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

January 04, 2016

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-4103701, issued to EQT PRODUCTION COMPANY, 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 penalities 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: 8222
Farm Name: OPHA WHITESELL
API Well Number: 47-4103701
Permit Type: Plugging
Date Issued: 01/04/2016

Promoting a healthy environment.

4103701 P

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.
4. This well is under a consent order and must be plugged under the terms of that agreement.

4103701P

CK # 20018

$100.00

rm WW-4 (B)
rmit Copy
ev 2/01)

Date: November 20, 2015
Operator's Well
Well No. 608222 (Opha Whitesel #1 - 8222)
API Well No.: 47 041 - 03701

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

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

Well Type: Oil _____ Gas X Liquid Injection _____ Waste Disposal: _____
If Gas, Production X Or Underground storage _____ Deep _____ Shallow X

Elevation: 1175 ft. Watershed: Right Fork Bear Run
Location: Collins Settlement County: Lewis Quadrangle: Roanoke 7.5'
District:

Well Operator: EQT Production Company
Address: 120 Professional Place
Bridgeport, WV 26330

7) Designated Agent: Rex C. Ray
Address: 120 Professional Place
Bridgeport, WV 26330

Oil & Gas Name: Barry Stollings
Address: 28 Conifer Drive
Bridgeport, WV 26330

9) Plugging Contractor:
Name: HydroCarbon Well Service
Address: PO BOX 995
Buckhannon, WV 26201

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

See Attachment for details and procedures.

RECEIVED
OFFICE OF OIL AND GAS

DEC 18 ...

OFFICE USE ONLY

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

Work order approved by inspector Bryan D'Ilen Date 12-14-15

4103701P

PLUGGING PROGNOSIS

Whitesel,O.J. #1(608222)
Lewis. Co. WV
District, Collins Settlement
API # 47-041-03701
BY: R.Green
DATE: **02/17/15**

CURRENT STATUS:
13" @ 18'
9 5/8" @ 690' (CTS)
7"@ 809' (cement w/ 83 sks)
4 ½"@ 2677'(cement w/ 123 sks)
TD @ 4800' (plugged back to 2644')
Elevation @ 1220'

Fresh Water @ 50'
Salt Water @ None reported
Coal @ 620'-628'
Gas Shows@ None reported
Oil Shows @ None reported
Well fraced (5th Sand @2588')

1. Notify State Inspector, Barry Stollings, 304-552-4194, 24 hrs. Prior to commencing operations.
2. TIH to 2588', set 100'C1A cement plug 2588'to 2488' (5th sand). WAIT 4 HRS, TAG PLUG, ADD CEMENT IF NEEDED gm
3. TOOH tbg to 2488' gel hole 2488' to 2100', TOOH tbg.
4. Free point 4 ½" casing, cut casing @ free point. (est @ 2065')TOOH casing.
5. Set 100' C1A cement plug 50' in/out of casing cut. Perforate all salt water, fresh water, coal, oil and gas shows below cut. Do not omit any plugs.
6. TOOH tbg to 2015', gel hole 2015' to 1270'.
7. TOOH tbg to 1270', set 100' C1A cement plug, 1270 to 1170, (elevation).
8. TOOH tbg to 1170', gel hole 1170' to 860'.
9. TOOH tbg to 860', set 100' C1A cement plug 860' to 760', (7" casing seat).TOOH tbg.
10. Free point 7" casing, cut casing @ free point, (est@ 570'), TOOH casing.
11. ★ Set 100' C1A cement plug, 50' in /out of casing cut, perforate all, freshwater, saltwater, coal, oil and gas shows below cut. Do not omit any plugs. DO NOT PERFORATE 9 5/8" CASING. IT IS CEMENTED TO SURFACE.
12. TOOH tbg to 520', gel hole 520' to 200'.
13. TOOH tbg to 200', set 200' C1A cement plug 200' to surface,(13" casing seat, water @ 50').
14. Erect monument with API#.
15. Reclaim location, road to WV-DEP specifications.

