



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street, S.E.
Charleston, WV 25304
(304) 926-0450
fax: (304) 926-0452

Harold D. Ward, Cabinet Secretary
www.dep.wv.gov

Thursday, May 4, 2023
WELL WORK PLUGGING PERMIT
Vertical Plugging

PILLAR ENERGY, LLC
1244 MARTINS BRANCH RD

CHARLESTON, WV 25312

Re: Permit approval for STURM B-1
47-093-00096-00-00

This well work permit 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 any additional specific 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. Please be advised that form WR-38, Affidavit of Plugging and Filling Well, is to be submitted to this office within 90 days of 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.

Per 35 CSR 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- 0450.

James A. Martin
Chief

A blue ink signature of James A. Martin, written in a cursive style.

Operator's Well Number: STURM B-1
Farm Name: STURM, JERRY
U.S. WELL NUMBER: 47-093-00096-00-00
Vertical Plugging
Date Issued: 5/4/2023

Promoting a healthy environment.

05/05/2023

H

4709300096

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. 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.
2. Well work activities shall not constitute a hazard to the safety of persons.
3. 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.

05/05/2023

WW-4B
Rev. 2/01

1) Date March 15, 2023
2) Operator's
Well No. Sturm B-1
3) API Well No. 47-093 -80095

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 ___

5) Location: Elevation 2425' Watershed Jobs Run
District Black Fork County Tucker Quadrangle Parsons 7.5'

6) Well Operator Pillar Energy, LLC 7) Designated Agent _____
Address 1244 Martins Branch Road Address _____
Charleston, WV 25312

8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name Gayne Knitowski Name _____
Address _____ Address _____

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

See attached procedure.

- * PLUGS SHALL BE CLASS A CEMENT, WITH EXCEPTION OF LATEX PLUG FROM 4550' - 4350'.
- * GEL SPACERS BETWEEN ALL PLUGS.

JMM

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

Sturm #1
 API# 47-093-00096
 Elevation: 2425' GL
 Latitude/Longitude: 39.067260, -79.724034

Sturm #1 Well Data (Drilled September 2003)

Casing: 20" Conductor csg @ 30' MD.
 13-3/8" 48 ppf Surface csg @ 217' MD. Cemented to surface.
 9-5/8" 40/36 ppf Intermediate csg @ 1302' MD. Cemented to surface.
 7" 23 ppf Production csg @ 6269' MD. ~~Cemented to surface.~~ ≈ 3550' TOC

PBTD: 5140' MD (Original TD 7143' MD, but has CIBP set @ 5140' MD).
 Perforations: 4470' – 4499' (100 holes)
 Coal: N/A
 Fresh Water Shows: 920'
 Salt Water Shows: 4680'
 Gas/Oil Shows: 4475'

★ USE CLASS A CEMENT TO PLUG.

H2S LIKELY PRESENT

Sturm #1 Procedure:

1. Notify State Inspector, Gayne Knitowski – (304)-546-8171 – Gayne.J.Knitowski@wv.gov 24 hours prior to commencing operations.
2. Prep location.
3. MIRU service rig, steel pits, and other ancillary equipment.
4. Blow well down and check for H2S, load hole w/ FW to kill well if necessary.
5. TOO H w/ 2-3/8" production tubing.
6. PU 2-3/8" work string & TIH to CIBP @ 5140' MD.
7. Pump 20 BBls 6% gel, followed by 100' cement plug F/ 5140' T/ 5040' MD.
8. TOO H to 4700', pump 20 BBls 6% gel, followed by 100' cement plug F/ 4700' T/ 4600' MD.
9. TOO H to 4550' and set 200' LATEX cement plug F/ 4550' T/ 4350' MD.
10. TOO H to 3000', WOC 8 hrs, TIH & tag plug, add cement if needed.
11. 7" Casing will be ripped and removed from well bore where free. The following cement plugs set will be set, with the order depending on where casing is free and able to be removed, with 6% gel spotted between each plug.
 - a. 100' plug across from casing rip, 50' below and 50' above rip. ≈ 3200' - 3400' TOC → 7"
 - b. 100' plug F/ 2475' – T/ 2375'. (Csg Ripped or Perf'd @ ~2425' if 7" csg is present)
 - c. 100' plug F/ 970' – T/ 870'. (Csg Ripped or Perf'd @ ~920' if 7" csg is present)
 - d. 200' plug F/ 200' – T/ surface'.
12. Erect a monument to WV DEP specifications (CSR 35-4-5.5 – sub "b").
13. Reclaim location and roads to WV DEP Specifications.

