



---

**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 09, 2015

**WELL WORK PLUGGING PERMIT**

**Plugging**

This permit, API Well Number: 47-5101391, issued to CHEVRON APPALACHIA, 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.

A blue ink signature of James Martin, Chief, is written over a white background.

James Martin  
Chief

Operator's Well No: STARCOVIC 2H  
Farm Name: STARCOVIC, STEPHEN M. & KIM  
**API Well Number: 47-5101391**  
**Permit Type: Plugging**  
Date Issued: 01/09/2015

**Promoting a healthy environment.**

**01/09/2015**

## 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.

WW-4B  
Rev. 2/01

1) Date December 22, 2014  
2) Operator's  
Well No. Starovic 2H  
3) API Well No. 47-051 - 01591

WV Department of  
Environmental Protection

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 \_\_\_ or Underground storage \_\_\_) Deep \_\_\_ / Shallow \_\_\_

5) Location: Elevation 1190' Watershed Grave Creek  
District Cameron County Marshall Quadrangle Cameron 7.5'

6) Well Operator Chevron Appalachia, LLC 7) Designated Agent N/A  
Address 800 Mountain View Drive Address \_\_\_\_\_  
Smithfield, PA 15478

8) Oil and Gas Inspector to be notified Name James Nicholson  
Address P.O. Box 44  
Mounsville, WV 26041  
9) Plugging Contractor Name See work order  
Address \_\_\_\_\_

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

See attached work order

DEC 31 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 James Nicholson Date 12/31/2014





5101391A

### Site Prep

Notify WV DEP Oil and Gas Inspector 48hrs prior to MIRU rig

1. Hold Tailgate Safety Meeting and review JSA
2. MIRU containment (per site layout and needs) and surface rental equipment
3. MIRU mud tanks and auxiliary equipment
4. RU flowback lines.

### Procedure

5. Mobilize work-over rig and pumping equipment to location
6. Spot rig and equipment in place
7. Check pressure on all casing and tubing strings. Note pressures on report.  
Bleed off pressure and kill well with kill weight fluid if needed.
8. MIRU E-line with 5k lubricator and test to 250 psi low for 5 minutes and 5,000 psi high.
9. RIH with a tbg plug and set in profile nipple at 6769'.
10. Test the tbg plug to 1000psi and record.
11. Set BPV inside the tubing hanger and ND tree.
12. NU the class III BOP and equipment (rams, manifold, lines etc). Ensure that 5k tbg safety valve is in the open position on the floor when handling tbg.
13. Test all breaks and BOP to 250 psi low for 5 minutes and 5,000 psi high (if pressure is higher, test to 500psi above known SITP) for 10 minutes, chart and record data with barton chart recorder and keep on file on location.
14. Retrieve BPV
15. R/U rig floor and tubing handling equipment.
16. *Fill the 5-1/2" csg lateral with fresh water to 6500'*
17. TOOH with 2-3/8", 4.7#, N-80 tubing and BHA.
18. R/U W/L and RIH with 4.5" gauge ring to 6500'.
19. POOH with gauge ring. Make note if any tight spots.
20. RIH with 5-1/2" CIBP and set at 6500'.
21. RIH with 2-3/8" tbg and tag top of CIBP at 6500'. Break circulation with 140bbls of fresh water. Test 5-1/2" CIBP to 1000psi.
22. *Spot a 700' plug with 75 sxs, 88.5 cuft of 15.6ppg, 1.18 yield, class "A" cmt. from*

RECEIVED  
Office of Oil and Gas

DEC 8 1 2014

WV Department of Environmental Protection

01/09/2015



5101391A

6500' – 5800' TOC @ 5800'.

23. Spot a 200' plug from 2400' – 2200' with 25 sxs, 29.5 cuft of 15.6ppg, 1.18 yield, class "A" cmt. TOC @ 2000'.
24. Spot a 200' plug from 1200' – 1000' with 25 sxs, 29.5 cuft of 15.6ppg, 1.18 yield, class "A" cmt. TOC @ 1000'.
25. Spot a 200' plug from 200' to surface' with 25 sxs, 29.5 cuft of 15.6ppg, 1.18 yield, class "A" cmt. TOC surface.
26. NOTE: 6% Bentonite Gel will be run between all plugs
27. ND the BOP and NU the tree. Test the tree to 3000psi and record.
28. RD work-over rig and equipment and mobilize rig to yard.

