



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

June 26, 2013

WELL WORK PERMIT
Vertical Well

This permit, API Well Number: 47-3906359, issued to RESERVE OIL & GAS, 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.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.

James Martin
Chief

Operator's Well No: CAPITOL HIGH #1
Farm Name: KANAWHA CO. BOARD OF EDU
API Well Number: 47-3906359
Permit Type: Vertical Well
Date Issued: 06/26/2013

390637A

WW - 2B
(Rev. 8/10)

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

39 03 289

1) Well Operator: Reserve Oil & Gas, Inc. Operator ID: 310-324 County: Kanawha District: North Charleston Quadrangle: Charleston East

2) Operator's Well Number: Capitol High #1 3) Elevation: 686

4) Well Type: (a) Oil _____ or Gas _____
(b) If Gas: Production _____ / Underground Storage _____
Deep _____ / Shallow _____

5) Proposed Target Formation(s): Base of Lower Huron/Rhinestreet Proposed Target Depth: 4700
6) Proposed Total Depth: 4750 Feet Formation at Proposed Total Depth: Base of Lower Huron
7) Approximate fresh water strata depths: 200
8) Approximate salt water depths: 1200

9) Approximate coal seam depths: None

10) Approximate void depths, (coal, Karst, other): None

11) Does land contain coal seams tributary to active mine? No

12) Describe proposed well work and fracturing methods in detail (attach additional sheets if needed)
Drill and complete a New Devonian Shale well with a 2 stage frac.

13) CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft	For Drilling	Left in Well	Fill -up (Cu. Ft.)
Conductor	13 3/8			20'		CTS X 40%
Fresh Water	9 5/8			330'		CTS X 30" Hole
Coal						
Intermediate	7			1800'		CTS
Production	4 1/2			4650'		120 sks
Tubing						
Liners						

Angela Miller
5:30 B

Received

Packers: Kind: _____
Sizes: _____
Depths Set _____

JUN 7 2013

WW - 2B
(Rev. 8/10)

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

1) Well Operator: Reserve Oil & Gas, Inc. 310-324 Kanawha North Charleston Charleston East
Operator ID County District Quadrangle

2) Operator's Well Number: Capitol High #1 3) Elevation: 701

4) Well Type: (a) Oil _____ or Gas x
(b) If Gas: Production x / Underground Storage _____
Deep _____ / Shallow x

5) Proposed Target Formation(s): Base of Lower Huron/Rhinestreet Proposed Target Depth: 4700

6) Proposed Total Depth: 4750 Feet Formation at Proposed Total Depth: Base of Lower Huron

7) Approximate fresh water strata depths: 200

8) Approximate salt water depths: 1200

9) Approximate coal seam depths: None

10) Approximate void depths,(coal, Karst, other): None

11) Does land contain coal seams tributary to active mine? No

12) Describe proposed well work and fracturing methods in detail (attach additional sheets if needed)

Drill and complete a New Devonian Shale well with a 2 stage frac.

13) **CASING AND TUBING PROGRAM**

TYPE SPECIFICATIONS FOOTAGE INTERVALS CEMENT

	Size	Grade	Weight per ft	For Drilling	Left in Well	Fill -up (Cu. Ft.)
Conductor	13 3/8			20'		CTS X 40%
Fresh Water	9 5/8			330'		CTS X 30% hole
Coal						
Intermediate	7			1800'		CTS
Production	4 1/2			4650'		120 sks
Tubing						
Liners						

Handwritten signature and notes:
6-25-13

Packers: Kind: _____
Sizes: _____
Depths Set _____

CK# 9496
\$650.00

WW-2A
(Rev. 6-07)

1.) Date: 05/29/13
2.) Operator's Well Number _____ Capital High #1
State County Permit
3.) API Well No.: 47- _____ - _____

**STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE AND APPLICATION FOR A WELL WORK PERMIT**

4) Surface Owner(s) to be served: 5) (a) Coal Operator
(a) Name Kanawha County Board of Education ✓ Name None
Address 200 Elizabeth St. Address _____
Charleston, WV 25311
(b) Name _____ (b) Coal Owner(s) with Declaration
Address _____ Name None
(c) Name _____ Address _____
Address _____
6) Inspector Terry Urban (c) Coal Lessee with Declaration
Address P.O. Box 1207 Name None
Clendenin, WV 25045 Address _____
Telephone 304-549-5915

