



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

February 11, 2014

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-9700837, issued to GREAT OAK ENERGY INC, 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: 1
Farm Name: HAWKINS, C. H.
API Well Number: 47-9700837
Permit Type: Plugging
Date Issued: 02/11/2014

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. 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.

9700837A

WW-4B
Rev. 2/01

1) Date November 6, 2013
2) Operator's M338
Well No. Clarence Hawkins #1
3) API Well No. 47-097-00837

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

5) Location: Elevation 1635' Watershed French Creek
District Buckhannon County Upshur Quadrangle Adrian 203

6) Well Operator Great Oak Energy, Inc. 7) Designated Agent Jerry K. Hanifan
Address 637 Allegheny Ave., P O Box 445 Address RR 9 Box 421
Oakmont, PA 15139-0445 Buckhannon, WV 26201

8) Oil and Gas Inspector to be notified Name Bill Hatfield
Address P. O. Box 522
Buckhannon, WV 26201

9) Plugging Contractor Name Great Oak Energy, Inc.
Address 637 Allegheny Ave., P O Box 445
Oakmont, PA 15139-0445

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

General Information On Well:

- Casing Size and depths as follows:
10 3/4" Casing depth 218'
8 5/8" Casing depth 962'
4 1/2" Casing depth 4098'
- Indications of oil or gas on the completion report as follows:
2036' - 2086' Gas
2156' - 2197' Gas
3643' 2643' - 3660 Gas
4008' - 4015' Gas
- Perforations: 4013' - 4018'
- 4 1/2" Casing cemented approximately 625' with 125 sacks cement and 14 sacks gel.

COAL 378' (72")
COAL 315' (24")
COAL 168' (72")

Proposed Plugging Procedures and Contingencies

- Run tubing to TD and load hole with 6% gel.
- Set 100' plug from 3993' to 3983'. (20' above top perf at 4013'). 703893' 2 SET 100' CEMENT PLUG FROM 3700' - 3600'!
- Trip tubing out of hole.
- Shut down for night (SDFN) and wait on cement (WOC).
- Tag plug to make sure plug in proper place.
- Determine 4 1/2" casing free point (estimated at approximately 3475'). Cut 4 1/2" casing and pull up 200'. Run tubing back in hole and set 100' cement plug 50' below and 50' above point where casing was cut. Pull tubing. Tag cement plug.
- Pull 4 1/2" casing to approximately 2016'. Set cement plug from 2016' to 1916' (Covering gas shows at 2156' - 2194' and 2036' - 2086'. Pull 4 1/2" casing and SDFN and WOC. 2200' - 2000'
- Tag cement plug.
- Determine if 8 5/8" casing can be pulled.
 - If unable to pull any of the 8 5/8" casing, perforate at the coal 378' to 384', and 315' to 317'. Trip tubing in hole and set cement plug from 434' to 295' (50' below lowest coal and 20' above highest coal. Trip tubing out of hole and WOC.
 - If any casing can be pulled below the coal at 378' to 384', and 315' to 317', gel from last plug and set 100' cement plug (50' below and 50' above cut). Then set cement plug from 434' to 294' (50' below lowest coal and 20' above highest coal. Trip tubing out of hole and WOC.
 - If any casing can be pulled above the coal at 378' to 384' and/or 315' to 317', perforate any coal behind pipe, then set cement plug from 434' to 294' (50' below lowest coal and 20' above highest coal. Then set 6% gel from last plug and set 100' cement plug (50' below and 50' above cut). Trip tubing out of hole and WOC.
- Determine if 10 3/4" casing can be pulled.
 - If any casing can be pulled below the coal at 168' to 174', gel from last plug and set cement plug 50' below casing cut to surface.
 - If any casing can be pulled above the coal at 168' to 174', perforate coal and water zone at 90'-110', then set cement plug from 258' (50' below casing seat) to surface.
- Install 3' monument with API number.

RECEIVED
Office of Oil and Gas
JAN 23 2014

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

Work order approved by inspector Bill Hatfield Date 11/25/13

02/14/2014



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

M. 338

Rotary
Spudder
Cable Tools
Storage

Quadrangle Crawford N. E.