RECEIVED  
Office of Oil and Gas

DEC 31 2014

WV Department of  
Environmental Protection

01/09/2015





5101391P

CHIEF OIL & GAS LLC

WELLBORE DATA AND SKETCH

<b>Well: Starcovic 2H</b>	<b>Quad: Cameron 7.5', Cameron District</b>	<b>Updated: 12/17/14</b>																								
<b>County: Marshall</b>	<b>State: West Virginia</b>	<b>Status: SI - WOPL (AB Res.)</b>																								
Directions: See Prognosis	Location: Lat: 39° 49' 56.64" N	Survey:																								
Well Type: <b>Horizontal Well</b>	Long: 80° 35' 02.35" W	API # 47-510-1288																								
Elevation: GL: 1170'	<b>Proposed T&amp;A Well</b>	<b>Note: All depths MD unless noted</b>																								
DF: 1189'		Build Location: Start 7/6/09 End: 7/21/09																								
KB: 1190'		Spud: 10/31/10																								
24" Conductor Csg @ 80'		Release Rig: 12/1/10																								
22 3/4" Hole @ 420'		Completed: 4/10/11																								
20" 94# J-55 Surface Csg @ 395'		First Production: Turned Over to AB Resources																								
Cmtd w/ 305 sxs - Circ - TOC @ Surface		AB will assume flowback ops.																								
17 1/2" Hole @ 1210'																										
13 3/8" 54.5# J-55 Surface Csg @ 1182'																										
Cemented w/ 900 sxs - Circ TOC @ Surface																										
12 1/4" Hole @ 2430'																										
9 5/8" 36# J-55 Intermediate Csg @ 2368'																										
Cmtd w/ 750 sxs - Circ - TOC @ Surface																										
DV Tool Set @ 4818' - Cmtd w/ 984 sx Drilled thru DV Tool																										
8 1/2" Hole @ 10427' MD (6839' TVD)																										
TOC @ 1100' by CBL																										
KOP: 6120'																										
Target Centerline - 6890' TVD																										
Pen. Marcellus - 7429' MD (6876' TVD) VS 720'																										
Maximum Deflection - 17.9 degree @ 6744'																										
Maximum Angle - 93.1 degree @ 10380'																										
Displacement - 3689' N 20.9 W																										
Landing Point - 7877 MD (6890' TVD) VS 1164'																										
MWD Gamma run. No OH logs run.																										
4/6/11: Pumpco Frac w/ 11,012 BFW (Treated) & 241,800# 100 Mesh & 404,100# 40/70 Sand. LTR: 82,161 bbbls - 7th Stg		<p>Set a 200', 25x25 cmt bal. plug at 2400', 1200', and 200'</p> <p>Air/Foam Drilling Method - Rotary Rig - Union Drilling, LP #60 (KB: 20') Ziegenfuss Drl'd Conductor 10/17/10</p> <p>Bottom Hole Location DDC Survey: True Lat: 39° 50' 31.653" N True Long: 80° 35' 14.981" W</p> <p>5% Bentonite gel between all</p> <p>Set a 5-1/2" CIBP at 6500', Spot 75 sxs of 15.6ppg, 1.18 yield, class "A" 700' cmt plug on top of CIBP. TOC @ 5800'</p> <table border="1"> <tr> <td>Marcellus:</td> <td>Top @ 7429'</td> <td>630 Holes</td> </tr> <tr> <td>7th Stg Perfs:</td> <td>7283' - 7637'</td> <td>90 Holes</td> </tr> <tr> <td>6th Stg Perfs:</td> <td>7702' - 8056'</td> <td>90 Holes</td> </tr> <tr> <td>5th Stg Perfs:</td> <td>8121' - 8475'</td> <td>90 Holes</td> </tr> <tr> <td>4th Stg Perfs:</td> <td>8540' - 8894'</td> <td>90 Holes</td> </tr> <tr> <td>3rd Stg Perfs:</td> <td>8959' - 9313'</td> <td>90 Holes</td> </tr> <tr> <td>2nd Stg Perfs:</td> <td>9413' - 9847'</td> <td>90 Holes</td> </tr> <tr> <td>1st Stg Perfs:</td> <td>9911' - 10345'</td> <td>90 Holes</td> </tr> </table>	Marcellus:	Top @ 7429'	630 Holes	7th Stg Perfs:	7283' - 7637'	90 Holes	6th Stg Perfs:	7702' - 8056'	90 Holes	5th Stg Perfs:	8121' - 8475'	90 Holes	4th Stg Perfs:	8540' - 8894'	90 Holes	3rd Stg Perfs:	8959' - 9313'	90 Holes	2nd Stg Perfs:	9413' - 9847'	90 Holes	1st Stg Perfs:	9911' - 10345'	90 Holes
Marcellus:	Top @ 7429'	630 Holes																								
7th Stg Perfs:	7283' - 7637'	90 Holes																								
6th Stg Perfs:	7702' - 8056'	90 Holes																								
5th Stg Perfs:	8121' - 8475'	90 Holes																								
4th Stg Perfs:	8540' - 8894'	90 Holes																								
3rd Stg Perfs:	8959' - 9313'	90 Holes																								
2nd Stg Perfs:	9413' - 9847'	90 Holes																								
1st Stg Perfs:	9911' - 10345'	90 Holes																								
4/6/11: Pumpco Frac w/ 10,713 BFW (Treated) & 241,600# 100 Mesh & 362,400# 40/70 Sand. LTR: 71,149 bbbls - 6th Stg																										
4/5/11: Pumpco Frac w/ 11,092 BFW (Treated) & 241,590# 100 Mesh & 367,710# 40/70 Sand. LTR: 60,436 bbbls - 5th Stg																										
4/4/11: Pumpco Frac w/ 10,731 BFW (Treated) & 241,600# 100 Mesh & 364,410# 40/70 Sand. LTR: 49,344 bbbls - 4th Stg																										
4/3/11: Pumpco Frac w/ 12,195 BFW (Treated) & 241,400# 100 Mesh & 363,300# 40/70 Sand. LTR: 38,613 bbbls - 3rd Stg																										
4/2/11: Pumpco Frac w/ 13,177 BFW (Treated) & 288,800# 100 Mesh & 423,200# 40/70 Sand. LTR: 26,418 bbbls - 2nd Stg																										
4/1/11: Pumpco Frac w/ 13,241 BFW (Treated) & 287,500# 100 Mesh & 433,462# 40/70 Sand. LTR: 13,241 bbbls - 1st Stg	Frac done from Starcovic Water Impoundment	5 1/2" 20# P-110 Csg @ 10415' Cemented w/ 762 sxs																								