TO THE PERSONS NAMED ABOVE TAKE NOTICE THAT:

Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas
OR

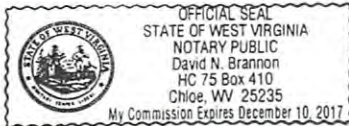
Included is the information required by Chapter 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)
I certify that as required under Chapter 22-6 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through ___ on the above named parties by:

- x Personal Service (Affidavit attached)
- _____ Certified Mail (Postmarked postal receipt attached)
- _____ Publication (Notice of Publication attached)

I have read and understand Chapter 22-6 and 35 CSR 4, and I agree to the terms and conditions of any permit issued under this application.

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, 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 and imprisonment.



Well Operator Reserve Oil & Gas, Inc.
By: J. Scott Freshwater
Its: Vice President
Address 929 Charleston Road
Spencer, WV 25276
Telephone 304-927-5228

Subscribed and sworn before me this 30th day of May, 2013

David N. Brannon
My Commission Expires December 10, 2017

Notary Public

Oil and Gas Privacy Notice

Received

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

Office of Oil and Gas
WV Dept. of Environmental Protection

06/28/2013

3906359
Relocation

SURFACE OWNER WAIVER

County Kanawha

Operator
Operator well number

Reserve Oil & Gas, Inc.
Capital High #1

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW2-A

The well operator named on page WW2A is applying for a permit from the State to do oil or gas well work. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.

WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0450

Time Limits and methods for filing comments. The law requires these materials to be served on or before the date the operator files his Application. You have **FIFTEEN (15) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure a adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Comments must be in writing. Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

The Chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation..."

If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

List of Water Testing Laboratories. The Office maintains a list of water testing laboratories which you can hire to test your water to establish water quality prior to and after drilling. Contact the Chief to obtain a copy.

VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application for a Well Work Permit on Form WW2-A, and attachments consisting of pages 1 through ___ including a work order on Form WW2-B, a survey plat, and a soil and erosion plan, all for proposed well work on my surface land as described therein.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

FOR EXECUTION BY A NATURAL PERSON

FOR EXECUTION BY A CORPORATION, ETC.

Signature Date _____

Print Name

Company Name
By Kanawha County Board of Education
Its Gerald E. Quincy 6/25/13
Date Superintendent

Signature Date 6/25/13

WW-2A Surface Waiver

SURFACE OWNER WAIVER

County Kanawha

Operator
Operator well number

Reserve Oil & Gas, Inc.
Capital High #1

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW2-A

The well operator named on page WW2A is applying for a permit from the State to do oil or gas well work. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.
WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0450

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Comments must be in writing. Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

- The Chief has the power to deny or condition a well work permit based on comments on the following grounds:
- 1) The proposed well work will constitute a hazard to the safety of persons.
 - 2) The soil erosion and sediment control plan is not adequate or effective;
 - 3) Damage would occur to publicly owned lands or resources;
 - 4) The proposed well work fails to protect fresh water sources or supplies;
 - 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation..."

If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

List of Water Testing Laboratories. The Office maintains a list of water testing laboratories which you can hire to test your water to establish water quality prior to and after drilling. Contact the Chief to obtain a copy.

VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application for a Well Work Permit on Form WW2-A, and attachments consisting of pages 1 through ___ including a work order on Form WW2-B, a survey plat, and a soil and erosion plan, all for proposed well work on my surface land as described therein.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

FOR EXECUTION BY A NATURAL PERSON

FOR EXECUTION BY A CORPORATION, ETC.

Signature Date _____

Print Name

Company Name KANAWHA CO. SHERIFFS / Board of Ed.
By C. Wilson Date 6/26/13
Prayer Admin 2013
[Signature] Date 6/26/13
Signature Office of Oil and Gas Dept. of Environmental Protection Date

WW-2A Coal Waiver

COAL OPERATOR, OWNER, OR LESSEE WAIVER

County Kanawha
Operator Reserve Oil & Gas, Inc. Operator's Well Number Capital High #1

INSTRUCTIONS TO COAL OPERATOR, OWNER, OR LESSEE

To the coal operator, owner, or lessee named on page WW2-A. You are hereby notified that any objection you wish to make or are required to make by WV Code 22-6-15, 16 or 17, must be filed with the Chief of the Office of Oil and Gas within fifteen (15) days after the receipt of this application by the Office. Mail objections to:

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0499 extension 1654

WAIVER

The undersigned coal operator _____ / owner _____ / lessee _____ / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

FOR EXECUTION BY A NATURAL PERSON

FOR EXECUTION BY A CORPORATION, ETC.