GJK
 ★
 ADD 60' OF CLASS A
 ACROSS 9 5/8" SNOB
 FROM 1350' TO 1250'

★

Prior to the start of the plugging procedure a metal plate of equivalent is to be placed to protect bridge culvert from vehicle traffic. GJK 3-30-2023

Gayne
 Knitowski

Digitally signed by Gayne Knitowski
 Date: 2023.03.30 14:51:09 -0400

05/05/2023

Permit Number: 47-093-00096

Sturm # B-1

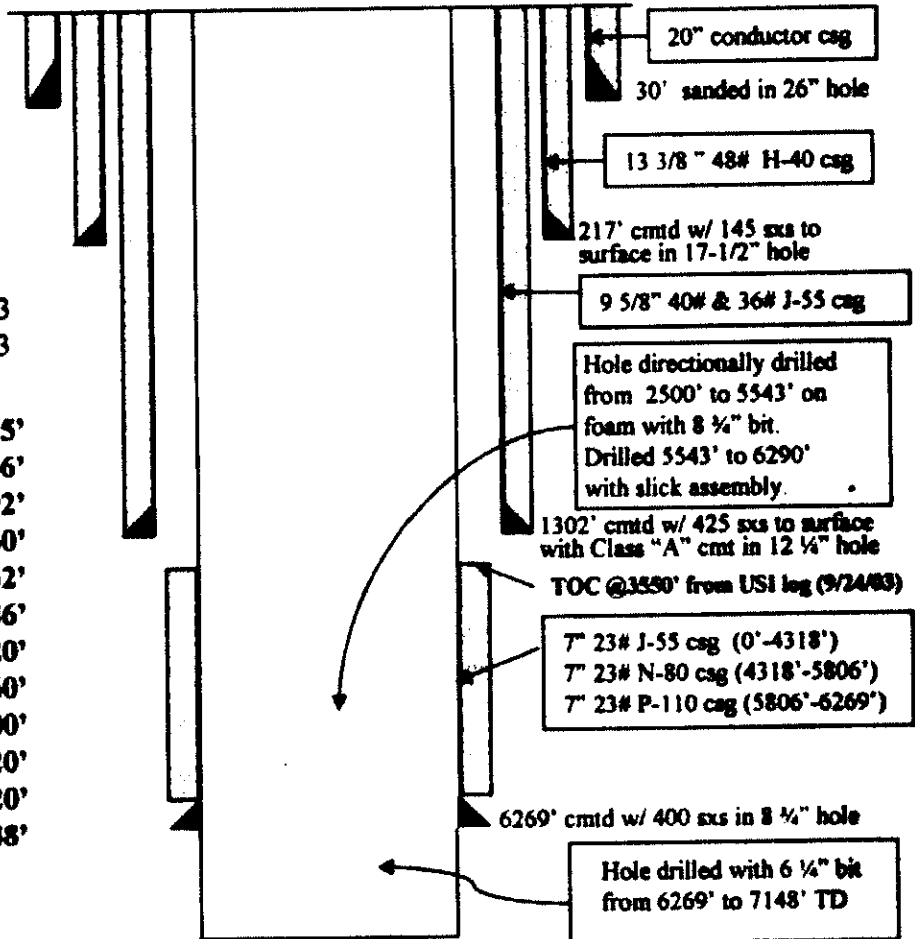
Location:

District: Black Fork
 County: Tucker
 Quadrangle: Parson

Elevation: **GL: 2425'**
KB: 2445'

Spud date: 08-31-2003
 Drilling Complete: 09-23-2003

T/Tully:	3745'
T/Onondaga:	4166'
T/Huntersville:	4192'
T/Oriskany:	4360'
T/Holderberg:	4532'
T/Mandata:	4946'
T/Corriganville:	5020'
T/Tonoloway:	5960'
T/Salt:	6000'
B/Salt:	6120'
T/Lockport:	7020'
T. D. in Lockport:	7148'



TD: 7143 Ft Drillers
 TD: 7148 Ft Loggers

Huntersville Chert

No shows while drilling

Oriskany

Natural gas flow encountered at 4475' (3375 units)

Holderberg

Salt water flow encountered at 4680'