RECEIVED  
Office of Oil and Gas  
WV Dept of Environmental Protection

PBTD10067  
TD: 10427

01/09/2015



5101391P

# Starcovic 2H

## **"Temporary Abandonment Procedure"**

MUST BE PLUGGED  
AS IF PERMANENT.  
JMM

Expected Start Date: January 12, 2015

	2H
AFE Number	
API Number	47-051-01391

Service Rig Company	Nabors	County	Marshall
Wellhead	Weatherford	Township	Cameron, WV
Downhole Tools	Baker Hughes	Latitude	39° 49' 56.10" North
		Longitude	80° 35' 05.50" West

RECEIVED  
Office of Oil and Gas

DEC 8 2014

### Objective:

Temporary abandonment of Starcovic 2H in accordance West Virginia's DEP requirements.

WV Department of Environmental Protection

### Completion Design Review:

Listed below are the members of the well team who were in attendance and agreement with the completion procedure as discussed.

Revised by:	Tony Raphael – Well Abandonment Engineer	12/30/14
Review by:	Garland Bledsoe – Project Manger	12/30/14
Revised by:	David Beasley – Completion Engineer	
Reviewed by:	Lisa Branden– Petroleum Engineer	
Reviewed by:	Pam Gellek – Production Engineer	
Reviewed by:	Matt Bower - Petroleum Engineer	

01/09/2015





57101391P

### IFO: Incident Free Operations

Chevron is committed to providing a safe working environment for all personnel through the tenets we live by such as **Do it safely or not at all. Stop Work Authority** means all personnel not only have the right but the responsibility to stop any potentially unsafe job.

