



---

west virginia department of environmental protection

---

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

Harold D. Ward, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Monday, May 24, 2021  
WELL WORK PLUGGING PERMIT  
Vertical Plugging

DIVERSIFIED PRODUCTION LLC  
101 MCQUISTON DRIVE  
JACKSON CENTER, PA 16133

Re: Permit approval for 507020  
47-109-02675-00-00

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

Operator's Well Number: 507020  
Farm Name: U.S. ARMY CORP. OF ENG.  
U.S. WELL NUMBER: 47-109-02675-00-00  
Vertical Plugging  
Date Issued: 5/24/2021

I

4710902675P

## 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 within two years of the date of issuance of this permit.

05/28/2021

4710902675P

WW-4B  
Rev. 2/01

1) Date February 5, 2021  
2) Operator's  
Well No. 507020  
3) API Well No. 47-109 - 02675

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

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

4) Well Type: Oil \_\_\_ / Gas X / Liquid injection \_\_\_ / Waste disposal \_\_\_ /  
(If "Gas, Production X or Underground storage \_\_\_) Deep \_\_\_ / Shallow X

5) Location: Elevation 1,208 ft Watershed Big Branch of Guyandotte River  
District Huff Creek County Wyoming Quadrangle Gilbert

6) Well Operator Alliance Petroleum Company 7) Designated Agent Jeff Mast  
Address P.O. Box 6070 Address P.O. Box 6070  
Charleston, WV 25362 Charleston, WV 25362

8) Oil and Gas Inspector to be notified 9) Plugging Contractor  
Name Gary Kennedy Name Diversified Production, LLC (In House Rig)  
Address 66 Old Church Lane Address 1951 Pleasant View Ridge Road  
Pipestem, WV 25979 Ravenwood, WV 26164

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

SEE ATTACHED!

RECEIVED  
Office of Oil and Gas

FEB 17 2021

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  Date 2/8/21

05/28/2021

**PLUGGING PROGNOSIS**

API# 47-109-02675

West Virginia, Wyoming County

37.5792345087265, -81.7609499742721

Nearest ER: Welch Community Hospital: 454 McDowell St. Welch, WV 24801

**Casing Schedule**

20" csg @ 25'

13 3/8" csg @ 122' cemented to surface

9 5/8" csg @ 681' cemented to surface

7" csg @ 1574' cemented to surface

4 1/2" csg @ 5550' est TOC 1140' w/ 451 cu ft.

TD 5563'

**Completion: Frac**

Rhinstreet 5206'-5528'

L Huron 4751'-5195'

Huron 4613'-4737'

Berea 3463'-3495'

Ravenciff 1661'-1698'

**Fresh Water:** 20', 38', 68', 202', 228', 460'**Gas Shows:** see above**Oil Show:** No shows**Coal:** 328', 433'**Elevation:** 1219'

1. Notify Inspector Gary Kennedy @ 304-382-8402, 48 hours prior to commencing operations.
2. Check and record pressures on csg.
3. Check TD w/ wireline.
4. TIH w/ tbg to 5528'. Kill well as needed with 6% bentonite gel. Pump 422' C1A cement plug from 5528'-5106' (Rhinstreet gas show). Tag TOC. Top off as needed.
5. TOOH w/ tbg to 5106'. Pump 593' C1A cement plug 5106'-4513' (Huron gas shows).
6. TOOH w/ tbg to 4513'. Pump 6% bentonite gel from 4513'-3495'.
7. TOOH w/ tbg to 3495'. Pump 132' C1A cement plug from 3495'-3363' (Berea gas show).
8. TOOH w/ tbg to 3363'. Pump 6% bentonite gel from 3363'-1698'.
9. TOOH w/ tbg to 1698'. Pump 137' C1A cement plug from 1698'-1561' (Ravenciff gas show).
10. TOOH w/ tbg to 1561'. Pump 6% bentonite gel from 1561'-1219'.
11. TOOH w/ tbg to 1219'. Pump 100' C1A cement plug from 1219'-1119' (Elevation).
12. TOOH w/ tbg to 1119'. Pump 6% bentonite gel from 1119'-510'. TOOH LD tbg.
13. Free point 4 1/2" csg. Cut and TOOH. Set 100' C1A cement plug across csg cut. 50' in/out of cut. Do not omit any plugs listed below. Perforate as needed.
14. TIH w/ tbg to 510'. Pump 510' C1A cement plug from 510'-0' (Freshwater, coal, and surface).
15. Erect monument with API#, date plugged, and company name.
16. Reclaim location and road to WV-DEP specifications.