RECEIVED
 Office of Oil and Gas

MAY 5 2023

WV Department of
 Environmental Protection

Permit Number: 47-093-00096 **Sturm # B-1**

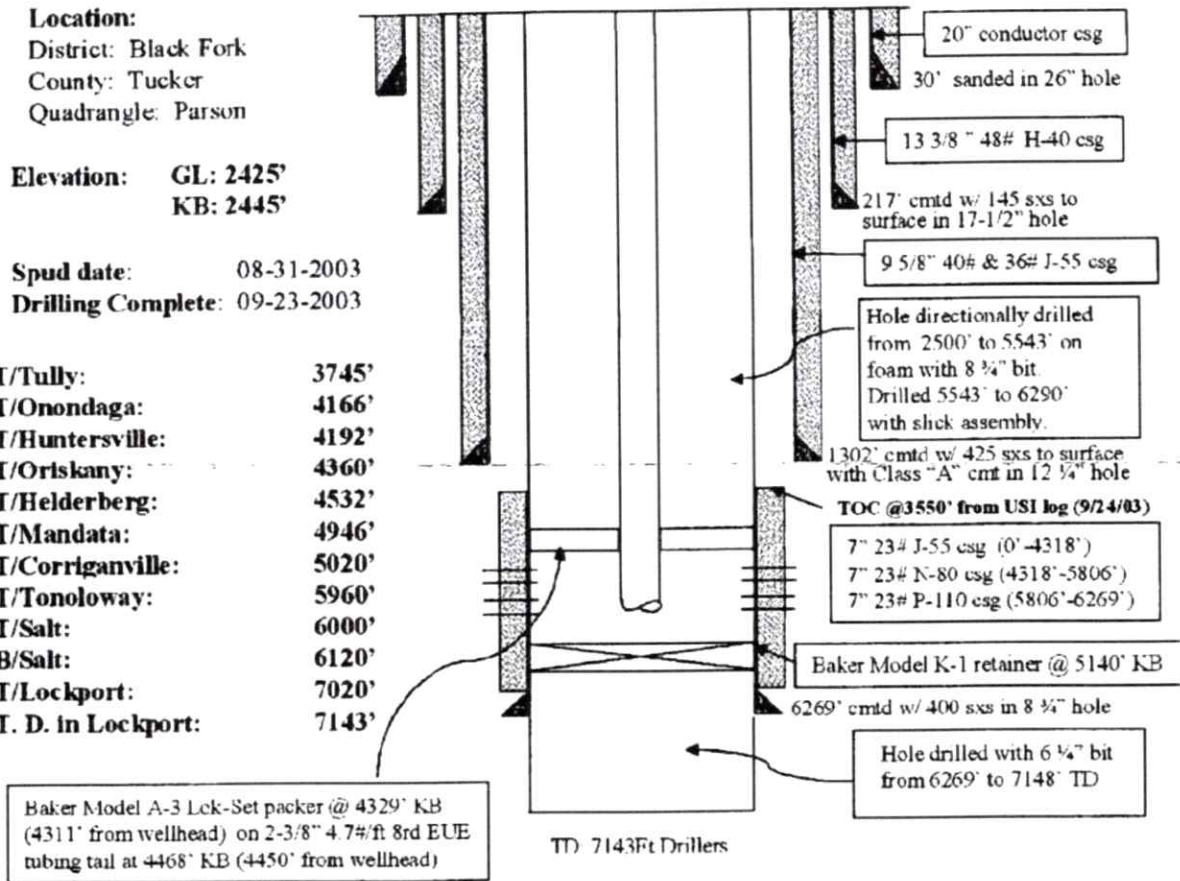
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County: Tucker
Quadrangle: Parson

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T/Mandata:	4946'
T/Corriganville:	5020'
T/Tonoloway:	5960'
T/Salt:	6000'
B/Salt:	6120'
T/Lockport:	7020'
T. D. in Lockport:	7143'



Oriskany Completion

Natural gas flow encountered at 4475' KB while drilling (3375 units). On 11/8/04 Perforated 4489-4499' 6 SPF (60 holes) and 4470-4480' 4 SPF (40 holes) w/ Baker Atlas 3-1/8" HSC, 60° phased. Wireline set 7" (3BB) Model K-1 cement retainer @ 5140' KB and ran Lok-Set packer on tubing. Acid/Frac Job - On 11/10/04 spotted 840 gal 15% Fe acid & pumped 20 bbls treated water to break perfs (breakdown = 1173 psi, ISIP = 1758 psi, 5-minute ISIP = 1592 psi) followed by 74 bbls Fe acid w/ 121 perf balls. Displaced acid with 20 bbls treated water. Surged off balls. Halliburton frac'd down tubing with 150 bbls gelled pre-pad, 250 bbls cross-linked pad, 162 bbls with Brady 20/40 sand ramped from 0.5 to 2 ppg, 96 bbls @ 2 ppg, 113 bbls @ 3 ppg sand concentration (total 256 sacks in formation). Treated at 10-11 BPM and pressure ramped to 4900 psi. Flushed with 16.5 bbls treated freshwater. ISIP = 2380 psi, 5-minute ISIP = 1987, 10-minute ISIP = 1906 psi.

Initial Rock Pressure: 1590 psig on tubing on 12/10/2004

WR-35
Rev (5-01)

DATE: August 31, 2005
API #: 47-093-00096

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work



Farm name: Jerry Sturm Operator Well No.: Sturm B-1
 LOCATION: Elevation: 2425' Quadrangle: Parsons 7.5'
 District: Black Fork County: Tucker
 Latitude: 5780 Feet South of 39 Deg. 5 Min. 0 Sec.
 Longitude 4390 Feet West of -79 Deg. 42 Min. 30 Sec.

Company: MegaEnergy Operating, Inc.

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: 9085 E. Mineral Cir, Ste 270 Englewood, CO 80112	20" csg	30'	30'	Sanded in
Agent: Paul Smith	13-3/8" H40	217'	217'	145 sxs <i>cts</i>
Inspector: Craig Duckworth	9-5/8" J-55	1302'	1302'	425 sxs <i>cts</i>
Date Permit Issued: 10-28-2004	7" J55/N80/	6269'	6269'	400 sxs
Date Well Work Commenced: 11-4-2004	P110			
Date Well Work Completed: 11-19-2004	2-3/8" tbg		4468' (KB)	
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rig: Key Service Rig #770				
Total Depth (feet): 7148				
Fresh Water Depth (ft.): 920				
Salt Water Depth (ft.): 4680				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.):				