WELL RECORD

Permit No. URS- 837

Oil or Gas Well GAS
(KIND)

Company Alton Miller
Address 2501 Grant Build., Pittsburgh, Pa.
Farm Clarence Hawkins Acres 22
Location (waters) French Creek
Well No. 1 Elev. 1565
District Buckhannon County Upshur
The surface of tract is owned in fee by Chas. McCarty
Buckhannon Address W. Va.
Mineral rights are owned by Clarence Hawkins
Clarksburg Address W. Va.
Drilling commenced 4-21-64
Drilling completed 7-17-64
Date Shot From To
With
Open Flow /10ths Water in Inch
/10ths Merc. in Inch
Volume 12, 717 Cu. Ft.
Rock Pressure lbs. hrs.
Oil bbls., 1st 24 hrs.
WELL ACIDIZED
WELL FRACTURED Dowell-- 7-21-64 32,500 gallons water
55,000 sand
RESULT AFTER TREATMENT 2,000,000
ROCK PRESSURE AFTER TREATMENT 1340
Fresh Water Feet Salt Water Feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			
10 3/4"	218	218	Size of
8 5/8"	962	962	
6 5/8"			Depth set
5 3/16"			
4 1/2"	4098	4098	Perf. top <u>4013</u>
2			Perf. bottom <u>4018</u>
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED 4 1/8" size 625 No. Ft. 7-18-64 Date
125 cmt. & 34 bgs. Jell by Lawson

COAL WAS ENCOUNTERED AT 168 FEET 72 INCHES
315 FEET 24 INCHES 378 FEET 72 INCHES
FEET INCHES FEET INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Sand			0	96			
Lime			36	65			
Slate			65	90			
Sand			90	110	Water	93'	2 Barrel/h
Red Rock			110	120			
Lime			120	168	Water	168'	in Coal
Coal			168	174			
Slate			174	200			
Lime		Gritty	200	215			
Slate			215	217			
Lime			217	290			
Slate			290	300			
Sand			300	315			
Coal			315	317			
Slate			317	378			
Coal			378	384			
Slate			384	400			
Sand			400	432			
Slate, S. & S.			432	502			
Sand			502	602			
Slate			602	622			
Lime		Gritty	622	671			
Slate			671	704			
Sand			704	725			
Shale			725	735			
Lime		Gritty	735	781			
Slate			781	802			
Lime			802	836			
Sand			836	862			
Slate			862	882			

(over)

9700837A

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Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Lime			882	897			
Slate			897	930			
Lime			930	1019			
Slate			1019	1035			
Lime			1035	1082			
Sand			1082	1115			
Lime			1115	1158			
Red Rock			1158	1250			
Lime		Gritty	1250	1335			
Red Rock			1335	1350			
Slate			1350	1364			
Lime			1364	1390			
Slate			1390	1400			
Red Rock			1400	1420			
Big Lime			1420	1493			
Fin. Sand			1493	1652			
Slate			1652	1675			
Sand			1675	1728			
S. & S.			1728	1871			
Red Rock & Shells			1871	2018			
Sand			2018	2028			
Slate			2028	2036			
Sand			2036	2086	Gas		
S. & S.			2086	2121			
Sand			2121	2150			
Red Rock			2150	2156			
Sand			2156	2194	Gas		
S. & S.			2194	2509			
Lime		Gritty	2509	2565			
S & S.			2565	2677			
Lime		Gritty	2677	2757			
S. & S.			2757	3080			
Lime		Gritty	3080	3110			
S. & S.			3110	3180			
Lime, S. & S.			3180	3196			
S. & S.			3196	3643			
Sand, Riley			3643	3660	Gas		
Lime		Gritty	3660	3700			
S. & S.			3700	3924			
Lime			3924	3944			
S. & S.			3944	3998			
Benson Sand			3998	4020	Gas	4008-15	
Lime, S. & S.			4020	TD			

Date August 28, 19 64

APPROVED _____, Owner

By _____ (Title)

02/14/2014

9700837A

WW4-A
Revised 6-07

1) Date: November 25, 2013
2) Operator's Well Number
Clarence Hawkins #1 (M338)
3) API Well No.: 47 - 097 - 00837

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:
(a) Name Elmer D. & Cora A. Heck
Address 15 Hinkle Drive
Buckhannon, WV 26201
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Bill Hatfield
Address P. O. Box 522
Buckhannon, WV 26201
Telephone (304) 767-1828

5) (a) Coal Operator
Name _____
Address _____
(b) Coal Owner(s) with Declaration
Name Hawthorne Coal Co., Inc./CoalQuest Dev. LLC
Address 300 Corporate Center Drive
Scott Depot, WV 25560
Attn: Lavina Conley
Name CDX Gas, LLC.
Address 5485 Beltline Road, Suite 190
Dallas, TX 75254
Name _____
Address _____
(c) Coal Lessee with Declaration
Name _____
Address _____

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.