★ IF 7" CUT IS ABOVE 691' (9 5/8" CASING SEAT), SET 100' C1A CEMENT PLUG ACROSS CUT. THEN MAKE SURE 9 5/8" CASING SEAT HAS 100' C1A PLUG FROM 741' TO 641'.

gm

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WV Dept. of Environmental Protection

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RECEIVED
JUL - 2 1986
DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

IV-35
(Rev 8-81)

State of West Virginia
Department of Mines
Oil and Gas Division

Date July 1, 1986
Operator's
Well No. 1 - 4
Farm Opha J. Whitesel #1
API No. 47 - 041 - 3701

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

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

LOCATION: Elevation: 1220' Watershed Dunkin Run
District: Collins Settl. County Lewis Quadrangle Roanoke

COMPANY Gas Well Supply Company
ADDRESS P.O. Drawer 40, Buckhannon, WV 26201
DESIGNATED AGENT Joseph C. Pettey
ADDRESS P.O. Drawer 40, Buckhannon, WV 26201
SURFACE OWNER Dept. of the Army, Huntignton Dist.
ADDRESS 502 Eighth St., Huntignton, WV 25701
MINERAL RIGHTS OWNER same as surface
ADDRESS
OIL AND GAS INSPECTOR FOR THIS WORK Stephen Casey ADDRESS Rt2, Box 232D, Jane Lew, WV 26378
PERMIT ISSUED 4/29/86
DRILLING COMMENCED 5/7/86
DRILLING COMPLETED 5/15/86
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"	18.00'	18.00'	
9 5/8	690.85'	690.85'	271 cf
8 5/8			
7	2238.00'	809.17'	94 cf
5 1/2			
4 1/2		2677.30'	139 cf
3			
2			
Liners used	2 3/8"	2562.55	

GEOLOGICAL TARGET FORMATION Benson Depth 4400' feet
Depth of completed well 4800' feet Rotary XXX / Cable Tools ___
Water strata depth: Fresh 50' feet; Salt ___ feet
Coal seam depths: 620/628 Is coal being mined in the area? no

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OPEN FLOW DATA
Producing formation 5th Sand Pay zone depth 2590' feet
Gas: Initial open flow no show Mcf/d Oil: Initial open flow ___ Bbl/d
Final open flow 94 Mcf/d Final open flow 7 Bbl/d
Time of open flow between initial and final tests 2 hours
Static rock pressure 750# psig (surface measurement) after 24 hours shut in
(If applicable due to multiple completion--)
Second producing formation ___ Pay zone depth ___ feet
Gas: Initial open flow ___ Mcf/d Oil: Initial open flow ___ Bbl/d
Final open flow ___ Mcf/d Oil: Final open flow ___ Bbl/d
Time of open flow between initial and final tests ___ hours
Static rock pressure ___ psig (surface measurement) after ___ hours shut in

(Continue on reverse side)

4103701P

FORM IV-35
(REVERSE)

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

Plugged back to 2644'

Dowell 1 stage Water Frac - 5/22/86

2588/90 - 5th sand - 54,500# sand and 543 bbls water

WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Sand & Shale	0	620	1/2" stream water @50'
Coal	620	628	
Sand & Shale	628	2583	
5th sand	2583	2616	
Balltown	3380	3496	
Benson	4484	4498	
		4800'	T.D. Gas check @TD = no show
Plugged back to 2644'			

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WV Dept. of Environmental Protection

(Attach separate sheets as necessary)

