



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

Monday, June 14, 2021
WELL WORK PLUGGING PERMIT
Vertical Plugging

DIVERSIFIED PRODUCTION LLC
101 MCQUISTON DRIVE
JACKSON CENTER, PA 16133

Re: Permit approval for WELCHLANDS 29-AW
47-109-00980-00-00

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: WELCHLANDS 29-AW
Farm Name: CXS MINERALS, INC.
U.S. WELL NUMBER: 47-109-00980-00-00
Vertical Plugging
Date Issued: 6/14/2021

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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.

06/18/2021

1) Date February 4, 2021
2) Operator's
Well No. UIC Welch Lands 29
3) API Well No. 47-109 - 00980

4710900980P

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 / Liquid injection / Waste disposal /
(If "Gas, Production or Underground storage) Deep / Shallow

5) Location: Elevation 2,452 ft Watershed Marsh Fork
District Slab Fork County Wyoming Quadrangle McGraws

6) Well Operator Diversified Production, LLC 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 Name Gary Kennedy
Address 66 Old Church Lane
Pipestem, WV 25979
9) Plugging Contractor Name Diversified Production, LLC (In House Rig)
Address 1951 Pleasant View Ridge Road
Ravenwood, WV 26164

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

GORDON / WELL PERFORATIONS 4382 - 4411
3862 - 3872

RAVENWOOD PERFORATIONS 2064 - 2098

ALL MUST BE COVERED W/ CIA CEMENT PLUGS

COAL SEAMS 20" OR MORE MUST BE COVERED WITH CLASS A CEMENT.

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

Work order approved by inspector Gary Kennedy Date 2/8/21

06/18/2021

PLUGGING PROGNOSIS

UIC Welch Lands 29

API #47-109-00980

37.6519753436251, -81.4435055497431

Nearest ER: Raleigh General Hospital: 1710 Harper Road. Beckley, WV 25801

Casing Schedule

12 3/4" csg @ 24'

9 5/8" csg @ 697' CTS

7" csg @ 1530' CTS

4 1/2" csg @ 4540' TOC 3300'

2 3/8" tbg @ 4380' 2x4 Halliburton R4 packer 4350'

TD 4484'

Completion: Frac

Fresh Water: None Recorded

Salt Water: 1300', 2910'

Gas Shows: Gordon 4374'-4425'

Oil Show: None Recorded

Coal: 575', 735', 1110', 1424'

Elevation: 2461'

4 1/2" FREE POINT MAY BE ABOVE RAVENCLIFF PERFORATIONS.

JMM

1. Notify Inspector Gary Kennedy @ 304-382-8402, 48 hours prior to commencing operations.
2. Check and record pressures on csg and tbg.
3. Release Packer. TOOH LD and inspect tbg.
4. Check TD w/ wireline.
5. TIH w/ tbg to 4425". Kill well as needed with 6% bentonite gel. Pump 151' C1A cement plug from 4425'-4274' (Gordon gas show). Check TOC. Top off as needed.
6. TOOH w/ tbg to 4274'. Pump 6% bentonite gel from 4274'-2960'. TOOH LD tbg.
7. 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.
8. TIH w/ tbg to 2960'. Pump 100' C1A cement plug from 2960'-2860' (Salt water).
9. TOOH w/ tbg to 2860'. Pump 6% bentonite gel from 2860'-2461'.
10. TOOH w/ tbg to 2461'. Pump 100' C1A cement plug from 2461'-2361' (Elevation).
11. TOOH w/ tbg to 2361'. Pump 6% bentonite gel from 2361'-1580'.
12. TOOH w/ tbg to 1580'. Pump 330' C1A cement plug from 1580'-1250' (7" csg st, coal, and salt water).
13. TOOH w/ tbg to 1250'. Pump 6% bentonite gel from 1250'-1160'.
14. TOOH w/ tbg to 1160'. Pump 100' C1A cement plug from 1160'-1060' (Coal).
15. TOOH w/ tbg to 1060'. Pump 6% bentonite gel from 1060'-785'.
16. TOOH w/ tbg to 785'. Pump 260' C1A cement plug from 785'-525' (Coal).
17. TOOH w/ tbg to 525'. Pump 6% bentonite gel from 525'-100'.
18. TOOH w/ tbg to 100'. Pump 100' C1A cement plug from 100'-0' (Surface). TOOH LD tbg.
19. Erect monument with API#, date plugged, and company name.
20. Reclaim location and road to WV-DEP specifications.

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★ Ga PUMP 100' CEMENT PLUG FROM 3862 - 3762 TO COVER WELL. JMM

★ 119 PUMP 100' CEMENT PLUG FROM 2064' - 1964' TO COVER RAVENCLIFF.