OPEN FLOW DATA

Producing formation Oriskany Pay zone depth (ft) 4470'-4500'
 Gas: Initial open flow 120 MCF/d Oil: Initial open flow Bbl/d
 Final open flow 200 MCF/d Final open flow Bbl/d
 Time of open flow between initial and final tests 3 days Hours
 Static rock Pressure 1590 psig (surface pressure) after 17 days Hours

Second producing formation Pay zone depth (ft)
 Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d
 Final open flow MCF/d Final open flow Bbl/d
 Time of open flow between initial and final tests Hours
 Static rock Pressure psig (surface pressure) after Hours

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

Signed: J. Scott Hornafius
 By: J. Scott Hornafius
 Date: August 31, 2005

4709300096P

WR-35

DATE: November 4, 2003
API #: 47-093-00096

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

Well Operator's Report of Well Work

Farm name: Jerry Sturm Operator Well No.: Sturm B-1 Revised

LOCATION: Elevation: 2425' Quadrangle: Parsons

District: Union County: Tucker
Latitude: 5780 Feet South of 39 Deg. 05 Min. 00 Sec.
Longitude 4390 Feet West of 79 Deg. 42 Min. 30 Sec.

Company: MegaEnergy Operating, Inc.

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: <u>8501 East Dry Creek Place</u>	<u>20"</u>	<u>30'</u>	<u>30'</u>	<u>Sanded in</u>
<u>Englewood, CO 80112</u>	<u>13-3/8" H-40</u>	<u>217'</u>	<u>217'</u>	<u>145 sks</u>
Agent: <u>Land & Resource Management</u>	<u>9-5/8" J-55</u>	<u>1302'</u>	<u>1302'</u>	<u>425 sks</u>
Inspector: <u>Craig Duckworth</u>	<u>7" J-55/N-80</u>	<u>6269'</u>	<u>6269'</u>	<u>400 sks</u>
Date Permit Issued: <u>8/28/2003</u>				
Date Well Work Commenced: <u>8/31/2003</u>				
Date Well Work Completed: <u>9/23/2003</u>				
Verbal Plugging: <u>N/A</u>				
Date Permission granted on: <u>N/A</u>				
Rotary Rig: <u>Union Drilling Rig # 45</u>				
Total Depth (feet): <u>7148'</u>				
Fresh Water Depth (ft.): <u>920'</u>				
Salt Water Depth (ft.): <u>4680'</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>N/A</u>				

OPEN FLOW DATA

Producing formation Oriskany Sand Pay zone depth (ft) 4470'-4500'
Gas: Initial open flow 200 MCF/d Oil: Initial open flow Bbl/d
Final open flow not tested MCF/d Final open flow Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure no test psig (surface pressure) after N/A Hours

Producing formation Pay zone depth (ft)
Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d
Final open flow MCF/d Final open flow Bbl/d
Time of open flow between initial and final tests Hours
Static rock Pressure psig (surface pressure) after Hours

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

Signed: J. Scott Hornafius
By: J. Scott Hornafius
Date: November 4, 2003

05/05/2023



Table Descriptions
 County Code Translations
 Permit Numbers Series
 Usage Notes
 Contact Information
 Disclaimer
 WVGES Main
 "Pipeline-Plus"

Select County: (093) Tucker (Check All)
 Enter Permit #: 00096
 Location Production Plugging
 Owner/Completion Stratigraphy Sample
 Pay/Show/Water Logs Btm Hole Loc

Report Time: Thursday, April 27, 2023 1:40:45 PM

Well: County = 93 Permit = 00096 [Link to all digital records for well](#)

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX_DISTRICT	QUAD_75	QUAD_15	LAT_DD	LONG_DD	UTME	UTMN
47093000096	Tucker	96	Black Fork	39.067632	-79.723559	510425.8	4325057.1		

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_VD	PROP_TRGT_FM	TFM_EST_PR
47093000096	9/23/2003		Completed	Jerry Sturm		B-1 revised			Jerry Sturm	MegaEnergy Operating, Inc.			
47093000096	11/19/2004		Completed	Jerry Sturm		B-1			Jerry Sturm	MegaEnergy Operating, Inc.			

Completion Information:

API	CMP_DT	SPUD_DT	ELEV_DATUM	FIELD	DEEPEST_FM	DEEPEST_FMT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TVD	TMD	NEW_FTG	KOD	G_BEF	O_BEF	O_AFT	NGL_BEF	NGL_AFT	P_BEF	TL_BEF	P_AFT	TL_AFT	BH_1	
47093000096	9/23/2003	8/31/2003	2425	Ground Level	Unnamed	McKenzie Fm	New-field Wildcat	New-field Discovery	Gas	Rotary	Fractured	7148		7148		200									1590	408
47093000096	11/19/2004	11/19/2004	2425	Ground Level	Leadmine	McKenzie Fm	Development Well	Development Well	Gas	Rotary	Acid+Frac	7148		7148		120										

Comment: 9/23/2003 directional from 2500 to 5543'

Pay/Show/Water Information:

API	CMP_DT	ACTIVITY	PRODUCT	SECTION	DEPTH_TOP	FM	TOP	DEPTH_BOT	FM	BOT	G_BEF	G_AFT	O_BEF	O_AFT	WATER_QNTY
47093000096	9/23/2003	Water	Fresh Water	Vertical		4470	Oriskany	920	Oriskany	920					
47093000096	11/19/2004	Pay	Gas	Deviated		4489	Oriskany		4489	Oriskany					
47093000096	9/23/2003	Pay	Gas	Deviated		4470	Oriskany		4470	Oriskany					
47093000096	9/23/2003	Water	Salt Water	Deviated		4680	Helderberg		4680	Helderberg					

Production Gas Information: (Volumes in Mcf) * 2022 data for H6A wells only. Other wells are incomplete at this time.