Gas Well Supply Company
Well Operator

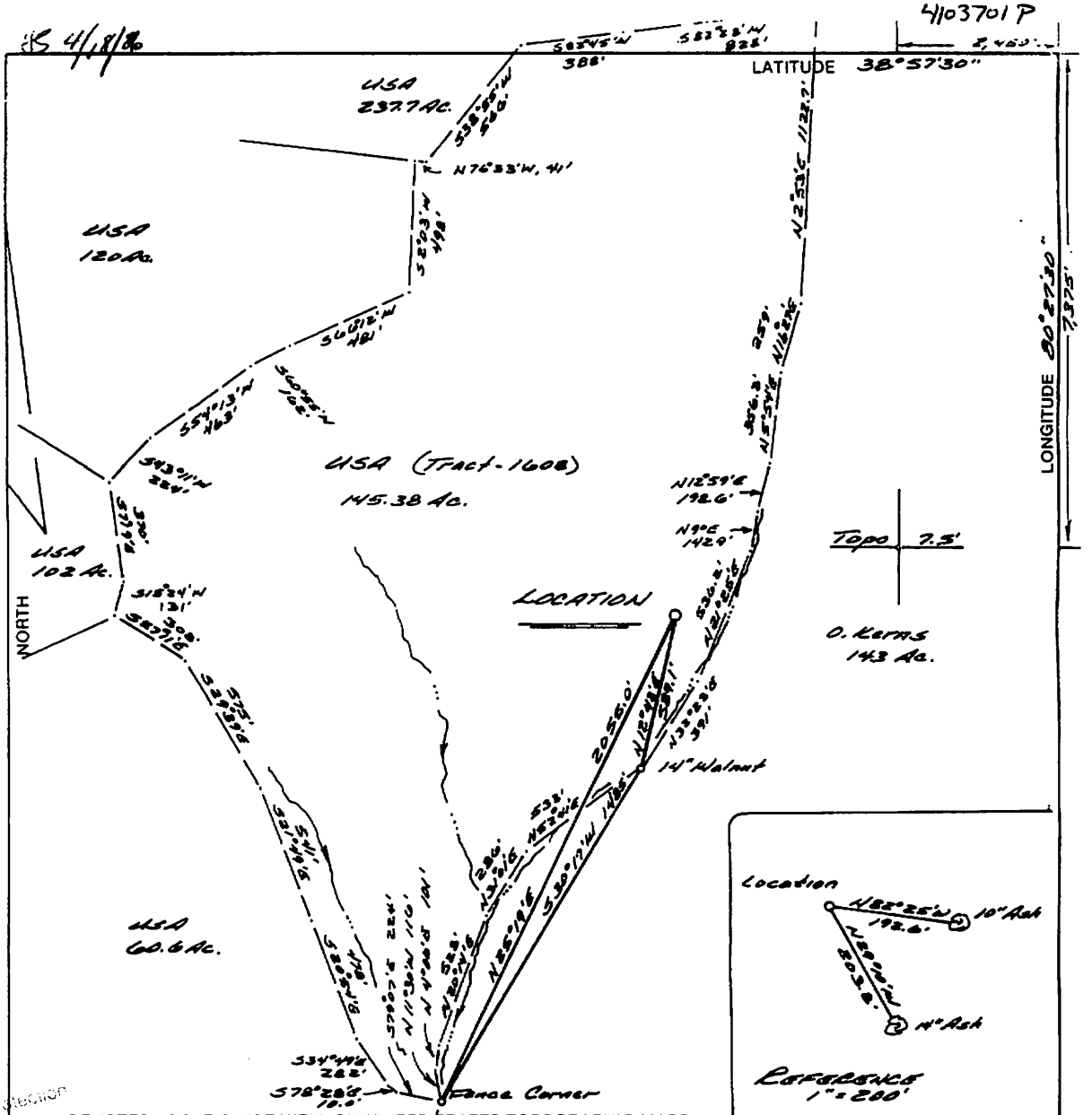
By: Joseph C. Pettey

Date: Joseph C. Pettey, Vice President of Production
7/1/86

Note: Regulation 2.02(i) provides as follows:
"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including coal, encountered in the drilling of a well."

4103701 P

BS 4/18/86



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

FILE NO. 40.01
DRAWING NO. B5-11
SCALE 1"=500'
MINIMUM DEGREE OF ACCURACY 1 in 200
PROVEN SOURCE OF ELEVATION Spot Elev.-1661 West of Location on Knob.