_____	Date _____	Company Name _____	_____
Signature		By _____	_____
		Its _____	Date _____
		Signature _____	Date _____

No known owner, operator, or lessee of workable coalbed/seam on this tract.

Received

JUN 7 2013

WW-2A1
(Rev. 1/11)

Operator's Well Number Capital High #1

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6, Section 8(d)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
Kanawha County Board of Education	Reserve Oil & Gas, Inc.	1/8	LB 261/458

**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources
- WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator: Reserve Oil & Gas, Inc.
 By: Its: J. Scott Freshwater
 Vice President

Received
 JUN 7 2013

Office of Oil and Gas
 WV Dept. of Environmental Protection
 06/28/2013

WW-2B1
(5-12)

Well No. Capital High #1

West Virginia Department of Environmental Protection
Office of Oil and Gas

NOTICE TO SURFACE OWNERS

The well operator named below is preparing to file for a permit from the state to drill a new well. Before a well work permit can be filed with the Chief of the Office of Oil and Gas, the well operator is required to have given notice of the right to request water well or spring analytical testing. This notice shall be given to the owners or occupants of land which have a water well or spring being utilized for human consumption, domestic animals, or other general use and which is located within 1000 feet of the proposed well site.

With this form, the operator is giving you notice of your right to request analytical testing. The operator is required to sample and analyze the water wells or springs of all owners or occupants who request it. Therefore, if you wish to have your water well or spring tested, contact the operator named below.

All sampling shall be completed prior to drilling. Within thirty (30) days of the receipt of such sample analyses the operator shall submit the results to the Chief of the Office of Oil and Gas and to the owners or occupants who may have requested them.

Be advised, you have the right to sample and analyze any water supply at your own expense.

Listed below is the laboratory chosen by operator to perform analysis, and contactor chosen to collect sample.

Certified Laboratory Name ALS Environmental Lab- South Charleston, WV
Sampling Contractor _____

Well Operator Reserve Oil & Gas, Inc.
Address 929 Charleston Road
Spencer, WV 25276
Telephone 304-927-5228

FOR OPERATOR'S USE ONLY: Below, or on an attached page, list those persons which were given this notice. Place an asterisk beside the one(s) that contacted you and requested sampling and analyses. If there were no requests made, indicate by underling which one you have selected to sample and analyze. If there are no water wells or springs within 1000 feet of the proposed site, the Chief may require the operator to test wells up to 2000 feet from the proposed site.

See Attached. Received

JUN 7 2013

Office of Oil and Gas
WV Dept. of Environmental Protection

06/28/2013



Reserve Oil and Gas, Inc.

Well Information / Potential Water Well Sample Data Sheet

Operator: Reserve

Lease Name and Number: Capital H.S. # 2

Comments

The initial mapping review of the area surrounding the proposed well site revealed the below listed surface owner (s) that were potentially utilizing groundwater (potable) for human consumption or other purposes within one thousand (1,000) feet of the proposed well site. The following landowners have been notified of the opportunity to request a water sample should it be necessary.

Please note that the following information is subject to change upon field inspection.

Individual Contacted or Notified

Owner / Occupant:

Address: 1506 Greenbrier

Letter / Notice Date: 5/30/13

Comments: posted on door

Owner / Occupant:

Address: 1510 Greenbrier

Letter / Notice Date: 5/30/13

Comments: posted on door

Owner / Occupant: Bethany Baptist Church

Address: 1512 Greenbrier

Letter / Notice Date: 5/30/13

Comments: posted on door

Owner / Occupant:

Address: yellow house by church

Letter / Notice Date: 5/30/13

Comments: posted on door

Received

JUN 7 2013

06/28/2013



Reserve Oil and Gas, Inc.