API	PRODUCING_OPERATOR	PRD_YEAR	ANN_GAS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DCM
47093000096	MegaEnergy Operating, Inc.	2005	25,784	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	MegaEnergy Operating, Inc.	2006	55,234	4,999	5,541	6,781	6,125	6,057	4,116	4,403	3,743	3,610	2,975	2,332	4,552
47093000096	MegaEnergy Operating, Inc.	2007	35,230	3,589	4,428	4,467	4,877	4,284	5,072	4,908	3,605	0	0	0	0
47093000096	Saga Petroleum, LLC of Colorado	2008	62,985	1,603	3,498	4,252	5,432	5,858	6,589	6,789	6,647	5,864	5,711	5,374	5,338
47093000096	Saga Petroleum, LLC of Colorado	2009	54,583	3,489	4,435	5,076	3,781	4,014	4,833	4,658	4,721	4,651	3,949	4,469	4,507
47093000096	Gastar Exploration USA, Inc.	2010	35,698	3,486	3,129	3,697	1,864	3,709	3,657	3,426	3,048	2,335	2,317	2,156	
47093000096	Gastar Exploration USA, Inc.	2011	14,458	2,165	1,846	2,129	1,857	1,575	1,870	1,664	8	0	341	996	5
47093000096	Gastar Exploration USA, Inc.	2012	8,175	0	0	0	0	1,371	2,269	1,793	1,453	1,254	35	0	0
47093000096	Gastar Exploration USA, Inc.	2013	10,698	0	14	1,506	1,508	1,372	1,287	348	1,187	1,336	928	833	379
47093000096	Gastar Exploration USA, Inc.	2014	1,697	388	790	386	133	0	0	0	0	0	0	0	0
47093000096	Gastar Exploration Inc.	2015	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	K. Petroleum, Inc.	2015	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Pillar Energy, LLC	2016	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Pillar Energy, LLC	2017	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Pillar Energy, LLC	2018	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Pillar Energy, LLC	2019	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Pillar Energy, LLC	2020	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Pillar Energy, LLC	2021	0	0	0	0	0	0	0	0	0	0	0	0	0

Production Oil Information: (Volumes in Bbl) ** some operators may have reported NGL under Oil * 2022 data for H6A wells only. Other wells are incomplete at this time.

API	PRODUCING_OPERATOR	PRD_YEAR	ANN_OIL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DCM
47093000096	MegaEnergy Operating, Inc.	2005	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	MegaEnergy Operating, Inc.	2006	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	MegaEnergy Operating, Inc.	2007	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Saga Petroleum, LLC of Colorado	2008	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Saga Petroleum, LLC of Colorado	2009	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Gastar Exploration USA, Inc.	2010	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Gastar Exploration USA, Inc.	2011	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Gastar Exploration USA, Inc.	2012	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Gastar Exploration USA, Inc.	2013	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Gastar Exploration USA, Inc.	2014	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Gastar Exploration USA, Inc.	2015	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	K. Petroleum, Inc.	2015	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Pillar Energy, LLC	2016	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Pillar Energy, LLC	2017	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Pillar Energy, LLC	2018	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Pillar Energy, LLC	2019	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Pillar Energy, LLC	2020	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Pillar Energy, LLC	2021	0	0	0	0	0	0	0	0	0	0	0	0	0

Production NGL Information: (Volumes in Bbl) ** some operators may have reported NGL under Oil * 2022 data for H6A wells only. Other wells are incomplete at this time.

API	PRODUCING_OPERATOR	PRD_YEAR	ANN_NGL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DCM
47093000096	Gastar Exploration USA, Inc.	2013	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Gastar Exploration USA, Inc.	2014	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	K. Petroleum, Inc.	2015	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Gastar Exploration Inc.	2015	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Pillar Energy, LLC	2016	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Pillar Energy, LLC	2018	0	0	0	0	0	0	0	0	0	0	0	0	0
47093000096	Pillar Energy, LLC	2019	0	0	0	0	0	0	0	0	0	0	0	0	0

47093000096P

9/23/2023

API	PRODUCING OPERATOR	PRD_YEAR	ANN_WTR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DCM
4709300096	Pillar Energy, LLC	2020		0	0	0	0	0	0	0	0	0	0	0	0
4709300096	Pillar Energy, LLC	2021		0	0	0	0	0	0	0	0	0	0	0	0

Production Water Information: (Volumes in Gallons) * 2022 data for H6A wells only. Other wells are incomplete at this time.