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 MINES.
(SIGNED) Confred L. Alexander
R.P.E. ____ L.L.S. 555
Buckhannon, WV

PLACE SEAL HERE

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NOV 24 2015
Office of Oil and Gas
WV Dept. of Environmental Protection

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

DATE 20 August, 19 85
OPERATOR'S WELL NO. 4
API WELL NO.
47 - 041 - 3701
STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS ✓ LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION ✓ STORAGE ___ DEEP ___ SHALLOW ✓
LOCATION: ELEVATION 1320' WATER SHED Dunkin Run
DISTRICT Collins Settlement COUNTY Lewis
QUADRANGLE Roanoke
SURFACE OWNER United States of America ACREAGE 145.38
OIL & GAS ROYALTY OWNER U S of A LEASE ACREAGE 336
LEASE NO. 25096
PROPOSED WORK: DRILL ✓ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ✓ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) ___
PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
TARGET FORMATION Benson ESTIMATED DEPTH 4400
WELL OPERATOR Gas Well Supply Co. DESIGNATED AGENT Joseph C. Pettey
ADDRESS P.O. Drawer 40 ADDRESS P.O. Drawer 40
Buckhannon W.V. 26201 Buckhannon W.V. 26201

COUNTY NAME
PERMIT

4/103701 P

WW-4-A
Revised 6/07

1) Date: November 20, 2015
2) Operator's Well Number
608222 (Opha Whitesel #1 - 8222)
3) API Well No.: 47 041 - 03701
State County Permit

STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL & GAS
NOTICE AND APPLICATION TO PLUG AND ABANDON WELL

4) Surface Owner(s) to be served:
(a) Name: U. S. Army Corps of Engineers
Address: 1012 Skin Creek Road
Weston, WV 26452-7435

(b) Name:
Address:

(c) Name:
Address:

6) Inspector: Barry Stollings
Address: 28 Conifer Drive
Bridgeport, WV 26330
Telephone: (304) 552-4194

5) (a) Coal Operator:
Name: None
Address:

(b) Coal Owner(s) with Declaration
Name: U. S. Army Corps of Engineers
Address: 1012 Skin Creek Road
Weston, WV 26452-7435

Name:
Address:

(c) Coal Lessee with Declaration
Name: None
Address:

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NOV 24 2015
Office of Oil and Gas
WV Dept. of Environmental Protection

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 Division 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.

OFFICIAL SEAL
STATE OF WEST VIRGINIA
NOTARY PUBLIC
Misty S Christie
1207 Brierdale Drive
Bridgeport, WV 26330
My Commission Expires February 20, 2018

Well Operator: **EQT Production Company**
By: **Victoria J.Roark**
Its: **Permitting Supervisor**
Address: **PO Box 280**
Bridgeport, WV 26330
Telephone: **(304) 848-0076**

Subscribed and sworn before me this 23rd day of November, 2015
Misty S Christie Notary Public
My Commission Expires: 2/20/18

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

4/1037017P

WW-9
Revised 2/03

Page _____ of _____
2) Operator's Well Number
608222 (Opha Whitesel #1 - 8222)
3) API Well No.: 47 041 - 03701

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL & GAS
CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM
GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Name: EQT PRODUCTION COMPANY OP ID: _____
Watershed: Right Fork Bear Run Quadrangle: Roanoke 7.5'
Elevation: 1175 ft. County: Lewis District: Collins Settlement
Description of anticipated Pit Waste: **Formation Fluids**

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes___ No X
Will synthetic liner be used in the pit? **Yes** Is so, what ml.? ~~10 mil~~ 20 mil

Proposed Disposal Method for Treated Pit Wastes:
X Land Application
_____ Underground Injection - UIC Permit Number _____
_____ Reuse (at API Number) _____
_____ Offsite Disposal Permit #.
_____ Other: Explain _____

Drilling medium anticipated for this well? Air, freshwater, oil based, etc.
If oil based, what type? Synthetic, petroleum, etc.
Additives to be used?
Will closed loop system be used?
Drill Cuttings disposal method? Leave in pit, landfill, remove offsite, etc.
If left in pit and plan to solidify what medium will be used? Cement, Lime, sawdust
Landfill or offsite name/permit number?