Report all injuries, no matter how minor, 24/7 to Axiom Medical at 1-877-502-9466

### Directions to Location

From Pittsburgh: Merge onto I-79 S via EXIT 64A toward Washington (20.9m), Merge onto I-70 W via EXIT 38 toward Wheeling (6.6m), Take EXIT 11 toward PA-221/Taylorstown. Turn right onto Prosperity Pike/PA-18/PA-221. Continue to follow PA-18. Once in Graysville turn right onto W Roy Furman Hwy/PA-21 (Crossing into West Virginia) W Roy Furman Hwy/PA-21 becomes WV-891. WV-891 becomes US-250 S (Waynesburg Ave). continue until you get in Camerom. Turn right onto Loudenville Rd/County Hwy-25. Turn left onto Main St/County Hwy-25. Continue to follow County Hwy-25. .3 miles past summit street, Turn right onto unmaked gravel road which will lead to the site location.

From Waynesburg PA, go West on SR 21 (26.1 mi) into West Virginia, continue on SR 891 (2.0 mi) to SR 250, follow Rt. 250 south towards Cameron for (3.7 mi), make a right on Loudenville Rd, follow for (0.5 mi) to the stop sign, make a right, then a left to stay on Loudenville Rd, follow for (0.8 Mi) to the location lease entrance on the Right.

Office of Oil and Gas

DEC 8 1 2014

WV Department of



01/09/2015





5101391A

### Well Information

Well #	Top Perf		RKB	Marker Joint	PBTD
	MD	TVD	MD	MD	MD
2H	7,283		20'		10,367

Dimensions and Pressure Data					
Size	Depth	Weight	Grade	Burst	Collapse
24"	80'				
20	395'	94	J-55		
13 3/8"	1182'	54.5 lbs/ft	J-55		
9 5/8"	2368'	36 lbs/ft	K-55		
5 1/2"	10,415'	20 lbs/ft	P-110	12,640 psi	11,080 psi

Capacity	
5 1/2"# 20 P-110 CSG	0.02210 bbl/ft

### Current Status

Well is currently on line and flowing approximately 1.1 MMCFD of gas a day at 750 psi on the tubing. Less than 1 bbl of condensate produced per day.

RECEIVED  
Office of Oil and Gas

DEC 8 2014

WV Department of  
Environmental Protection

01/09/2015



5101391A

### Starcovic 2H Wellbore Schematic (Current)

CHIEF OIL & GAS LLC

WELLBORE DATA AND SKETCH

<b>Well:</b> Starcovic 2H	<b>Quad:</b> Cameron 7.5', Cameron District	<b>Updated:</b> 4/22/11
<b>County:</b> Marshall	<b>State:</b> West Virginia	<b>Status:</b> SI - WOPL (AB Res.)
<b>Directions:</b> See Progress	<b>Location:</b> Lat: 35° 49' 56.64" N	<b>Survey:</b>
<b>Well Type:</b> Horizontal Well	<b>Long:</b> 80° 35' 02.35" W	<b>API #:</b> 47-510-1258