API	SUFFIX	FM	FM QUALITY	DEPTH_TOP	DEPTH	DEPTH_QUALITY	THICKNESS	THICKNESS_QUALITY	ELEV	DATUM
4709300096		Dvid Orgnl Loc	Drillers E-log pick	3745	Deviated Drig	Deviated Drig	Deviated Drig	Deviated Drig	2425	Ground Level
4709300096		Dvid Orgnl Loc	Drillers E-log pick	4166	Deviated Drig	Deviated Drig	Deviated Drig	Deviated Drig	2425	Ground Level
4709300096		Dvid Orgnl Loc	Onondaga Ls	4360	Deviated Drig	Deviated Drig	Deviated Drig	Deviated Drig	2425	Ground Level
4709300096		Dvid Orgnl Loc	Oniskany	4532	Deviated Drig	Deviated Drig	Deviated Drig	Deviated Drig	2425	Ground Level
4709300096		Dvid Orgnl Loc	Heiderberg	4946	Deviated Drig	Deviated Drig	Deviated Drig	Deviated Drig	2425	Ground Level
4709300096		Dvid Orgnl Loc	Mandata Sh	5020	Deviated Drig	Deviated Drig	Deviated Drig	Deviated Drig	2425	Ground Level
4709300096		Dvid Orgnl Loc	Corriganville	5960	Deviated Drig	Deviated Drig	Deviated Drig	Deviated Drig	2425	Ground Level
4709300096		Dvid Orgnl Loc	Tonoloway Fm	6000	Deviated Drig	Deviated Drig	Deviated Drig	Deviated Drig	2425	Ground Level
4709300096		Dvid Orgnl Loc	Salina	6000	Deviated Drig	Deviated Drig	Deviated Drig	Deviated Drig	2425	Ground Level
4709300096		Dvid Orgnl Loc	McKenzie Fm	7020	Deviated Drig	Deviated Drig	120	Deviated Drig	2425	Ground Level
4709300096		Dvid Orgnl Loc	Drillers E-log pick				Osmble Pick		2425	Ground Level

Wireline (E-Log) Information:

* There is no Scanned/Paper Log data for this well

* There is no Digitized Log data for this well

* There is no Scanned or Digital Logs available for download
There is no Plugging data for this well

There is no Sample data for this well

4709300096P

WW-4A
Revised 6-07

1) Date: 03/15/2023
2) Operator's Well Number
Sturm B-1
3) API Well No.: 47 - 093 - 00096

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF APPLICATION TO PLUG AND ABANDON A WELL

4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>Elizabeth Lancaster</u>	Name <u>N/A</u>
Address <u>1021 Jobs Run Road</u>	Address _____
<u>Kerens, WV 26276</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name _____
_____	Address _____
(c) Name _____	Name _____
Address _____	Address _____
_____	_____
6) Inspector <u>Gayne Knitowski</u>	(c) Coal Lessee with Declaration
Address _____	Name _____
_____	Address _____
Telephone <u>304-546-8171</u>	_____

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

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

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

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, and the plat have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.



OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
Anita E. Kirk
783 Stringers Branch Road
Peytona, WV 25154
My Commission Expires June 9, 2024

Well Operator Pillar Energy, LLC
By: Jeff Isner
Es: CEO
Address 1244 Martins Branch Road
Charleston, WV 25312
Telephone 304-681-8599

RECEIVED
Office of Oil and Gas
APR 5 2023
WV Department of
Environmental Protection

Subscribed and sworn before me this 15th day of March 2023
Anita E. Kirk Notary Public
My Commission Expires June 9, 2024

Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

05/05/2023

SENDER: COMPLETE THIS SECTION

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

1. Article Addressed to:
 Elizabeth Lancaster
 1021 Jobs Run Rd
 Kerens WV 26276



9590 9402 7179 1284 0767 18

2. Article Number (Transfer from service label)
 7020 1810 0001 0462 5085

PS Form 3811, July 2020 PSN 7530-02-000-9053

COMPLETE THIS SECTION ON DELIVERY

470 9300096P

A. Signature
 X *Elizabeth C. Lancaster* Agent Addressee

B. Received by (Printed Name)
 C. Date of Delivery
 3/25/23

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

3. Service Type
- | | |
|--|---|
| <input type="checkbox"/> Adult Signature | <input type="checkbox"/> Priority Mail Express® |
| <input type="checkbox"/> Adult Signature Restricted Delivery | <input type="checkbox"/> Registered Mail™ |
| <input checked="" type="checkbox"/> Certified Mail® | <input type="checkbox"/> Registered Mail Restricted Delivery |
| <input type="checkbox"/> Certified Mail Restricted Delivery | <input type="checkbox"/> Signature Confirmation™ |
| <input type="checkbox"/> Collect on Delivery | <input type="checkbox"/> Signature Confirmation Restricted Delivery |
| <input type="checkbox"/> Collect on Delivery Restricted Delivery | |
- Mail Restricted Delivery

Domestic Return Receipt

RECEIVED
 APR 3 2023
 BY:

RECEIVED
 Office of Oil and Gas
 APR 5 2023
 WV Department of
 Environmental Protection

05/05/2023

SURFACE OWNER WAIVER

Operator's Well
Number

Sturm B-1

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW4-A

The well operator named on page WW-4A is applying for a permit from the State to plug and abandon a well. (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 **FIVE (5) 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 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.