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Office of Oil and Gas
WV Dept. of Environmental Protection

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 Division of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any terms 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 or Printed) Victoria Roark
Company Official Title Permitting Supervisor-WV
Subscribed and sworn before me this 23rd day of November, 2015

Misty S. Christie
Notary Public
My Commission Expires 2/20/18

OFFICIAL SEAL
STATE OF WEST VIRGINIA
NOTARY PUBLIC
Misty S Christie
1207 Briercliff Rd
Bridgeport, WV 26330
My Commission Expires February 20, 2018

4/1037017P

OPERATOR'S WELL NO.:
608222 (Opha Whitesel #1 - 8222)

LEGEND

Property Boundary

Diversion

Spring

Wet Spot

Road

Planned Fence

Drain Pipe with size in inches

Water Way

Existing Fence

Stream

Cross Drain

Open Ditch

Artificial Filter Strip

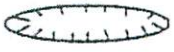
Rock

North

Building

Water well

Drill site

Pit with Cut Walls 

Pit with Compacted Walls

Area of Land Application of Pit Waste

Proposed Revegetation Treatment: Acres Disturbed: 1± Prevegetation pH _____

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20) or equivalent 1/3 ton lbs/acre (500 lbs minimum)

Mulch 2 Tons/acre or hydroseed.

SEED MIXTURES

Area I		Area II	
Seed Type	**lbs/acre**	**Seed Type**	**lbs/acre**
Red Fescue	40	Red Fescue	15
Alsike Clover	5	Alsike Clover	5
Annual Rye	15		

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DEC 18 2015

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

Plan approved by: Bryan O'Hern

Comments: _____

Title: Inspector Date: 12-14-15

Field Reviewed? X Yes _____ No

4103701P

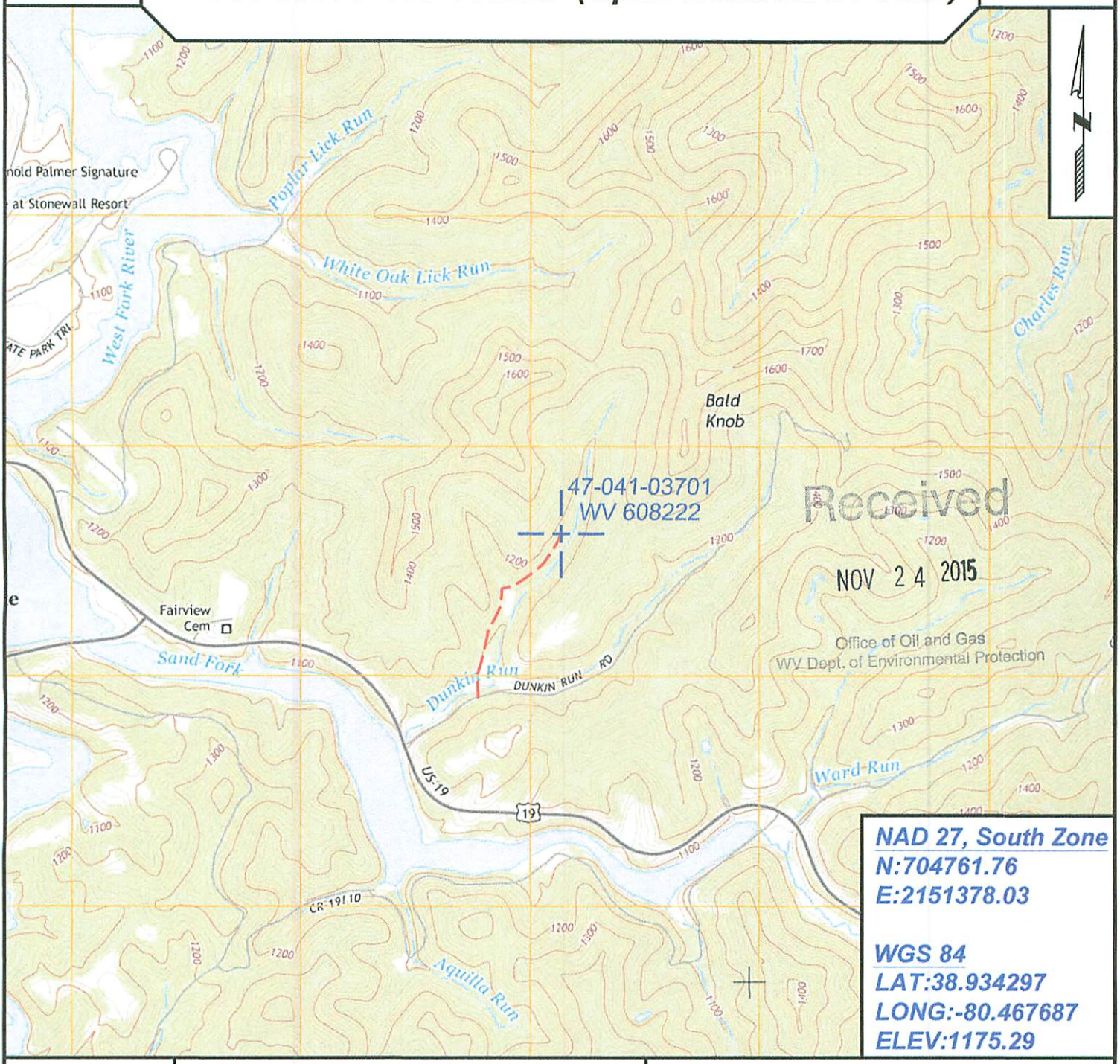
Topo Quad: Roanoke **Scale:** 1" = 2000'