<b>Elevation:</b> GL: 1170'	<b>Completed Well</b> <i>Note: All depths MD unless noted</i>	
DF: 1189'		<b>Build Location:</b> Start: 7/6/09 End: 7/21/09
KB: 1190'		<b>Spud:</b> 10/31/10
ibg hanger at 27'		<b>Release Rig:</b> 12/1/10
24" Conductor Csg @ 80'		<b>Completed:</b> 4/10/11
22 3/4" Hole @ 420'		<b>First Production:</b> Turned Over to AB Resources
20" 94# J-55 Surface Csg @ 395'		AB will assume flowback ops.
Cmf'd w/ 305 sxs - Circ - TOC @ Surface		
17 1/2" Hole @ 1210'		
13 3/8" 54.5# J-55 Surface Csg @ 1182'		<b>Air/Foam Drilling Method - Rotary</b>
Cemented w/ 900 sxs - Circ		Rig - Union Drilling, LP #60 (KB: 20)
TOC @ Surface		Ziegenfuss Dril Conductor 10/17/10
12 1/4" Hole @ 2430'		<b>Bottom Hole Location</b>
9 5/8" 36# J-55 Intermediate Csg @ 2368'		<b>DOC Survey:</b> True Lat: 35° 50' 31.653" N
Cmf'd w/ 750 sxs - Circ - TOC @ Surface		True Long: 80° 35' 14.981" W
DV Tool Set @ 4818' - Cmf'd w/ 984 sx		
Drilled thru DV Tool		
8 1/2" Hole @ 10427' MD (6839' TVD)		
TOC @ 1100' by CBL		
KOP: 6120'		
Target Centerline - 6890' TVD		
Pen. Marcellus - 7429' MD (6676' TVD) VS 720'		
Maximum Deflection - 17.9 degree @ 6744'		
Maximum Angle - 93.1 degree @ 10360'		
Displacement - 3689' N 20.9 W		
Landing Point - 7877' MD (6890' TVD) VS 1164'		
MWD Gamma run. No OH logs run.		
4/5/11: Pumpco Frac w/ 11,012 BFW (Treated) & 241,800# 100 Mesh & 404,100# 40/70 Sand. LTR: 82,161 bbis - 7th Stg		
4/5/11: Pumpco Frac w/ 10,713 BFW (Treated) & 241,600# 100 Mesh & 362,400# 40/70 Sand. LTR: 71,149 bbis - 6th Stg		
4/5/11: Pumpco Frac w/ 11,092 BFW (Treated) & 241,590# 100 Mesh & 367,710# 40/70 Sand. LTR: 60,436 bbis - 5th Stg		
4/4/11: Pumpco Frac w/ 10,731 BFW (Treated) & 241,600# 100 Mesh & 364,410# 40/70 Sand. LTR: 49,344 bbis - 4th Stg		
4/3/11: Pumpco Frac w/ 12,195 BFW (Treated) & 241,400# 100 Mesh & 363,300# 40/70 Sand. LTR: 38,613 bbis - 3rd Stg		
4/2/11: Pumpco Frac w/ 13,177 BFW (Treated) & 268,800# 100 Mesh & 423,200# 40/70 Sand. LTR: 26,418 bbis - 2nd Stg		
4/1/11: Pumpco Frac w/ 13,241 BFW (Treated) & 287,500# 100 Mesh & 433,462# 40/70 Sand. LTR: 13,241 bbis - 1st Stg		
Frac done from Starcovic Water Impoundment		
	<b>Perfs:</b> 7283' - 10345' 630 Holes	
	<b>EOT @ 7235'</b>	
	<b>TD: 10427'</b>	
	<b>5 1/2" 20# P-110 Csg @ 10415'</b>	
	<b>Cemented w/ 762 sxs</b>	