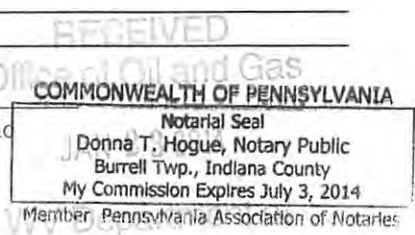
The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

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 Great Oak Energy, Inc.
By: Terry J. Holt
Its: President
Address 637 Allegheny Avenue, P O Box 445
Oakmont, PA 15139-0445
Telephone (412) 828-2900

Subscribed and sworn before me this 25th day of November, 2013
Donna T. Hogue Notary Public

My Commission Expires 7/3/14
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. 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. **02/14/2014**

9700837A

FORM WW-9
Rev. 02/03

Page _____ of _____
API Number 47 - 097 - 0837
Operator's Well No. M-338

STATE OF WEST VIRGINIA
DIVISION 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 Great Oak Energy, Inc. OP Code 20395

Watershed French Creek Quadrangle Adrian 7 1/2'

Elevation 1,635' County Upshur District Buckhannon 2

Description of anticipated Pit Waste: Gel, Cement, Water

Will a synthetic liner be used in the pit? Yes (20mil)

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
- Workover
- Other (Explain _____)
- Swabbing
- Plugging

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on December 31, 1999, 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 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 *Terry J. Holt*

Company Official (Typed Name) Terry J. Holt

Company Official Title President

Subscribed and sworn before me this 20th day of November, 2013

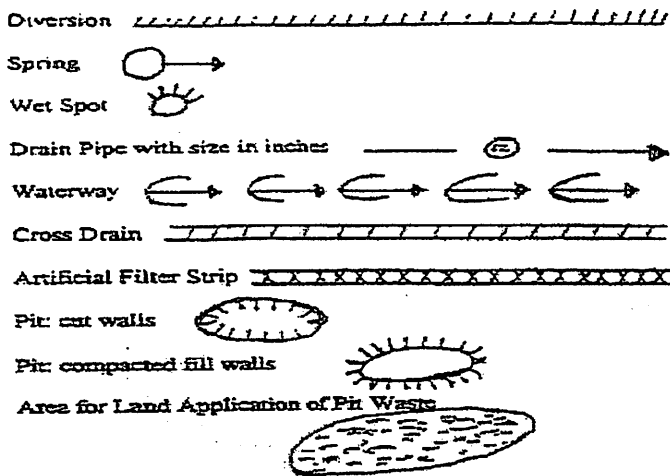
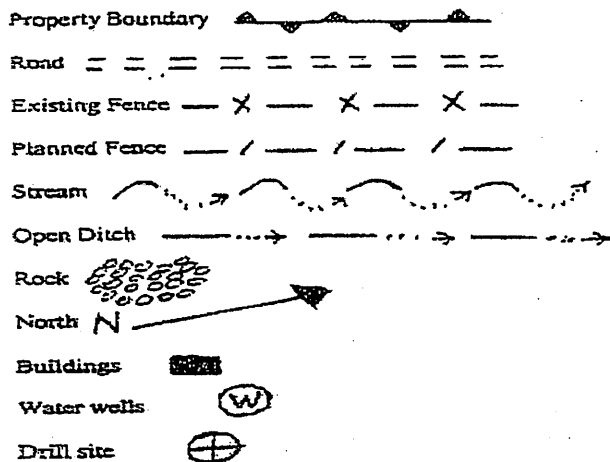
Donna T. Hogue Notary Public

My commission expires 7/3/2014



02/14/2014

LEGEND



Proposed Revegetation Treatment: Acres Disturbed _____ Prevegetation pH _____

As determined

Lime by pH test _____ Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20 or equivalent) 500 lbs/acre (500 lbs minimum)

Mulch hay or straw 2 Tons/acre

Seed Mixtures

Area I		Area II	
Seed Type	lbs/acre	Seed Type	lbs/acre
Kentucky Bluegrass	20	Kentucky Bluegrass	20
Redtop	5	Redtop	5
White Clover	2	White Clover	2

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

Photocopied section of involved 7.5' topographic sheet.

