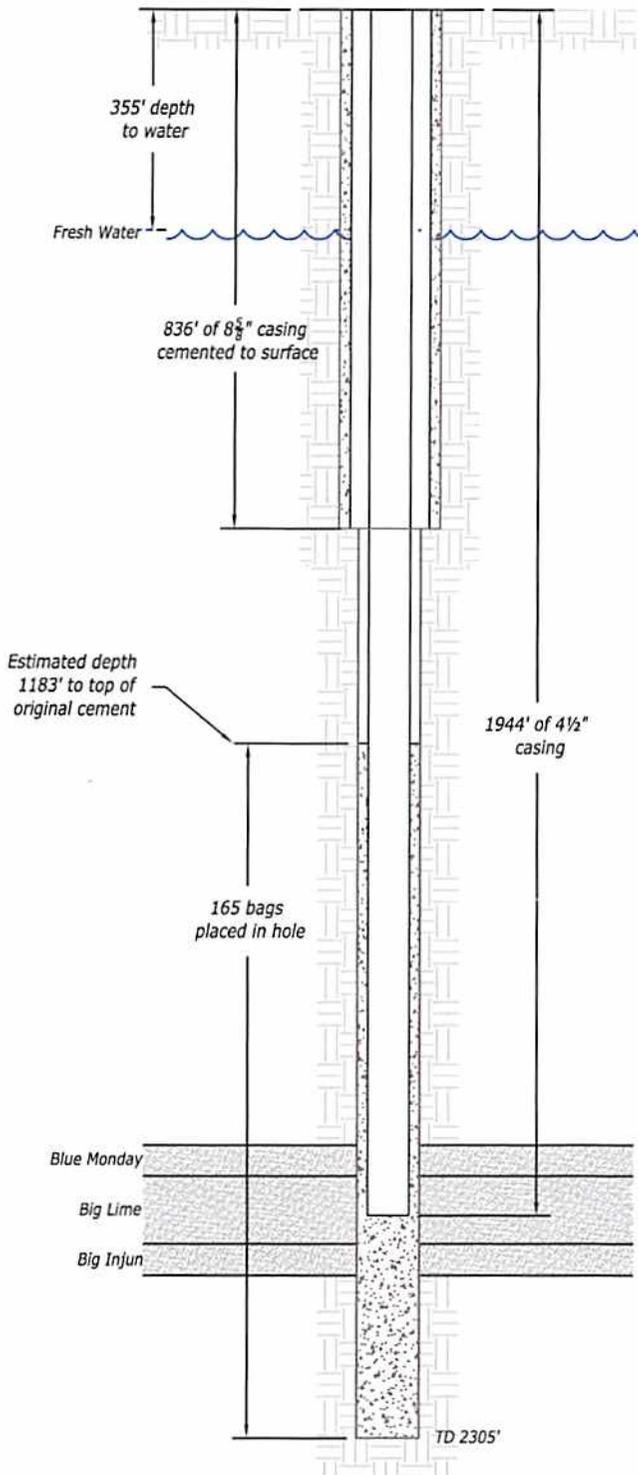
ELEVATION 1370'

702378P

Existing Status API 47-007-02378
Tinney 1629

Best Available Data

Plugging Plan; API 47-007-02378 P
Tinney 1629



Plugging Procedure: Contact Inspector Brian Harris 304-553-6087

- 1) Attempt to clean out well bore to total depth.
- 2) Circulate gel to 20' above cleaned out area, place the first cement plug from BOH to 1780' to close the hydrocarbon producing zone.
- 3) Attempt to pull the 4 1/2" casing; freepoint. sever and pull the 4 1/2" casing above the original cemented depth; 1183±.
- 4) Circulate gel from 1780' to 1233' depth, place the second cement plug from 1233' to 1133' to include casing cut and top of original cement.
- 5) Circulate gel from 1133' to 886' depth, place the third cement plug from 886' to 786' to include casing seat at 836' depth.
- 6) Perforate FW show from 352' to 358'
- 6) Circulate gel from 786' to 405'; set fourth cement plug from depth 405' to 305'.
- 7) Circulate gel from 305' to 100' then cement to surface.
- 8) Remove tubing and erect monument with API number affixed.