RECEIVED  
Office of Oil and Gas



FEB 17 2021

WV Department of  
Environmental Protection

05/28/2021

**State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas  
Well Operator's Report of Well Work**

API# 4710902675

4710902675P

Farm Name U.S. Army Corp. Of Eng. Well Number 507020  
 Location Elevation 1,219 Quadrangle GILBERT  
 District Huff Creek County Wyoming, WV  
 Degree Minute Second  
 Latitude 1520 FSL 37.00 35.00 0.00  
 Longitude 3220 FWL 81.00 45.00 0.00

Company	Equitable Production Company 1710 Pennsylvania Avenue Charleston, WV 25328	Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cubic Ft
Agent	Todd Tetrick	20	25	25	
Inspector	Barry Stollings	13 3/8	122	122	223.50
Permit Issued	05/30/2006	9 5/8	681	681	298.00
		7	1,574	1,574	319.40
Well Work Commenced	09/13/2006	4 1/2	5,550	5,550	451.56
Well Work Completed	10/18/2006	2 3/8		5,547	

Verbal Plugging  
 Permission granted or \_\_\_\_\_  
 Rotary Rig  Cable Rig \_\_\_\_\_

Total Depth 5,563

**Water Encountered**

Type	From
Fresh water	1/4" stream @ 20', 1-1/2" stream @ 38'
Fresh water	6" stream @ 68', 1/4" stream @ 202'
Fresh water	1" stream @ 218', 4-5" stream @ 460'
Salt Water	1-1/2" stream @ 4470'
Salt Water	damp @ 4482'

**Coal & Open Mines**

Type	From
Coal	328'-331', 433'-436'

**RECEIVED**  
 Office of Oil & Gas  
 Office of Chief  
**FEB 21 2007**  
 WV Department of  
 Environmental Protection

**Open Flow Data**

Producing Formation Rhinestreet ; Lower Huron ; Lower Huron/ Silt ; Berea ; Ravenc Cliff ; Pay Zone Depth (ft): See attached for details

Gas: Initial Open Flow 0 MCF 9/23/06 Date Oil: Initial Open Flow \_\_\_\_\_ Bbl/d  
 Final Open Flow 207 MCF 10/18/2006 Date Final Open Flow \_\_\_\_\_

Time of open flow between initial and final tests 0 hours  
 Static Rock Pressure 450 after 0 hours

Second Producing Formation \_\_\_\_\_ Pay Zone Depth (ft) \_\_\_\_\_

Gas: Initial Open Flow \_\_\_\_\_ MCF \_\_\_\_\_ Date Oil: Initial Open Flow \_\_\_\_\_ Bbl/d  
 Final Open Flow \_\_\_\_\_ MCF \_\_\_\_\_ Date Final Open Flow \_\_\_\_\_

Time of open flow between initial and final tests \_\_\_\_\_ hours  
 Static Rock 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, a systematic detailed geological record of all formations including coal encountered in the well bore