★ COAL FROM 970 TO 922, COVER W/ CEMENT FROM 1030' TO 920'

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DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

State of West Virginia
DEPARTMENT OF ENERGY
Oil and Gas Division

Date October 29, 1986
Operator's
Well No. #29-AW
Farm Welchlands
API No. 47 - 109 - 0980

4710900980P

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

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

LOCATION: Elevation: 2469' Watershed Marsh Fork
District: Slab Fork County Wyoming Quadrangle McGraws

COMPANY Peake Operating Company
ADDRESS 423 Charleston National Plaza
Charleston, WV 25301

DESIGNATED AGENT Timothy K. Wilcox
ADDRESS Same

SURFACE OWNER CSX Minerals, Inc.
ADDRESS Huntington, WV

MINERAL RIGHTS OWNER CSX Minerals, Inc.
ADDRESS Huntington, WV

OIL AND GAS INSPECTOR FOR THIS WORK Arthur
St. Clair ADDRESS Brenton, WV

PERMIT ISSUED June 3, 1985

DRILLING COMMENCED August 12, 1986

DRILLING COMPLETED August 23, 1986

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"	24	24	CTS
9 5/8	697	697	CTS
8 5/8			
7	1530	1530	CTS
5 1/2			
4 1/2	4540	4540	175 sks.
3			
2			
Liners used			

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GEOLOGICAL TARGET FORMATION Gordon Depth 4323 feet

Depth of completed well 4625 feet Rotary / Cable Tools _____

Water strata depth: Fresh None feet; Salt 1300 & 2925 feet

Coal seam depths: 575, 735, 970, 1110, 1424 Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Gordon/Weir Pay zone depth 3862-3872 3882-4411 feet

Gas: Initial open flow 26 Mcf/d Oil: Initial open flow _____ Bbl/d

Final open flow 100/111 Mcf/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ hours

Static rock pressure 465/450 psig (surface measurement) after 24 hours shut in

(If applicable due to multiple completion--)

Second producing formation Ravencliff Pay zone depth 2064-2098 feet

Gas: Initial open flow _____ Mcf/d Oil: Initial open flow _____ Bbl/d

WVOM - 0980

06/18/2021

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

Gordon Perfed: 4394-4411 (13 holes) and 4382-86 (12 holes). Ran 75 Q Foam Frac with 1000 gal. 15% HCL; 15,000# 80/100 sand; 45,000# 20/50 sand; 480,000 SCFN₂; 263 bbl. total fluid. BDP 1800#, ATP 1350#, ISIP 800#, 15 min. 750#; Aug. 7 8:00 p.m.
 Weir Perfed: 30 holes, 3862-3872. Ran 75 Q Foam Frac with 500 gal. 15% HCL; 15,000# 80/100; 45,000# 20/50; 413,000 SCFN₂; 207 bbl. total fluid & acid. BDP 2600#, ATP 1250#, ISIP 900#; 15 min. 800#.
 Ravencliff Perfed: 2064-2098 with 26 holes. Ran 75 Q Foam Frac with 500 gal. 15% HCL; 15,000# 80/100; 45,000# 20/50; 495,000 SCFN₂; total 202 bbl. fluid. BDP 2000#, ATP 1650#, ISIP 900#, 15 min. 750#.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Overburden			0	15	Hole moist at 1300' ±
Sand & Shale			15	575	
Coal			575	579	
Sandstone w/Shale			579	735	2910' - salt water 3 gpm
Coal			735	739	
Sandstone w/Shale			739	960	
Shale			960	970	
Coal			970	972	
Shale			972	990	
Sandstone			990	1110	
Coal w/Shale Streaks			1110	1116	
Shale			1116	1240	
Sandstone			1240	1300	
Sandstone w/Shale			1300	1424	Gas checks at:
Coal			1424	1428	1970 - Dead
Shale			1428	1475	2100 - 6/10 W 1" = 26 MCFD
Sandstone			1475	1540	3063 - 50/10 W 1" = 75
Shale w/Sandstone			1540	1710	3305 - 20-30/10 W 2" = 189-231
Red Shale			1710	1750	3640 - 10/10 W 2" = 133
Sandy Shale			1750	1810	3857 - 15/10 W 2" = 163
Sandstone			1810	1860	4016 - 20/10 W 2" = 189
Shale			1860	1998	4315 - 4-8/10 W 2" = 84-119
Sandstone			1998	2008	4469 - 6/10 W 2" = 103
Shale			2008	2019	
Ravencliff			2019	2098	
Shale			2098	2112	
Avis Lime			2112	2153	
Sand & Shale			2153	2875	
Maxton			2875	2986	
Shale			2986	3044	
Little Lime			3044	3075	
Pencil Cave			3075	3117	
Big Lime			3117	3600	
Sand & Shale			3600	3828	
Weir			3828	3888	
Sand & Shale			3888	4218	
Coffee Shale			4218	4239	
Sandy Shale			4239	4374	
Gordon			4374	4424	
			(Attach separate sheets as necessary)		
Sandy Shale			4424	4625	

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PEAKE OPERATING COMPANY

Well Operator

By:

Date: October 29, 1986

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."