Well Information / Potential Water Well Sample Data Sheet

Operator: Reserve

Lease Name and Number: Capital H.S. #2

Comments

The initial mapping review of the area surrounding the proposed well site revealed the below listed surface owner (s) that were potentially utilizing groundwater (potable) for human consumption or other purposes within one thousand (1,000) feet of the proposed well site. The following landowners have been notified of the opportunity to request a water sample should it be necessary.

Please note that the following information is subject to change upon field inspection.

Individual Contacted or Notified

Owner / Occupant:

Address: Rutledge Rd - tan siding house

Letter / Notice Date: 5/30/13

Comments: posted on door

Owner / Occupant:

Address: 1509 Rutledge Rd.

Letter / Notice Date: 5/30/13

Comments: left notice with babysitter

Owner / Occupant: Go Mart

Address: 1502 Greenbrier

Letter / Notice Date: 5/30/13

Comments: Left notice with ~~store~~ manager - city water

Owner / Occupant: Corral Bar

Address: Coonster Drive

Letter / Notice Date: 5/30/13

Comments: posted notice

Received

JUN 7 2013



Reserve Oil and Gas, Inc.

Well Information / Potential Water Well Sample Data Sheet

Operator: Reserve

Lease Name and Number: Capital H.S. # 1

Comments

The initial mapping review of the area surrounding the proposed well site revealed the below listed surface owner (s) that were potentially utilizing groundwater (potable) for human consumption or other purposes within one thousand (1,000) feet of the proposed well site. The following landowners have been notified of the opportunity to request a water sample should it be necessary.

Please note that the following information is subject to change upon field inspection.

Individual Contacted or Notified

Owner / Occupant: Elco
Address: 1510 Coonskin Drive
Letter / Notice Date: 5/30/13
Comments: No well

Owner / Occupant: Natl. Guard FCU
Address: 1512 Coonskin Drive
Letter / Notice Date: 5/30/13
Comments: Left notice with staff

Owner / Occupant:
Address: 1520 Coonskin Drive
Letter / Notice Date: 5/30/13
Comments: postal notice on door

Owner / Occupant:
Address: Brick house behind Elco w/ aptc - 2 poplar Hill Drive (Ellis)
Letter / Notice Date: 5/30/13
Comments: postal notice

Received

JUN 7 2013



Reserve Oil and Gas, Inc.

Well Information / Potential Water Well Sample Data Sheet

Operator: Reserve

Lease Name and Number: Capital H.S. # 2

Comments

The initial mapping review of the area surrounding the proposed well site revealed the below listed surface owner (s) that were potentially utilizing groundwater (potable) for human consumption or other purposes within one thousand (1,000) feet of the proposed well site. The following landowners have been notified of the opportunity to request a water sample should it be necessary.

Please note that the following information is subject to change upon field inspection.

Individual Contacted or Notified

Owner / Occupant: Amos

Address: 4 poplar Hill Drive

Letter / Notice Date: 5/30/13

Comments: posted notice on door

Owner / Occupant:

Address: red brick house across from Amos - 5 poplar Hill Drive

Letter / Notice Date: 5/30/13

Comments: posted notice on door

Owner / Occupant: W.G. Arnold

Address: 11 poplar Hill Drive

Letter / Notice Date: 5/30/13

Comments: city water - no well

Owner / Occupant: Spears

Address: 4 poplar Hill Drive

Letter / Notice Date: 5/30/13

Comments: posted notice on door

Received

JUN 7 2013

Office of Oil and Gas WV Dept. of Environmental Protection



Reserve Oil and Gas, Inc.

Well Information / Potential Water Well Sample Data Sheet

Operator: Reserve

Lease Name and Number: Capital H.S. # 1

Comments

The initial mapping review of the area surrounding the proposed well site revealed the below listed surface owner (s) that were potentially utilizing groundwater (potable) for human consumption or other purposes within one thousand (1,000) feet of the proposed well site. The following landowners have been notified of the opportunity to request a water sample should it be necessary.

Please note that the following information is subject to change upon field inspection.