DEC 3 1 2014





5101391P

7014 2120 0002 1442 6169

U.S. Postal Service™  
**CERTIFIED MAIL® RECEIPT**  
 Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®

**OFFICIAL USE**

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

Postmark Here  
 DEC 31 2014

Sent To  
 Street & Apt or PO Box #  
 City, State, ZIP+4®

Consolidated Coal Company  
 Engineering & Operations  
 Support/Coal  
 Attn: Analyst  
 1000 Consol Energy Drive  
 Canonsburg, PA 15317

PS Form 3800, June 2010

RECEIVED  
Office of Oil and Gas

DEC 31 2014

WV Department of Environmental Protection

7014 2120 0002 1442 6152

U.S. Postal Service™  
**CERTIFIED MAIL® RECEIPT**  
 Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®

**OFFICIAL USE**

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

Postmark Here  
 DEC 31 2014

Sent To  
 Street & Apt or PO Box #  
 City, State, ZIP+4®

Stephen M. & Kimberly A. Starcovic  
 RD 4 Box 152  
 152 Loudenville Rd  
 Cameron, WV 26033

PS Form 3800, June 2010

RECEIVED  
Office of Oil and Gas

DEC 31 2014

WV Department of Environmental Protection



WW-9  
(9/13)

API Number 47 - 051 - 01391  
Operator's Well No. Starovic 2H

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Chevron Appalachia, LLC OP Code 49449935

Watershed (HUC 10) Grave Creek Quadrangle Cameron 7.5'

Elevation 1170' County Marshall District Cameron

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

Will a pit be used? Yes  No

If so, please describe anticipated pit waste: \_\_\_\_\_

Will a synthetic liner be used in the pit? Yes  No  If so, what 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 \_\_\_\_\_ )

*ANY WELL EFFLUENT MUST BE CONTAINED IN TANKS AND DISPOSED OF PROPERLY. gmm*

Will closed loop system be used? If so, describe: N/A

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. NA Plugging well

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

RECEIVED  
Office of Oil and Gas

Additives to be used in drilling medium? \_\_\_\_\_

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. N/A

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

-Landfill or offsite name/permit number? \_\_\_\_\_

WV Dep  
Environment

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 *Branden Weimer*

Company Official (Typed Name) Branden Weimer

Company Official Title Permitting Team Lead

Subscribed and sworn before me this 9th day of January, 20 15

Kristen Brooks

Notary Public

My commission expires September 2, 2018

COMMONWEALTH OF PENNSYLVANIA  
NOTARIAL SEAL  
Kristen Brooks, Notary Public  
Smithfield Boro, Fayette County  
My Commission Expires Sept 2, 2018  
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Form WW-9