DO NOT PERFORATE CASING.

not to scale

Department of Environmental Protection

702378P

WK-35

API # 47-007-~~02358~~⁻⁰²³⁷⁸

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

BT

Well Operator's Report of Well Work

Farm name: **James F. Barnett etux** Operator Well No.: **Tinney 1629**

LOCATION: Elevation: **1370.00'** Quadrangle: **Herold 7.5"**

District: **Otter** County: **Braxton**
Latitude: **14320** Feet South of **38** Deg. **37** Min. **30** Sec.
Longitude: **7900** Feet West of **80** Deg. **45** Min. **00** Sec.

Company: **Linn Operating, LLC**
P. O. BOX 368
GLENVILLE, WV 26351-0368

Agent: **Judson E. Shreves**

INSPECTOR: **Craig Duckworth**
Permit Issued: **06/24/04**
Well work commenced: **07/12/04**
Well Work completed: **07/15/04**
Verbal Plugging
Permission granted on:
Rotary Cable Rig
Total Depth (feet) **2305'**
Fresh water depths (ft) **355'**
Salt water depths (ft) **none**
Is coal being mined in area (Y/N)? **n**
Coal Depths (ft): **none**

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cur. Ft.
8 5/8	836'	836'	C.T.S.
4 1/2		1944'	165 sks.

OPEN FLOW DATA

Producing formation **BM** Pay zone depth (ft) **see treat.**
Gas: Initial open flow **na** MCF/d Oil: Initial open flow **na** Bbl/d
Final open flow **60** MCF/d Final open flow **na** Bbl/d
Time of open flow between initial and final tests **4** Hours
Static Rock pressure **460** psig (surface pressure) after **48** Hours

Second producing formation _____ pay zone depth (ft) _____
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 pressure) after _____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATION, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

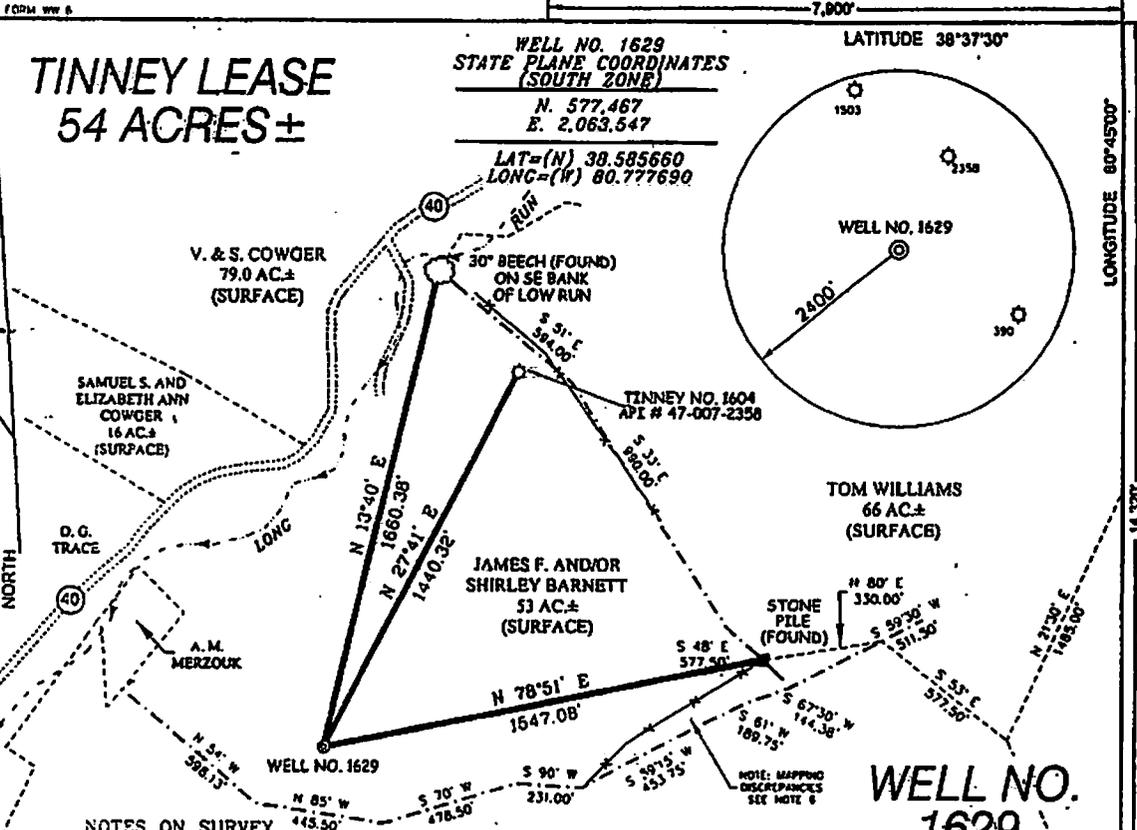
Office of Oil and Gas
Daniel R. Chapman
For: **Linn Operating, LLC**
By: **Daniel R. Chapman, Geologist**
Date: **November 12, 2004**
BRH
2378