Individual Contacted or Notified

Owner / Occupant:

Address: 18 Poplar Hill Drive

Letter / Notice Date: 5/30/13

Comments: No well - city water

Owner / Occupant:

Address: 1520 Condon Drive

Letter / Notice Date: 5/30/13

Comments: No well in use, city water

Owner / Occupant: Deans

Address: 19 Poplar Hill Drive

Letter / Notice Date: 5/30/13

Comments: posted notice on door

Owner / Occupant:

Address: 10 Poplar Hill Drive

Letter / Notice Date: 5/30/13

Comments: posted notice on door

Received

JUN 7 2013

Office of Oil and Gas
WV Dept. of Environmental Protection



Reserve Oil and Gas, Inc.

Well Information / Potential Water Well Sample Data Sheet

Operator: Reserve

Lease Name and Number: Capital H.S. # 1

Comments

The initial mapping review of the area surrounding the proposed well site revealed the below listed surface owner (s) that were potentially utilizing groundwater (potable) for human consumption or other purposes within one thousand (1,000) feet of the proposed well site. The following landowners have been notified of the opportunity to request a water sample should it be necessary.

Please note that the following information is subject to change upon field inspection.

Individual Contacted or Notified

Owner / Occupant:

Address: 8 Poplar Hill Drive

Letter / Notice Date: 5/30/13

Comments: posted notice on door

Owner / Occupant: Joseph Weaver

Address: 1650 Greenbrier St.

Letter / Notice Date: 5/30/13

Comments: Talked to him - no well

Owner / Occupant:

Address:

Letter / Notice Date:

Comments:

Owner / Occupant:

Address:

Letter / Notice Date:

Comments:

Received

JUN 7 2013

Office of Oil and Gas WV Dept. of Environmental Protection

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Reserve Oil & Gas, Inc. OP Code _____

Watershed (HUC 10) Elk Two Mile Quadrangle Charleston East

Elevation 701 County Kanawha District North Charleston

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

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

If so, please describe anticipated pit waste: Gel water, drill cuttings, freshwater

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

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 _____)

14
5-30-13

Will closed loop system be used? N/A

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. Air, Gel, Freshwater

-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. Leave in pit

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) Soil/Dirt

-Landfill or offsite name/permit number? _____

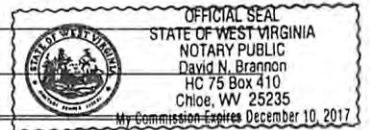
I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations 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 [Signature]

Company Official (Typed Name) J. Scott Freshwater

Company Official Title Vice President



Subscribed and sworn before me this 30th day of May, 2013

David N. Brannon Notary Public

My commission expires December 10, 2017

LEGEND

- Property Boundary
- Road
- Existing Fence
- Planned Fence
- Stream
- Open Ditch
- Rock
- North
- Buildings
- Water Well
- Drill Site

- Diversion
- Spring
- Wet Spot
- Drain Pipe with size in inches
- Waterway
- Cross Drain
- Artificial Filter Strip
- Pit: cut walls
- Pit: compacted fill walls
- Area for Land Application of Pit Waste

Proposed Revegetation Treatment: Acres Disturbed 2.5 Prevegetation pH 5.5
 Lime 3 Tons/acre or to correct to pH 6.5
 Fertilizer (10-20-20 or equivalent) 0.25 lbs/acre (500 lbs minimum)
 Mulch HAY 2 Tons/acre

— Seed Mixtures —

Area I		Area II	
Seed Type	lbs/acre	Seed Type	lbs/acre
<u>Orchard Grass</u>	<u>25</u>	<u>Ladino Clover</u>	<u>5</u>
<u>Red Top Clover</u>	<u>15</u>	<u>Ky 31</u>	<u>40</u>

Attach:
 Drawing(s) of road, location, pit and proposed area for land application.
 Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: *Amy W. Miller*
 Comments: _____