For Equitable Production Company  
 By [Signature]  
 Date 2/18/07

*[Handwritten Signature]*

**RECEIVED**  
 Office of Oil and Gas  
**FEB 17 2021**

WV Department of  
 Environmental Protection

**05/28/2021**

Well Number 507020

4710902675 P  
API # 4710902675

**Equitable Production Company  
WR-35 Completion Report - Attachment  
Well Treatment Summary**

Stage1		Stage2		Stage3		Stage4		Stage5	
Date	10/03/2006	Date	10/03/2006	Date	10/03/2006	Date	10/03/2006	Date	10/03/2006
FracTyp	N2	FracTyp	N2	FracTyp	75Q Foam	FracTyp	Variabl Foam	FracTyp	65Q Foam
Zone	Rhincstreet	Zone	Lower Huron	Zone	Lower Huron/ Silt	Zone	Berea	Zone	Ravencliff
# of Perfs	20	# of Perfs	40	# of Perfs	20	# of Perfs	33	# of Perfs	31
From/To	5,206- 5,528	From/To	4,751- 5,195	From/To	4,613- 4,737	From/To	3,463- 3,495	From/To	1,661- 1,698
BD Press	4,250	BD Press	2,919	BD Press	571	BD Press	1,800	BD Press	4,093
ATP Psi	3,998	ATP Psi	3,373	ATP Psi	2,923	ATP Psi	2,445	ATP Psi	2,989
Avg Rate	37,775	Avg Rate	68,157	Avg Rate	42	Avg Rate	43	Avg Rate	34
Max Press Psi	4,311	Max Press Psi	3,523	Max Press Psi	3,526	Max Press Psi	2,708	Max Press Psi	3,094
ISIP Psi	3,130	ISIP Psi	2,406	ISIP Psi	300	ISIP Psi	0	ISIP Psi	2,563
10min SIP	2,345 5 min.	10min SIP	2,301 5 min.	10min SIP	0 5 min.	10min SIP	0 5 min.	10min SIP	2,213 5 min.
Frac Gradient	0.70	Frac Gradient	0.58	Frac Gradient	0.50	Frac Gradient	0.43	Frac Gradient	1.40
Sand Proppant	0.00	Sand Proppant	0.00	Sand Proppant	453.70	Sand Proppant	464.48	Sand Proppant	458.77
Water-bbl	0	Water-bbl	0	Water-bbl	400	Water-bbl	165	Water-bbl	368
SCF N2	801,600	SCF N2	803,600	SCF N2	631,300	SCF N2	388,400	SCF N2	446,000
Acid-gal	600 gal 7.5%	Acid-gal	450 gal 7.5%	Acid-gal	350 gal 7.5%	Acid-gal	350 gal 15%HCL	Acid-gal	750 gal 15%HCL

Formation Name	Depth To	Depth Bottom	Formation Thick
RAVENCLIFF	1,648.00	1,703	55.00
AVIS	1,706.00	1,753	47.00
UPPER MAXTON	1,796.00	1,898	102.00
MIDDLE MAXTON	1,984.00	2,161	177.00
LOWER MAXTON	2,318.00	2,357	39.00
LITTLE LIME	2,419.00	2,475	56.00
PENCIL CAVE	2,475.00	2,486	11.00
BIG LIME	2,486.00	2,873	387.00
WEIR	2,985.00	3,104	119.00
SUNBURY	3,441.00	3,462	21.00
BEREA	3,462.00	3,508	46.00
GORDON	3,753.00	3,777	24.00
LOWER HURON	4,595.00	5,114	519.00
JAVA	5,114.00	5,276	162.00
ANGOLA	5,276.00	5,552	276.00
RHINESTREET	5,552.00	0	0.00

Gas Tests	
Depth	Remarks
1,800	No Show
2,100	No Show
2,400	No Show
2,700	No Show
3,000	odor
3,300	No Show
3,500	No Show
3,800	No Show
4,100	No Show
4,400	No Show
4,600	hit oil
4,700	No Show
5,000	No Show
5,563	No Show

RECEIVED  
Office of Oil and Gas  
  
FEB 17 2021  
  
WV Department of  
Environmental Protection

05/28/2021

4710902675P

WW-4A  
Revised 6-07

1) Date: February 5, 2021  
2) Operator's Well Number 507020  
3) API Well No.: 47 - 109 - 02675

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

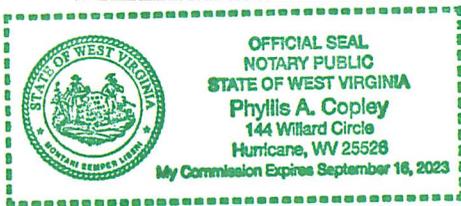
4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>U.S. Army Corps of Engineers</u>	Name _____
Address <u>502 8th Street</u>	Address _____
<u>Huntington, WV 25701</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name _____
_____	Address _____
(c) Name _____	Name _____
Address _____	Address _____
_____	_____
6) Inspector <u>Gary Kennedy</u>	(c) Coal Lessee with Declaration
Address <u>66 Old Church Lane</u>	Name <u>No Declaration</u>
<u>Pipestem, WV 25979</u>	Address _____
Telephone <u>304-382-8402</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.