1st Stage: Blue Monday(1870-1850) 500 gal 15% HCl, 359 sks 20/40,
160 mcf N2, 146 bbl H2O

Sand, shale	0	1415	1" stream @ 355'
Sand, shale, RR	1415	1635	
Sand, shale	1635	1786	
Little Lime	1786	1806	
Shale	1806	1830	
Blue Monday	1830	1880	
Big Lime	1880	1990	
Big Injun	1990	2041	
Shale	2041	2305	T.D.

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NOTES ON SURVEY

1. TIES TO WELLS AND CORNERS ARE BASED ON GRID NORTH FOR THE WV STATE PLANE COORDINATE SYSTEM SOUTH ZONE MAD '27.
2. TIES TO REFERENCES ARE BASED ON MAGNETIC NORTH 5/24/04.
3. LEASE BOUNDARY SHOWN HEREON TAKEN FROM DEED BOOK 485 AT PAGE 513 AND ADJOINING DEED DESCRIPTIONS.
4. SURFACE OWNER AND ADJONER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF BRAXTON COUNTY IN FEBRUARY, 2004.
5. WELL LAT./LONG. ESTABLISHED BY DGPS (SUBMETER MAPPING GRADE).
6. MAPPING DISCREPANCIES IN THIS AREA OF THE LEASE CREATE UNCERTAINTY AS TO OWNERSHIP DUE TO VAGUE AND INCOMPLETE DEED DESCRIPTIONS.

REFERENCES

WELLS NO. 1629

12" SUGAR MAPLE

14" SUGAR MAPLE

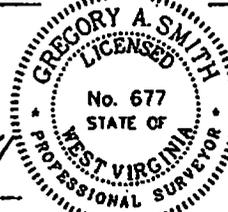
WOODS

WOODS

1" = 100'

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 DIVISION OF ENVIRONMENTAL PROTECTION.

P.S. Gregory A. Smith



(*) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

DATE JUNE 2, 20 04

OPERATORS WELL NO. TINNEY NO. 1629

API WELL NO. 47 - 007 - 02319

STATE 007 COUNTY 02319 PERMIT

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 5453P1629 (169-20)

PROVEN SOURCE OF ELEVATION DGPS (SUBMETER MAPPING GRADE) SCALE 1" = 500'

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

WELL TYPE: OIL GAS INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION 1,370' WATERSHED LONG RUN

DISTRICT OTTER COUNTY BRAXTON QUADRANGLE HEROLD 7.5'

SURFACE OWNER JAMES F. AND/OR SHIRLEY BARNETT ACREAGE 53±

ROYALTY OWNER WILLIAM A. DUNN, ET AL LEASE ACREAGE 54±

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER

PHYSICAL CHANGE IN WELL (SPECIFY) JAN 1 2011 TARGET FORMATION BKG INJUN ESTIMATED DEPTH 2,400'