Operator's Well No. Starcovic 2H

Chevron Appalachia, LLC

Proposed Revegetation Treatment: Acres Disturbed \_\_\_\_\_ Prevegetation pH \_\_\_\_\_

Lime \_\_\_\_\_ Tons/acre or to correct to pH \_\_\_\_\_

Fertilizer type \_\_\_\_\_

Fertilizer amount \_\_\_\_\_ lbs/acre

Mulch \_\_\_\_\_ Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Attach:  
Drawing(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided)

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: \_\_\_\_\_

Comments: \_\_\_\_\_

RECEIVED  
Office of Oil Conservation

WV Dept.  
Environmental Protection

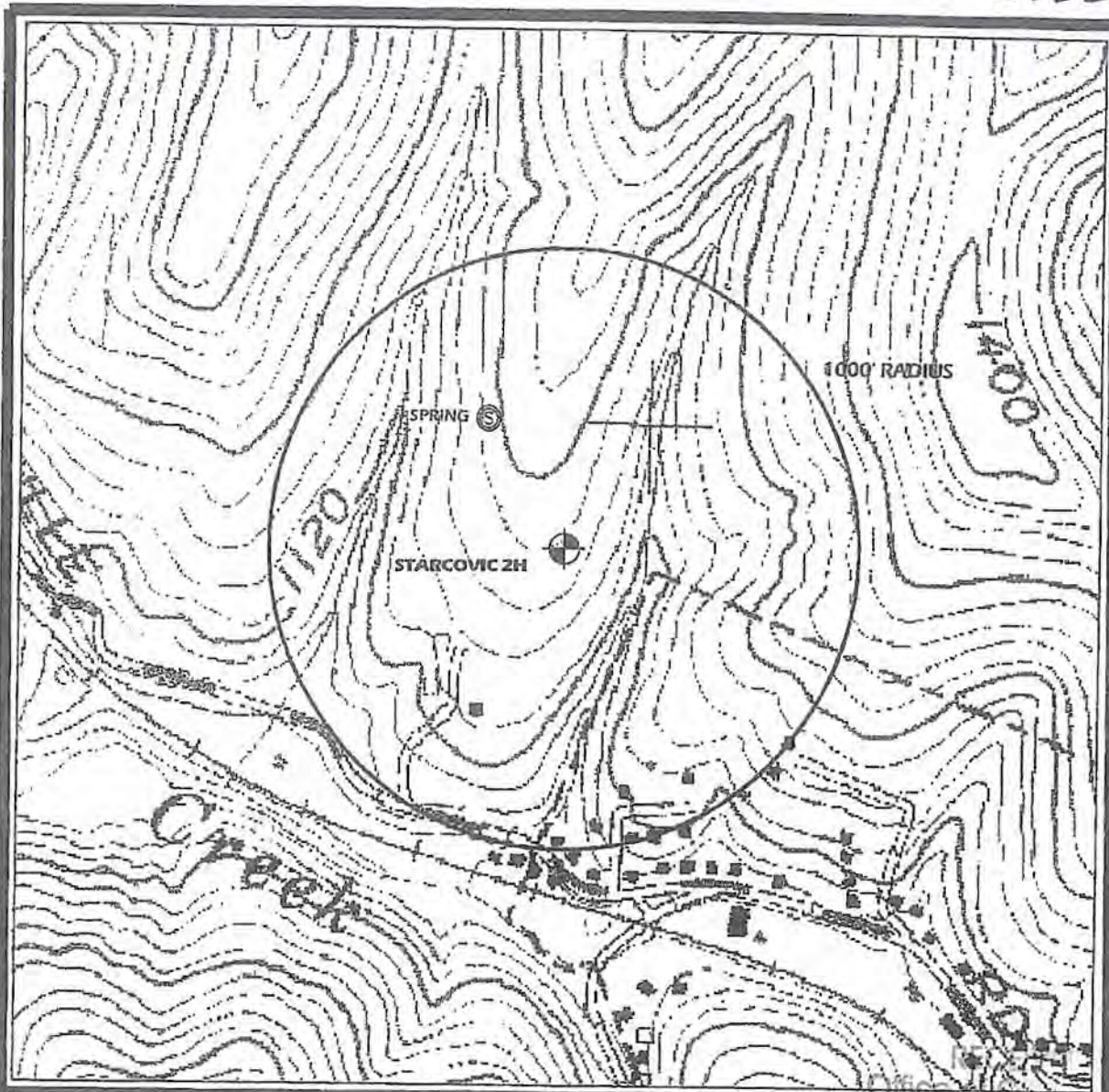
Title: \_\_\_\_\_ Date: \_\_\_\_\_

Field Reviewed? ( ) Yes ( ) No



51.01391P

~~51-01354H~~



**LEGEND**

- ⊙ WELL
- ⊕ CISTERN
- ⊙ SPRING

CAMERON QUADRANGLE  
NOT TO SCALE

NOTES: OTHER THAN AS SHOWN  
NO WATER WELLS OR OTHER SOURCES OF  
GROUNDWATER CURRENTLY BEING UTILIZED  
FOR HUMAN CONSUMPTION, DOMESTIC ANIMALS  
OR OTHER GENERAL USE WERE IDENTIFIED  
WITHIN 1000' OF THE PROPOSED WELL SITE.

PREPARED BY:  
EAGLE SURVEYING INC.

AB RESOURCES PA LLC

**STARCOVIC 2H**  
TOPOGRAPHIC LOCATION MAP

5101391P

WW-7  
8-30-06



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

API: 47-051-01391 WELL NO.: 2H

FARM NAME: Starcovic

RESPONSIBLE PARTY NAME: Chevron Appalachia, LLC

COUNTY: Marshall DISTRICT: Cameron

QUADRANGLE: Cameron 7.5'

SURFACE OWNER: Stephen M & Kimberly A Starcovic

ROYALTY OWNER: Stepehn M & Kimberly A Starcovic

UTM GPS NORTHING: 4409218.28

UTM GPS EASTING: 535534.65 GPS ELEVATION: 1170'

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:

- Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
- Accuracy to Datum – 3.05 meters
- Data Collection Method:  
Survey grade GPS \_\_\_\_ : Post Processed Differential \_\_\_\_  
Real-Time Differential \_\_\_\_  
Mapping Grade GPS \_\_\_\_ : Post Processed Differential \_\_\_\_  
Real-Time Differential \_\_\_\_

RECEIVED  
Office of Oil and Gas

LET'S 1 70M

WV Department of  
Environmental Protection

- Letter size copy of the topography map showing the well location.