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 Permit To Plug And Abandon on Forms WW-4A and WW-4B, and a survey plat.

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
ETC.

FOR EXECUTION BY A CORPORATION,

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Office of Oil and Gas

Signature

Date

Name

By
Its

APR 5 2023

Date

Signature WV Department of
Environmental Protection

05/05/2023

WW-4B

API No. 47-093-00096
Farm Name _____
Well No. Sturm B-1

**INSTRUCTIONS TO COAL OPERATORS
OWNERS AND LESSEE**

The well operator named on the obverse side of WW-4 (B) is about to abandon the well described in the enclosed materials and will commence the work of plugging and abandoning said well on the date the inspector is notified. Which date shall not be less than five days after the day on which this notice and application so mailed is received, or in due course should be received by the Department of Environmental Protection Office of Oil & Gas.

This notice and application is given to you in order that your respective representatives may be present at the plugging and filling of said well. You are further notified that whether you are represented or not the operator will proceed to plug and fill said well in the manner required by Section 24, Article 6, Chapter 22 of the Code and given in detail on obverse side of this application.

NOTE: If you wish this well to be plugged according to 22-6-24(d) then as per Regulation 35CSR4-13.9 you must complete and return to this office on form OB-16 "Request by Coal Operator, Owner, or Lessee for plugging" prior to the issuance of this plugging permit.

WAIVER

The undersigned coal operator ____ / owner ____ / lessee ____ / of the coal under this well location has examined this proposed plugging work order. 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.

Date: _____

By: _____

Its _____

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Environmental Protection

05/05/2023

WW-9
(5/16)

API Number 47 - 093 - 00096
Operator's Well No. _____

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS
FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Pillar Energy, LLC OP Code _____

Watershed (HUC 10) Jobs Run Quadrangle Parsons 7.5'

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 (if selected provide a completed form WW-9-GPP)
- Underground Injection (UIC Permit Number _____)
- Reuse (at API Number _____)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain No pit to be built. Any well effluent will be contained in tanks and properly disposed offsite)

Will closed loop system be used? If so, describe: _____

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

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

Additives to be used in drilling medium? _____

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

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

-Landfill or offsite name/permit number? _____

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on April 1, 2016, 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) Jeff Isner

Company Official Title CEO

Subscribed and sworn before me this 15th day of March

[Signature]

My commission expires June 9, 2024



OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
Anita E. Kirk
783 Stringers Branch Road
Peytona, WV 25154

My Commission Expires June 9, 2024

05/05/2023

Form WW-9

Operator's Well No. _____

Proposed Revegetation Treatment: Acres Disturbed 1/2 acre Preveg etation pH _____

Lime according to PH test Tons/acre or to correct to pH 7.0

Fertilizer type 10-20-20

Fertilizer amount 500 lbs/acre

Mulch Hay or Straw 2 Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type lbs/acre

Seed Type lbs/acre

Contractors Mix

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Contractors Mix			

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, provide water volume, include dimensions (L, W, D) of the pit, and dimensions (L, W), and area in acres, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: Gayne Knitowski Digitally signed by Gayne Knitowski
Date: 2023.03.30 14:50:37 -0400

Comments: _____

Reclaim site ASAP

Title: Inspector Date: 3-30-2023

Field Reviewed? () Yes () No

05/05/2023

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

Operator Name: Pillar Energy, LLC
Watershed (HUC 10): Jobs Run Quad: Parsons 7.5'
Farm Name: _____

1. List the procedures used for the treatment and discharge of fluids. Include a list of all operations that could contaminate the groundwater.

Plugging of a well. All residual fluids will be captured in portable flowback tanks for proper disposal

2. Describe procedures and equipment used to protect groundwater quality from the list of potential contaminant sources above.

Plugging of a well. All residual fluids will be captured in portable flowback tanks for proper disposal

3. List the closest water body, distance to closest water body, and distance from closest Well Head Protection Area to the discharge area.

Closest Water - Shavers Fork - ~5600'

4. Summarize all activities at your facility that are already regulated for groundwater protection.

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5. Discuss any existing groundwater quality data for your facility or an adjacent property.

6. Provide a statement that no waste material will be used for deicing or fill material on the property.

7. Describe the groundwater protection instruction and training to be provided to the employees. Job procedures shall provide direction on how to prevent groundwater contamination.