WELL OPERATOR LINN OPERATING, LLC DESIGNATED AGENT JUDSON E. SHREVES

ADDRESS 1700 NORTH HIGHLAND ROAD, SUITE 400 ADDRESS P.O. BOX 368

PITTSBURGH, PA 15241 LEWISBURG, WV 26351

COUNTY NAME BRAXTON

PERMIT 2378

702378P

WW-4A
Revised 6-07

1) Date: November 20, 2013
2) Operator's Well Number
Tinney 1629
3) API Well No.: 47 - 007 - 02378

**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>James F. and/or Shirley Barnette</u> ✓	Name <u>n/a</u>
Address <u>2507 GEM RD</u>	Address _____
<u>BURNSVILLE, WV 26335</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>n/a</u>
_____	Address _____
(c) Name _____	Name _____
Address _____	Address _____
_____	_____
6) Inspector <u>Bryan Harris</u> ✓	(c) Coal Lessee with Declaration
Address <u>P.O Box 157</u>	Name <u>n/a</u>
<u>Volga WV 26238</u>	Address _____
Telephone <u>304-553-6087 cell, or 304-472-1732</u>	_____

TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:

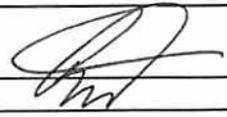
- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
- (2) The plat (surveyor's map) showing the well location on Form WW-6.

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 HAYDEN HARPER ENERGY KA, LLC

By: Brett McDonough 

Its: Vice President

Address 1001 Moorehead Square Drive - Suite 350

Charlotte, NC 28203

Telephone 704-343-2447

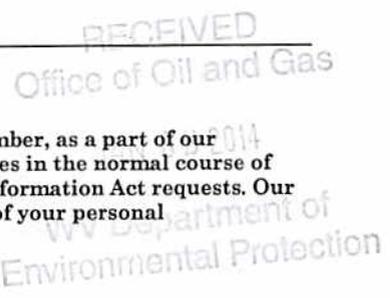
Subscribed and sworn before me this 10th day of December 2013

Deedee Taylor Notary Public

My Commission Expires May 17th, 2016

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.



702378P

ed Mail Provides:
ing receipt
e identifier for your mailpiece
of delivery kept by the Postal Service for two years.
It is not available for any class of international mail.
NCE COVERAGE IS PROVIDED
use consider insured or Registered Mail.
in Return Receipt service, please complete and attach a Return Receipt (RM-3811) to the article and add applicable postage to cover the fee.
For fee, delivery may be restricted to the addressee or authorized agent. Advise the clerk or mark the mailpiece with the Restricted Delivery Requested.
To receive a fee waiver for Certified Mail, please postmark on your Certified Mail receipt as follows:
For Restricted Delivery, attach and affix label with postage and mail.
For Restricted Delivery, attach and affix label with postage and mail.
PSN 7530-02-000-9047

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

James Barnette
2507 Gem Road
Burnsville, WV 26335

2. Article Number
(Transfer from service label)

COMPLETE THIS SECTION ON DELIVERY

A. Signature
x *Beth Banach* Agent Addressee

B. Received by (Printed Name) 26335
C. Date of Delivery

D. Is delivery address different from item 1? Yes
If YES, enter delivery address below: No
DEC 18 2013

3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

2461 9156 E000 0120 2002

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at www.usps.com
OFFICIAL USE

Postage	\$ 1.32
Certified Fee	3.10
Return Receipt Fee (Endorsement Required)	2.55
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 6.97

THORPE POST OFFICE
 Postmark Here
 DEC 17 2013
 PS 24888

Sent to Bryan Harris
 Street, or PO B P. O. Box 157
 City, State, ZIP+4® Volga, WV 26238

PS Form 3800, August 2006 See Reverse for Instructions

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Office of Oil and Gas

JAN 02 2014

WV Department of Environmental Protection

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name HAYDEN HARPER ENERGY KA, LLC OP Code 494495359

Watershed (HUC 10) 0505000704 Long Run of Birch River Quadrangle Herold WV 7 1/2

Elevation 1347.55 County Braxton District Otter

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

Will a pit be used for drill cuttings? Yes XX No _____

If so, please describe anticipated pit waste: fluids used and associated with well plugging activities