Well Operator Alliance Petroleum Company, LLC  
 By: [Signature] Jeff Mast  
 Its: Director Production  
 Address P.O. Box 6070  
Charleston, WV 25362  
 Telephone 304-543-6988

RECEIVED  
Office of Oil and Gas

Subscribed and sworn before me this 5th day of February, 2021  
Phyllis A. Copley Notary Public  
 My Commission Expires September 16, 2023

FEB 17 2021

WV Department of  
Environmental Protection

**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](mailto:depprivacyofficer@wv.gov).

05/28/2021

4710902675P

7017 1450 0002 3854 1020

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

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

Huntington, WV 25701

**OFFICIAL USE**

Certified Mail Fee	\$3.60
Extra Services & Fees (check box, add fee as appropriate)	\$2.85
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00
<input type="checkbox"/> Return Receipt (electronic)	\$0.00
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00
<input type="checkbox"/> Adult Signature Required	\$0.00
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00
Postage	\$1.40
Total Postage	\$7.85

0523  
03

Postmark Here

02/05/2021

Well 507020

Sent To U.S. Army Corps of Engineers

Street and 502 8<sup>th</sup> Street

City, State Huntington, WV 25701

PS Form 3854, October 2019

RECEIVED  
Office of Oil and Gas  
APR 16 2021  
WV Department of  
Environmental Protection

05/28/2021

WW-9  
(5/16)

API Number 47 - 109 - 002675  
Operator's Well No. 507020

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

Operator Name Alliance Petroleum Company, LLC OP Code 494506333

Watershed (HUC 10) Big Branch of Guyandotte River Quadrangle Gilbert

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 2D0550319 )
- Reuse (at API Number \_\_\_\_\_)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain \_\_\_\_\_)

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.

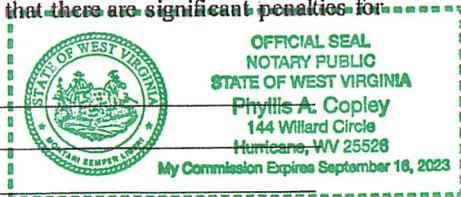
I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on April 1, 2016, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations 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 \_\_\_\_\_

Company Official (Typed Name) Jeff Mast

Company Official Title Director Production



Subscribed and sworn before me this 5th day of February, 20 21

Phyllis A. Copley Notary Public

My commission expires September 16, 2023

RECEIVED  
Office of Oil and Gas

FEB 17 2021

WV Department of  
Environmental Protection  
05/28/2021

Proposed Revegetation Treatment: Acres Disturbed 1 +/-

Prevegetation pH \_\_\_\_\_

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type 10-20-20 or equivalent

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

Mulch 2 Tons/acre

Seed Mixtures

**Temporary**

**Permanent**

Seed Type	lbs/acre
Red Fescue	40
Alsike	5
Annual Rye	15

Seed Type	lbs/acre
Red Fescue	15
Alsike Clover	5

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: *Amy K...*

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

RECEIVED  
Office of Oil and Gas

FEB 17 2021

Title: *Inspector*

Date: *2/8/21*

WV Department of  
Environmental Protection

Field Reviewed? ( ) Yes ( ) No



Diversified Gas & Oil  
Corporation  
100 Diversified Way  
Pikeville KY, 41051

507020

Plugging Map

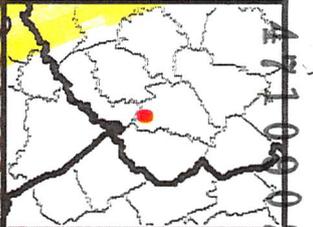
47-109-02675

### Legend

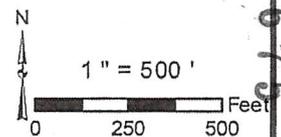
-  Well
-  Access Road
-  Pits
-  Pad
-  Public Roads



+ 8' Deep  
285bb1



Well No.: 507020  
UTM83-17 Meters  
North: 432803.17  
East: 4159400.97  
Elev.: 368.45 M  
Elev.: 1208.5 Ft



4710902675P

WW-7  
8-30-06



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

API: 47-109-02675 WELL NO.: 507020

FARM NAME: U.S. Army Corp. Of Eng.

RESPONSIBLE PARTY NAME: Alliance Petroleum CO., LLC

COUNTY: Wyoming DISTRICT: Huff Creek

QUADRANGLE: Gilbert

SURFACE OWNER: U.S. Army Corp. Of Eng.

ROYALTY OWNER: Weyerhaeuser

UTM GPS NORTHING: 4,159,400.97

UTM GPS EASTING: 432,803.17 GPS ELEVATION: 1208'

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

Director Production  
Title

2/4/2021  
Date

RECEIVED  
Office of Oil and Gas

FEB 17 2021

WV Department of  
Environmental Protection

05/28/2021