Received

Title: *Inspector Del & Coas* Date: *5.30.13* JUN 7 2013

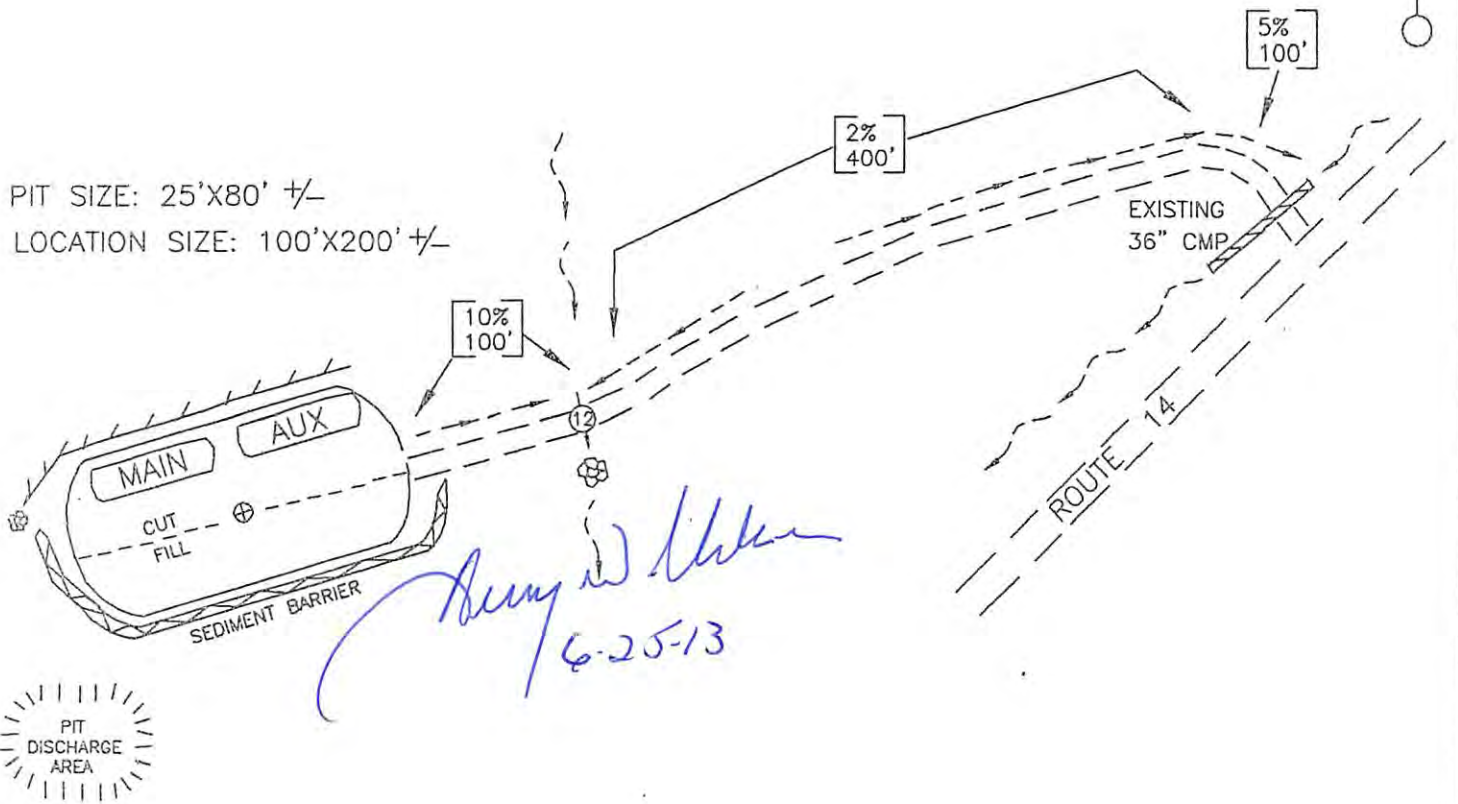
Field Reviewed? Yes No

Office of Oil and Gas
 WV Dept. of Environmental Protection

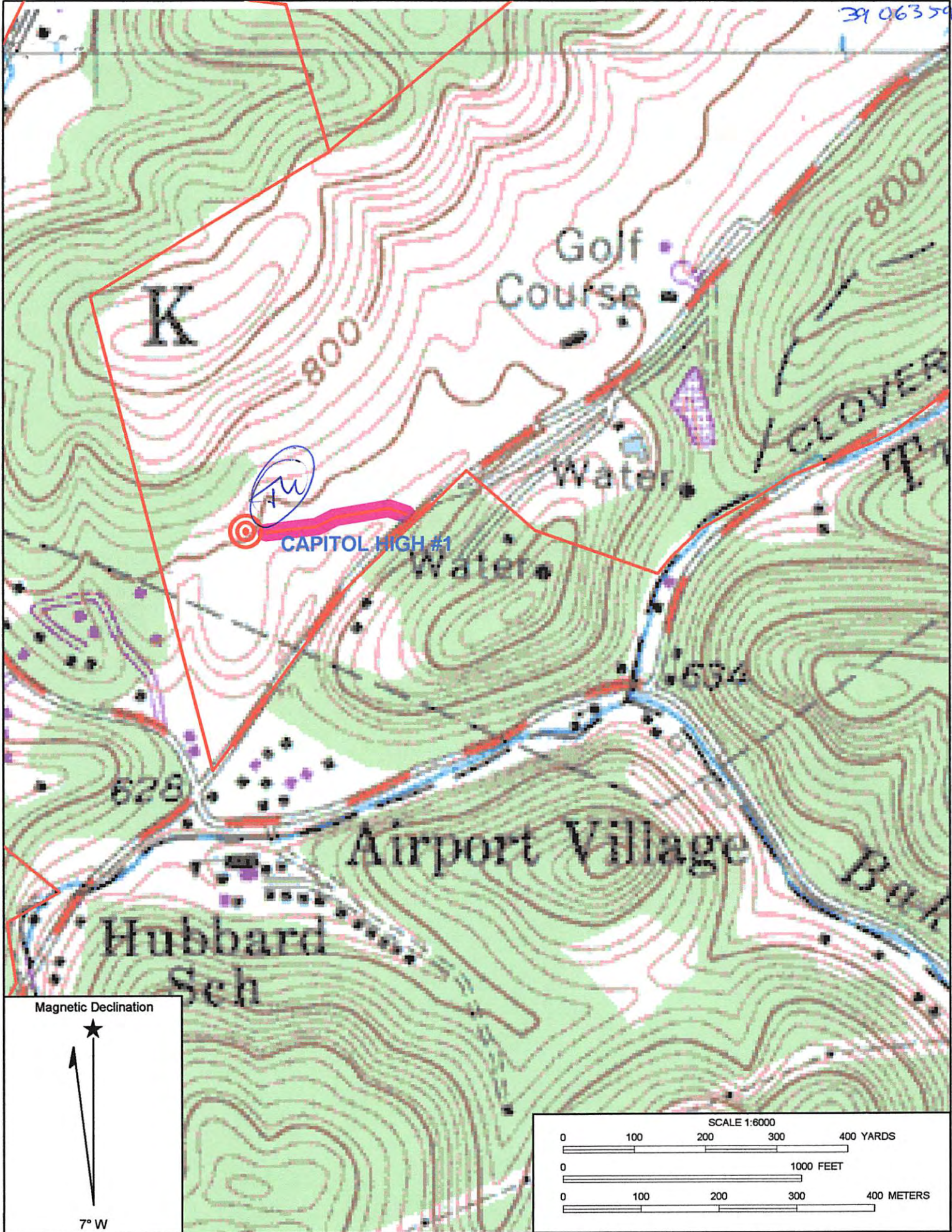
NOTE;

Any Trees 6" or larger in Diameter will be cut and piled. Brush will be used as Sediment Barriers. Temporary seed and mulch all slopes upon construction. Stone over all Culverts.

CAPITOL HIGH #1



39 063 59



LINE	BEARING	DISTANCE
L1	N 59°39' E	180.27'
L2	N 54°50' E	423.57'
L3	N 57°25' E	431.22'
L4	N 58°20' E	294.35'
L5	N 86°39' E	235.28'
L6	N 57°23' E	352.00'
L7	N 51°30' E	255.29'
L8	N 55°57' E	139.19'
L9	N 59°03' E	291.65'
L10	N 54°01' E	384.60'
L11	N 57°43' E	387.95'
L12	N 85°31' E	173.78'
L13	N 72°44' E	186.78'
L14	N 75°00' E	247.14'
L15	N 77°54' E	200.68'
L16	S 88°05' W	282.50'
L17	S 17°50' E	40.00'
L18	S 20°05' E	54.76'
L19	S 79°11' W	189.83'
L20	S 44°14' W	496.00'
L21	S 78°33' W	76.71'
L22	S 71°16' W	325.24'
L23	N 58°20' W	80.50'
L24	S 51°48' W	178.00'
L25	S 62°04' W	268.63'
L26	S 85°41' W	118.37'
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KANAWHA CO. PARKS & RECREATION COMMISSION
2393/657
TM 45 PAR 1