Will a synthetic liner be used in the pit? Yes XX No _____ If so, what ml.? 20 ml

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 _____)

Will closed loop system be used? ~~yes~~ NO

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. n/a

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

Additives to be used in drilling medium? _____

Drill cuttings disposal method? Leave in pit, landfill, removed 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 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 _____

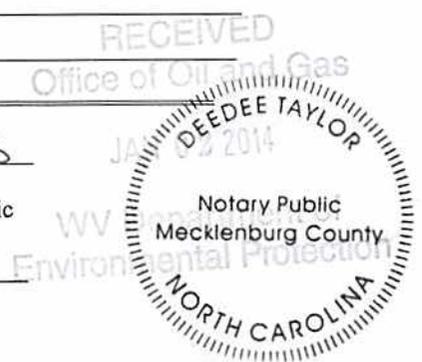
Company Official (Typed Name) Brett McDonough

Company Official Title Vice President

Subscribed and sworn before me this 10th day of December, 2013

DeeDee Taylor Notary Public

My commission expires May 17th 2016



TOPO SECTION OF:
United States Department of the Interior
Geological Survey - Herold, WV - 7½' Quadrangle

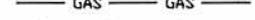
PROPOSED CULVERT INVENTORY
(For Bid Purposes Only)

15" (Minimum) Culverts	None
Additional Culverts and/or other drainage structures and sediment control devices may be required by the WVDEP Oil & Gas Inspector. Operator is responsible for coordination with contractor and True Line regarding any changes or additions the State may require.	

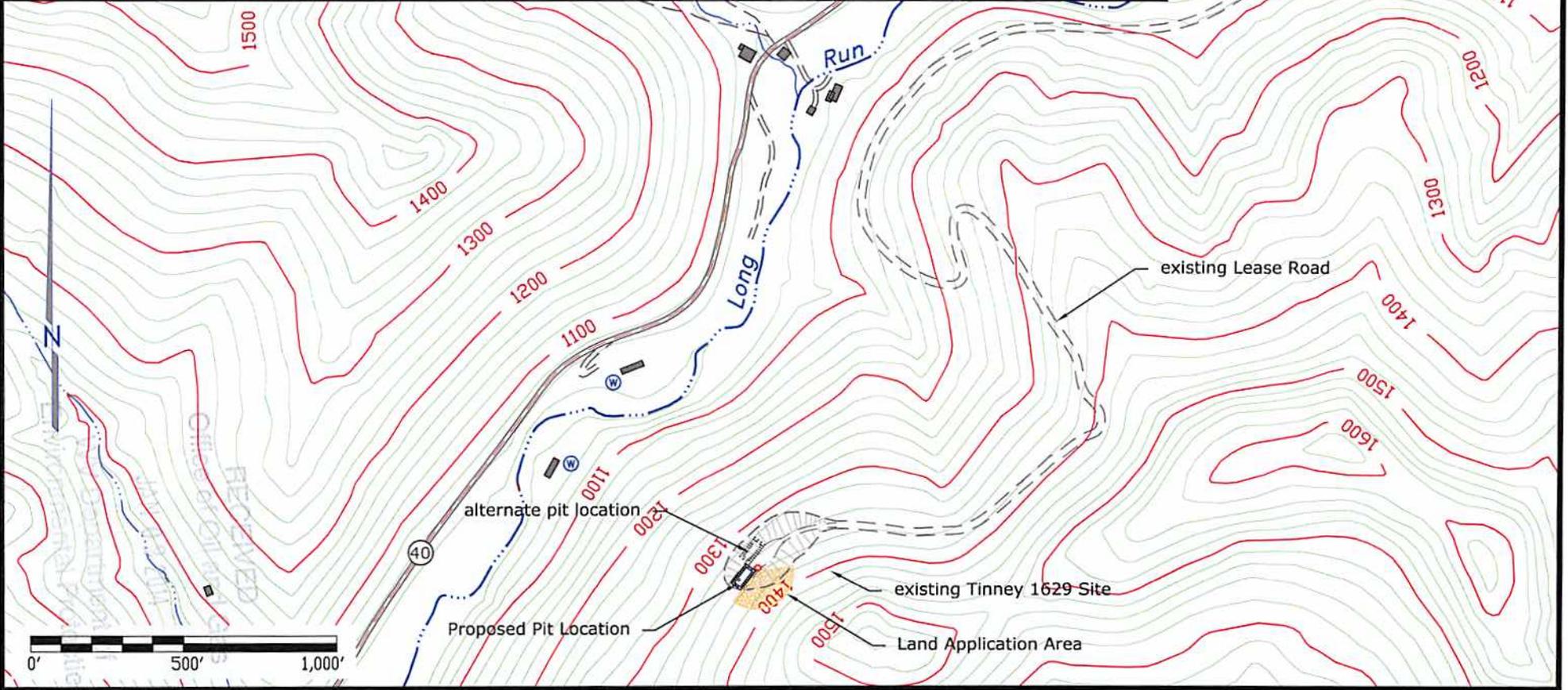
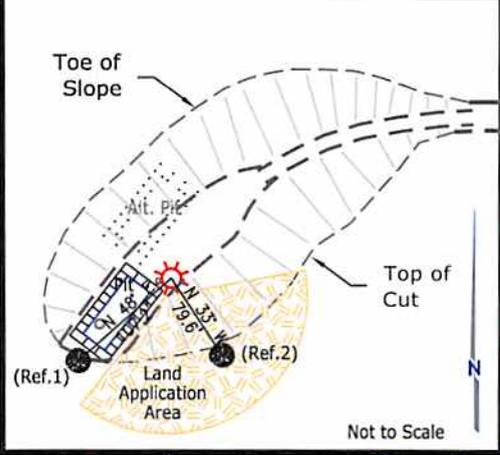
PROJECTED EARTHEN DISTURBANCE