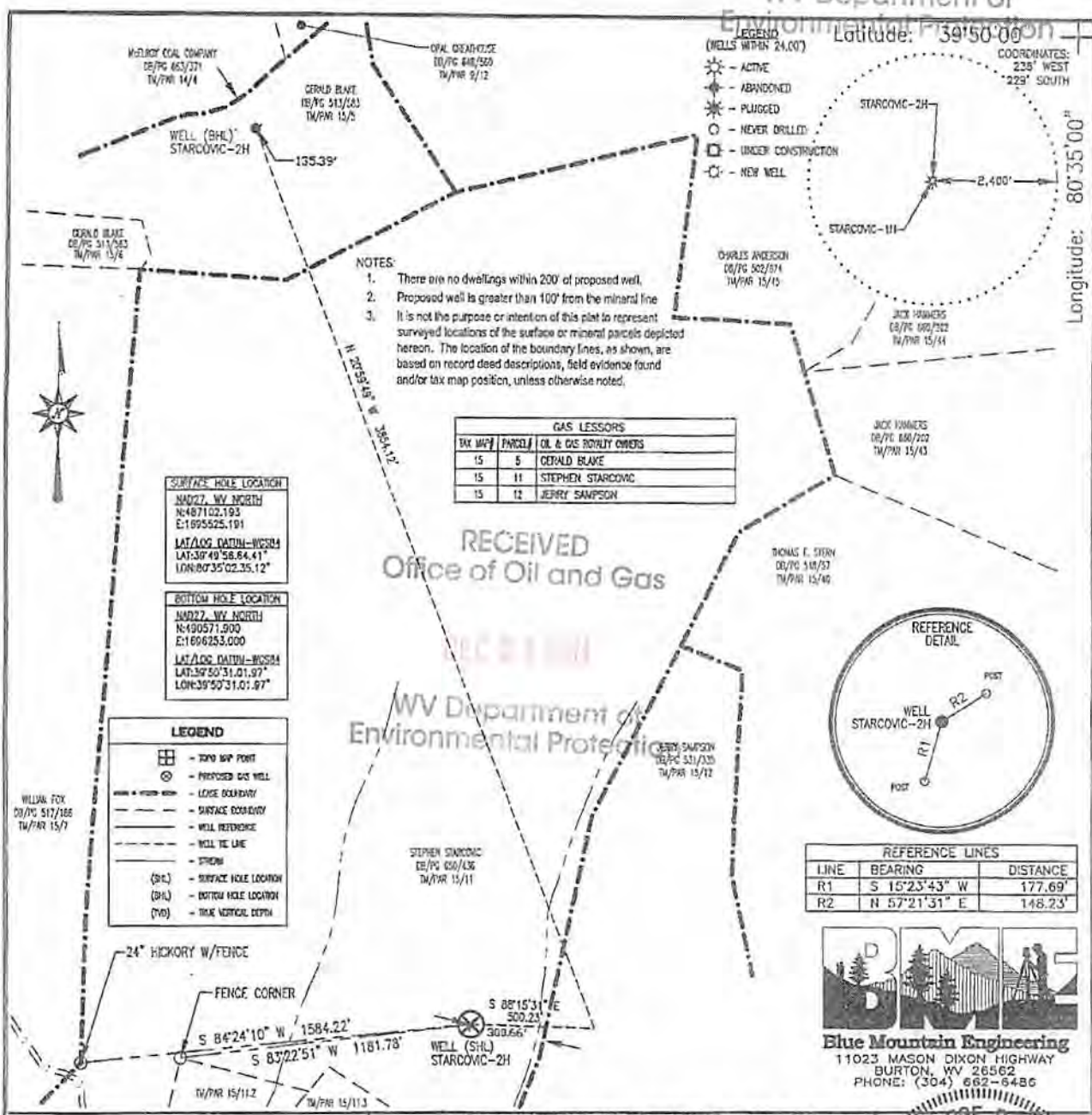
I the undersigned, hereby certify this data is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Office of Oil and Gas.

[Signature]  
Signature

Geotechnical Permitting Lead  
Title

1-8-15  
Date





FILE #: STARCOVIC 2H  
 DRAWING #: STARCOVIC 2H  
 SCALE: 1" = 600'  
 MINIMUM DEGREE OF ACCURACY: 1/2500  
 PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

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 ENVIRONMENTAL PROTECTION.

Signed: *George D. Six*  
 R.P.E.: \_\_\_\_\_ L.L.S.: P.S. No. 2000

GEORGE D. SIX  
 LICENSED  
 No. 2000  
 STATE OF WEST VIRGINIA  
 PROFESSIONAL SURVEYOR

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP  
 OFFICE OF OIL & GAS  
 601 57TH STREET  
 CHARLESTON, WV 25304



DATE: JANUARY 13, 2010  
 OPERATOR'S WELL #: STARCOVIC 2H  
 API WELL #: 47 51 01391 H6A P  
 STATE COUNTY PERMIT

Well Type:  Oil  Waste Disposal  Production  Deep  
 Gas  Liquid Injection  Storage  Shallow

WATERSHED: UNNAMED TRIBUTARY TO GRAVE CREEK ELEVATION: 1170.07'  
 COUNTY/DISTRICT: MARSHALL/CAMERON QUADRANGLE: CAMERON, WV 7.5'  
 SURFACE OWNER: STEPHEN STARCOVIC ACREAGE: 168.0±  
 OIL & GAS ROYALTY OWNER: STEPHEN STARCOVIC ACREAGE: 168.0±

DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE   
 PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  PLUG & ABANDON   
 CLEAN OUT & REPLUG  OTHER CHANGE  (SPECIFY): \_\_\_\_\_

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 6,832'± TMD: 10,612'±

WELL OPERATOR: CHIEF OIL & GAS LLC DESIGNATED AGENT: CHAD S. LOVEJOY  
 Address: 5956 SHERRY LANE, SUITE 1500 Address: 522 NINTH STREET  
 City: DALLAS State: TX Zip Code: 75225 City: HUNTINGTON State: WV Zip Code: 25701

01/09/2015