UTM NAD.83
ZONE 17
0449256E
4246986N

TOPO LOC

KANAWHA CO. BOARD OF EDUCATION
2148/477
TM 93 PAR 1

NOTE:
NO DWELLING WITHIN
500' OF PROPOSED WELL
AT DATE OF THIS PLAT

NORTH

JER BON LLC
2808/248
TM45C PR50

J. AMOS
2562/819
TM45C PAR51

T. ELLIS
1349/476
TM45C PAR52

M. COLLIAS
1777/474
TM45C PAR53

CAPITOL HIGH #1

IRF

N 48°53' E
500.57'

N 13°13' E
1010.75'

N 12°34' W
671.07'

IRON POST

NAD 83
LAT. 38.3696205N
LONG. 81.5808894W

STATE PLANE COOR.
NAD 83
N 499,250
E 1,801,964

B.P.O.E. LODGE
2000/258

1" = 2000'

NEW WELL

MALDEN DIST.

24" HY
S 14° W
78'
N 82° E
141'
28" BO
CAPITOL HIGH #1

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. _____
DRAWING NO. 13-21-R
SCALE 1"=600'
MINIMUM DEGREE OF ACCURACY 1 IN 200
PROVEN SOURCE OF ELEVATION GPS

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 DEPARTMENT OF ENERGY.
(SIGNED) _____
R.P.E. _____ L.L.S. 851



STATE OF WEST VIRGINIA
Department of Environmental Protection
OFFICE OF OIL AND GAS

DATE 6/12, 2013
OPERATOR'S WELL NO. CAPITOL HIGH
API WELL NO. # 1
47 - 039 - 06359
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
(IF "GAS") PRODUCTION STORAGE _____ DEEP _____ SHALLOW
LOCATION: ELEVATION 701 WATER SHED ELK TWOMILE
DISTRICT NORTH CHARLESTON COUNTY KANAWHA
QUADRANGLE CHARLESTON EAST
SURFACE OWNER KANAWHA CO. BOARD OF EDUCATION ACREAGE 168.81
OIL & GAS ROYALTY OWNER KANAWHA CO. BOARD OF EDUCATION LEASE ACREAGE 168.81
LEASE NO. _____

PROPOSED WORK: DRILL CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE PLUG OFF OLD FORMATION _____ PERFORATE NEW FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY): _____

06/28/2013

PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
TARGET FORMATION BASE OF LOWER HURON/RHINESTREET ESTIMATED DEPTH 5500
WELL OPERATOR RESERVE OIL & GAS INC. DESIGNATED AGENT J. SCOTT FRESHWATER
ADDRESS 929 CHARLESTON ROAD ADDRESS 929 CHARLESTON ROAD
SPENCER, WV 25276 SPENCER, WV 25276

LINE	BEARING	DISTANCE
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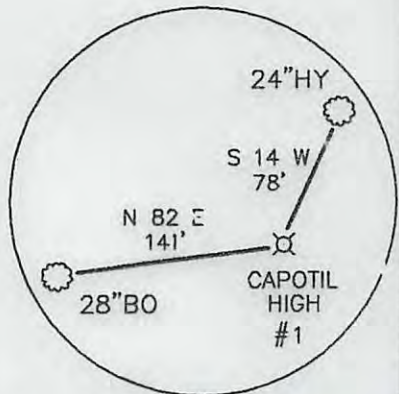
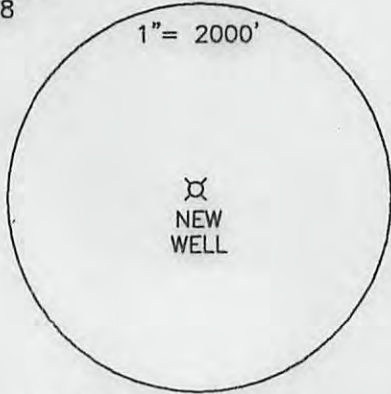
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CAPITOL HIGH #1

B.P.O.E. LODGE
 2000/258

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 LAT. 38.3696205N
 LONG. 81.5808894W
 STATE PLANE COOR.
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 SPENCER, WV 25276 SPENCER, WV 25276

06/28/2013