Well Location Site	1.19 Acres
Access Road	3.00 Acres
Approximate Total Disturbance	4.19 Acres

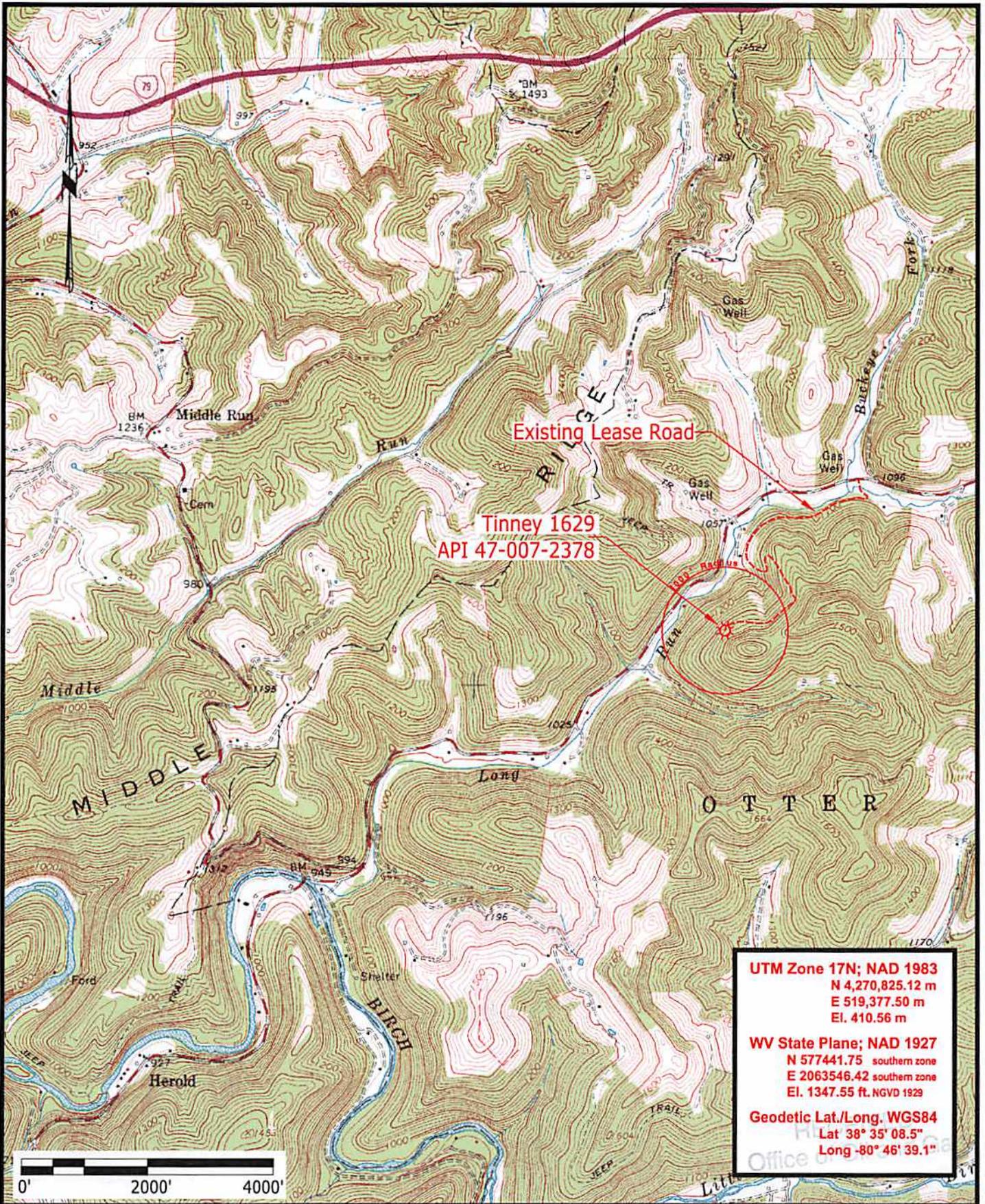
LEGEND

- Proposed Road 
- Existing Road 
- Existing Culvert 
- Proposed Culvert (15" Min. unless noted) 
- Proposed Stream Crossing 
- Cross Drain 
- Diversion Ditch 
- Silt Fence 
- Brush Barrier 
- Tree Line 
- Road Ditch 
- Gas Line 
- Fence Line 
- Water Well 
- House/Structure 
- Spring 
- Wet Spot 