County: Lewis **Date:** November 5, 2015

District: Collins Settlement **Project No:** 73-08

47-041-03701 WV 608222 (Opha Whitesel #1-8222)

Topo



NAD 27, South Zone
N:704761.76
E:2151378.03

WGS 84
LAT:38.934297
LONG:-80.467687
ELEV:1175.29

SURVEYING AND MAPPING SERVICES PERFORMED BY:

ALLEGHENY SURVEYS, INC.

1-800-482-8606
237 Birch River Road
Birch River, WV 26610
PH: (304) 649-8606
FAX: (304) 649-8608

PREPARED FOR:

EQT Production Company

P.O. Box 280
Bridgeport, WV 26330

4103701 P

WW-7
8-30-06

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

API: 47-041-03701 **WELL NO.:** WV 608222 (Opha Whitesel #1 - 8222)

FARM NAME: Opha Whitesel

RESPONSIBLE PARTY NAME: EQT Production Company

COUNTY: Lewis **DISTRICT:** Collins Settlement

QUADRANGLE: Roanoke 7.5'

SURFACE OWNER: The United States of America, U. S. Army Corps of Engineers

ROYALTY OWNER: The United States of America, U. S. Army Corps of Engineers

UTM GPS NORTHING: 4309620

UTM GPS EASTING: 546137 **GPS ELEVATION:** 358 m (1175 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 South, 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 X
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.

Received
NOV 24 2015
Office of Oil and Gas
Dept. of Environmental Protection

Signature	Title	Date
	PS # 2180	11/11/15

4103701P

POTENTIAL WATER SAMPLE DATA SHEET

CLIENT: EQT PRODUCTION COMPANY .
LEASE NAME AND WELL No. Opha Whitesel #1-8222 - WV 608222 - API No. 47-041-03701 .

POTENTIAL SAMPLE LOCATIONS

There appears to be no known water samples within the required 1000' of the existing well WV 608222.

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Office of Oil and Gas
WV Dept. of Environmental Protection

BIRCH RIVER OFFICE
237 Birch River Road
Birch River, WV 26610
phone: 304-649-8606
fax: 304-649-8608

BRIDGEPORT OFFICE
172 Thompson Drive
Bridgeport, WV 26330
phone: 304-848-5035
fax: 304-848-5037

ALUM CREEK OFFICE
P.O. Box 108 • 1413 Childress Rd
Alum Creek, WV 25003
phone: 304-756-2949
fax: 304-756-2948

RANSON OFFICE
401 South Fairfax Blvd, Suite 3
Ranson, WV 25438
phone: 304-724-5008
fax: 304-724-5010

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