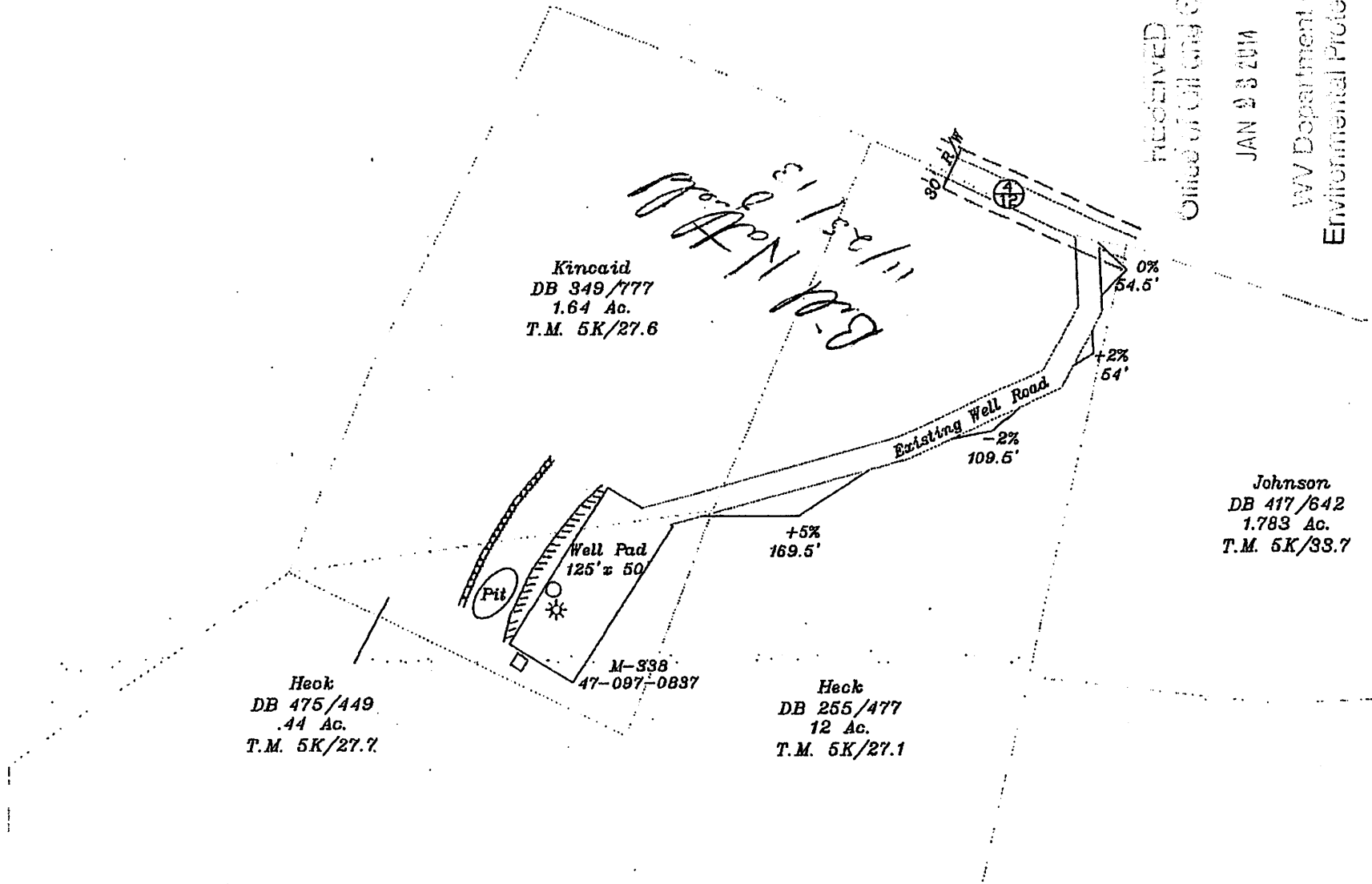
Plan Approved by: _____

Comments: _____

Title: oil & gas inspector Date: 11/25/13

Field Reviewed? Yes No

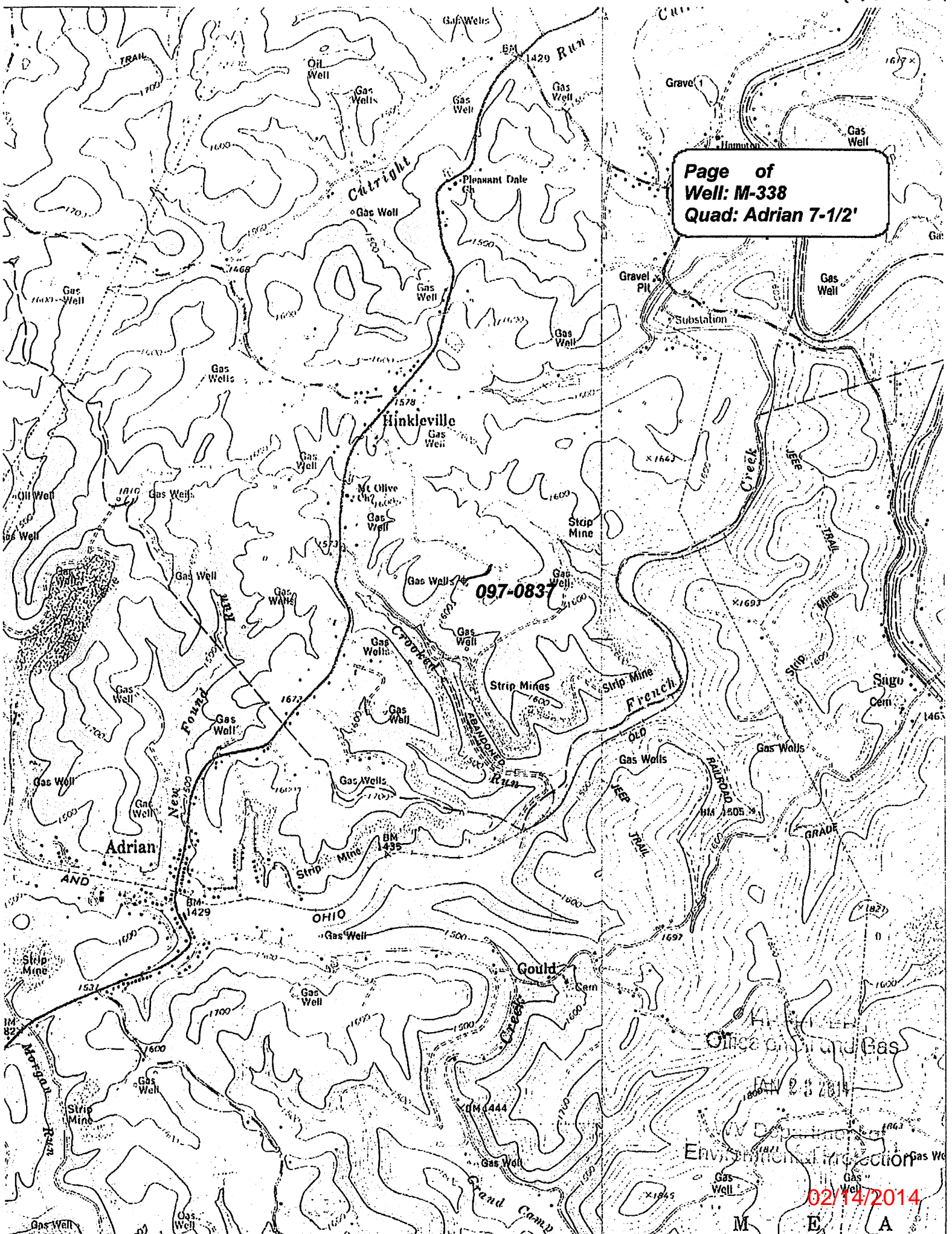
9700 837P



RECEIVED
Office of Oil and Gas
JAN 23 2014
WV Department of
Environmental Protection

- Access road follows existing road.
- Topsoil will be stockpiled for use in reclamation and revegetation.
- Culverts will be added as needed after construction.
- Sediment control will be added prior to construction phase.

Page of
Well: M-338
Quad: Adrian 7-1/2'



JAN 23 2014
Environmental Protection
M E A

WW-7
8-30-06



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

API: 47-097-0837 WELL NO.: M-338

FARM NAME: Clarence Hawkins #1

RESPONSIBLE PARTY NAME: Great Oak Energy, Inc.

COUNTY: Upshur DISTRICT: Buckhannon

QUADRANGLE: Adrian 7 1/2'

SURFACE OWNER: Elmer & Cora Heck

ROYALTY OWNER: Sheri Burnett & James F. Hawkins

UTM GPS NORTHING: 4308111.6

UTM GPS EASTING: 564314.4 GPS ELEVATION: 498.3m
(1635ft)

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 _____

Real-Time Differential X

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.

David Jackson
Signature

Professional Surveyor #708
Title

11/13/13
Date

02/14/2014