Detail Sketch existing well Tinney 1629



702378P



UTM Zone 17N; NAD 1983
 N 4,270,825.12 m
 E 519,377.50 m
 El. 410.56 m

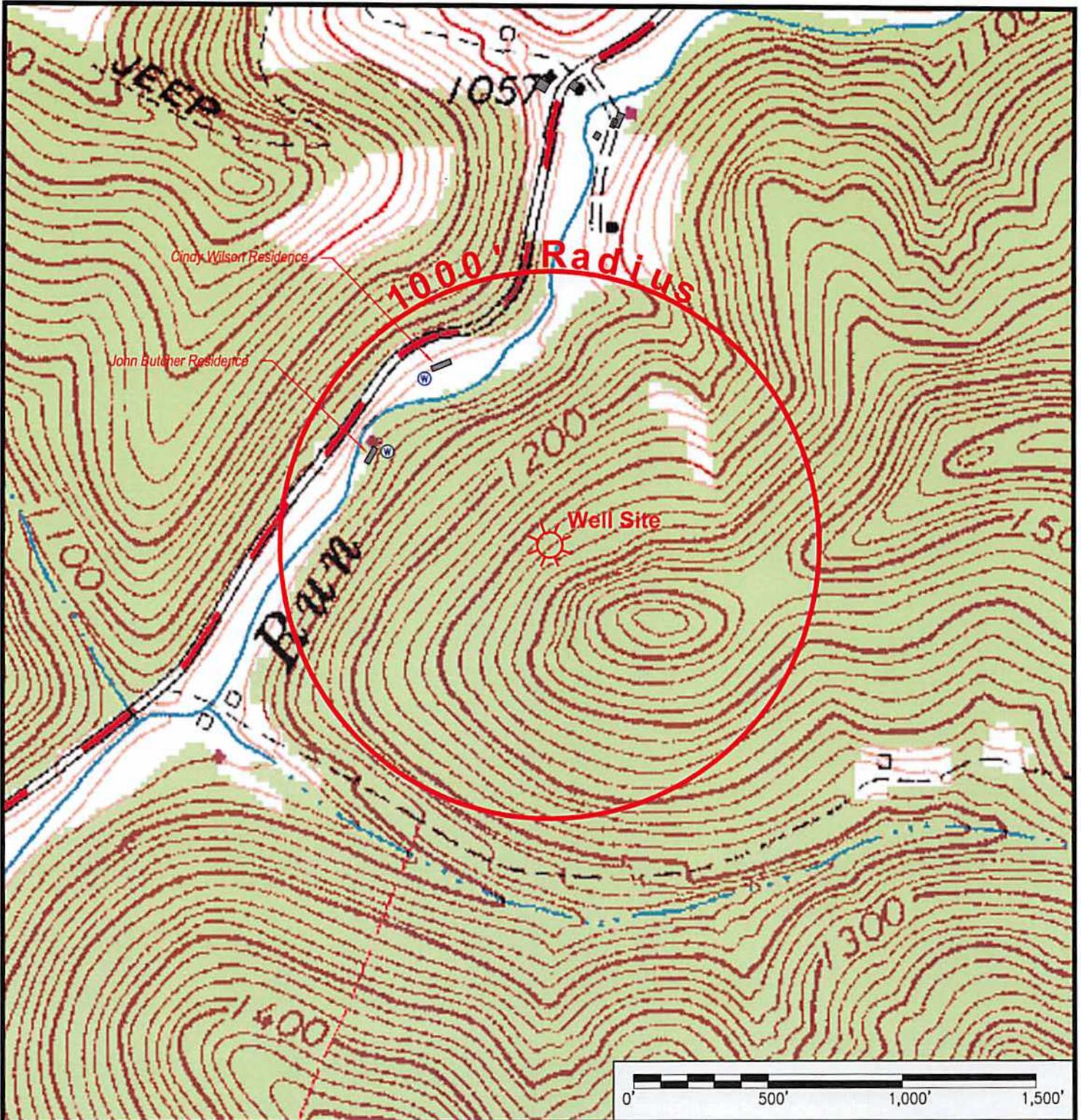
WV State Plane; NAD 1927
 N 577441.75 southern zone
 E 2063546.42 southern zone
 El. 1347.55 ft. NGVD 1929

Geodetic Lat./Long. WGS84
 Lat 38° 35' 08.5"
 Long -80° 46' 39.1"



Tinney 1629

API 47-007-02378
 November 20, 2013
 Located near Herold in Otter District of Braxton County, West Virginia



Notes: **Herold WV, 7-1/2' Quadrangle**
 Two residential water wells are the only groundwater source being used for human consumption, domestic animals or other general uses identified within 1000' of the well to be plugged. Water sample will be collected from the wells prior to commencement of plugging activities.

Legend:

- Water Well 
- Spring 
- Wet Spot 
- House/Structure 

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WW-9 Tinney 1629

Located near Herold in Otter District of Braxton County, West Virginia

WV Department of Environmental Protection

WW-7
8-30-06



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

API: 47-007-02378 WELL NO.: Tinney 1629

FARM NAME: James F. and/or Shirley Barnette

RESPONSIBLE PARTY NAME: Hayden Harper Energy KA, LLC

COUNTY: Braxton DISTRICT: Otter

QUADRANGLE: Herold WV 7½' Series

SURFACE OWNER: Barnette Lura F & James F & Shirley A Life ETAL

ROYALTY OWNER: William A Dunn et als

UTM GPS NORTHING: 4270825.12

UTM GPS EASTING: 519377.50 GPS ELEVATION: 410.56m 1347.55 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 XX: Post Processed Differential XX

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.

[Signature]
Signature

PS 1065
Title

11/20/13
Date

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Office of Oil and Gas
JAN 03 2014
Department of Environmental Protection