8. Provide provisions and frequency for inspections of all GPP elements and equipment.

Signature: _____

Date: _____

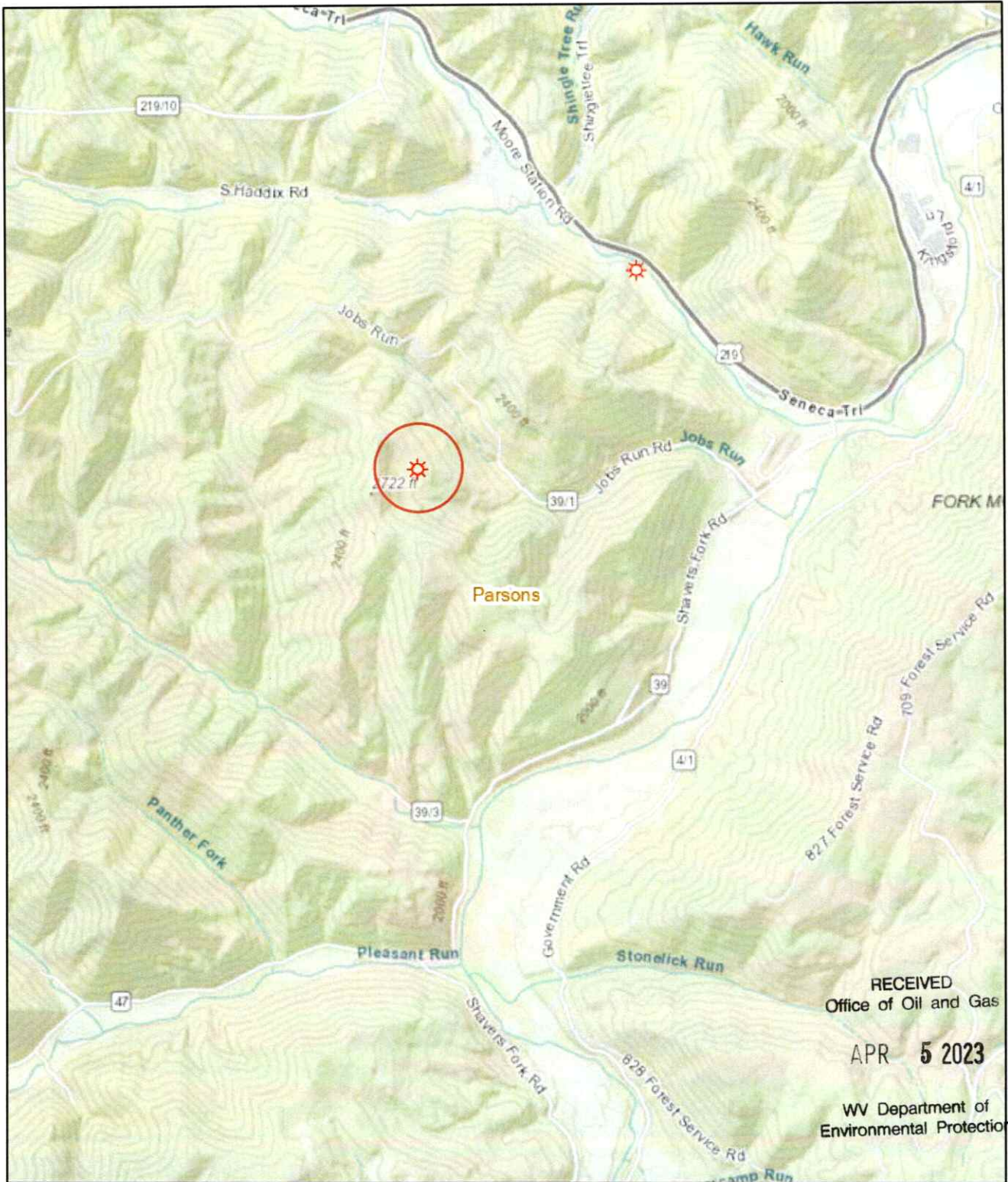
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05/05/2023

Sturm B-1 Well Location

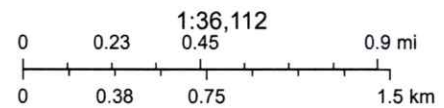


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3/15/2023, 2:11:18 PM



- Labels (7.5' Quadrangles)
- County Labels
- 7.5' Quadrangles
- WV Oil and Gas All Individual Wells
- State Boundary
- Gas
- Counties

VITA, West Virginia GIS, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA, West Virginia Geological and Economic Survey (WVGES)

05/05/2023

WW-7
8-30-06



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

API: 47-096-00096 WELL NO.: Sturm B-1
 FARM NAME: Sturm
 RESPONSIBLE PARTY NAME: Pillar Energy, LLC
 COUNTY: Tucker DISTRICT: Black Fork
 QUADRANGLE: Parsons 7.5'
 SURFACE OWNER: Elizabeth Lancaster
 ROYALTY OWNER: Elizabeth Lancaster
 UTM GPS NORTHING: ~~39.067627~~ 4325026
 UTM GPS EASTING: ~~-79.723562~~ 610417 GPS ELEVATION: 2425'

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 ____: Post Processed Differential ____

Real-Time Differential ____

4. **Letter size copy of the topography map showing the well location.**

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


Signature

CEO

Title

3-10-23

Date

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WV Department of
Environmental Protection

05/05/2023



Kennedy, James P <james.p.kennedy@wv.gov>

plugging permit issued 4709300096

1 message

Kennedy, James P <james.p.kennedy@wv.gov>


Thu, May 4, 2023 at 10:02 AM

To: Trevor Schaffer <Trevor.Schaffer@pillarenergy.com>, Gayne J Knitowski <gayne.j.knitowski@wv.gov>

To whom it may concern, a plugging permit has been issued for 4709300096.

2 attachments

 **IR-8 4709300096.pdf**
120K

 **4709300096.pdf**
3818K

05/05/2023