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7017 1450 0002 3854 1044

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Certified Mail Fee	\$3.60	0523
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<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00	
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<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	02/05/2021

Sent To: Well LC-29
Western Pocahontas Properties LP
Street and Address: 5260 Irwin Road
City, State, ZIP: Huntington, WV 25705

PS Form 3849, June 2019

06/18/2021

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

Operator Name Diversified Production, LLC OP Code 494524121

Watershed (HUC 10) Marsh Fork Quadrangle McGraws

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 [Signature]
Company Official (Typed Name) Jeff Mast
Company Official Title Director Production



OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
Phyllis A. Copley
144 Willard Circle
Hurricane, WV 25528
My Commission Expires September 16, 2023

Subscribed and sworn before me this 4th day of February, 2021

Phyllis A. Copley Notary Public

My commission expires September 16, 2023

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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: *[Signature]*

Comments: _____

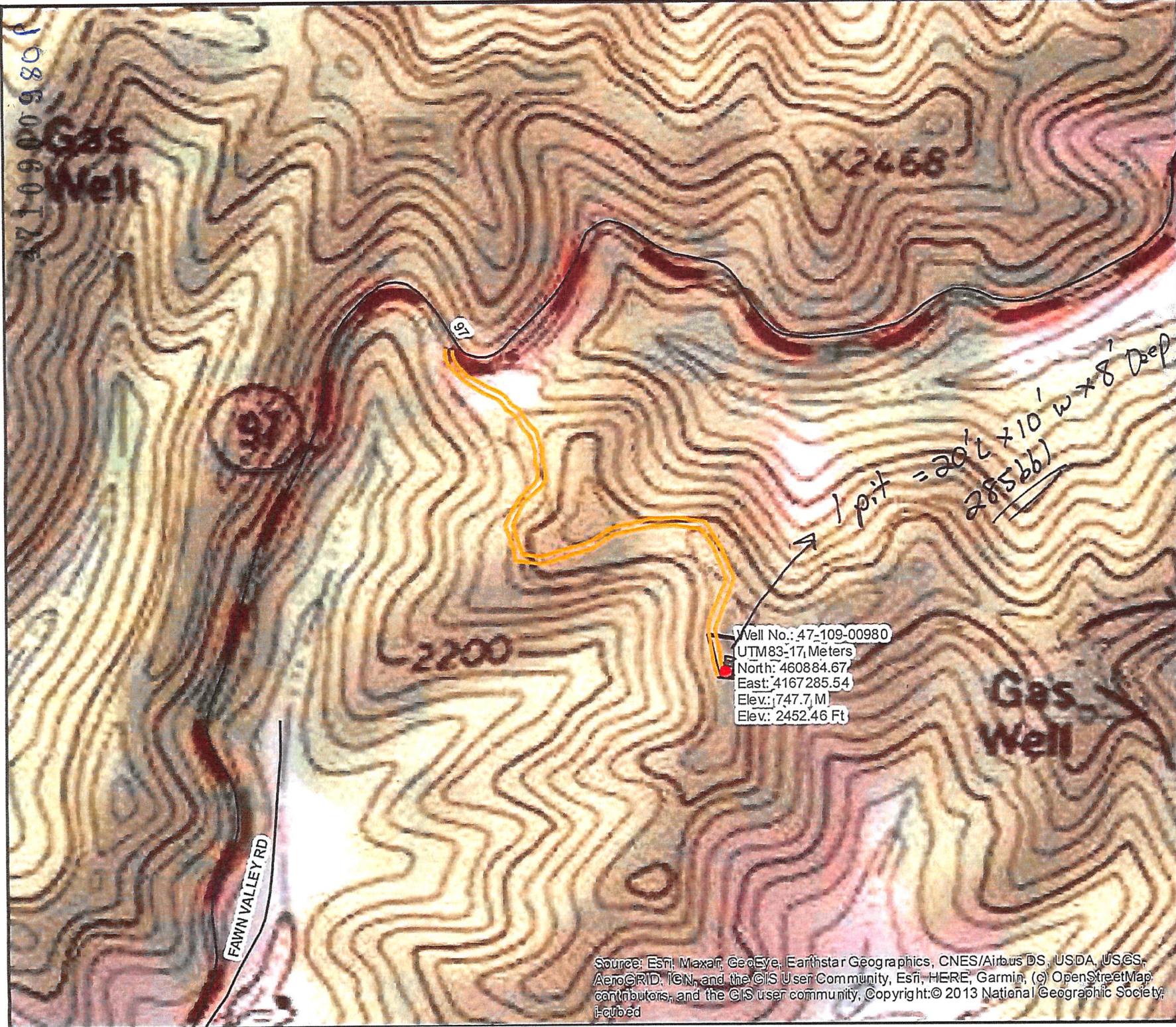
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Title: *Inspector* Date: *2/8/21*

Field Reviewed? () Yes () No



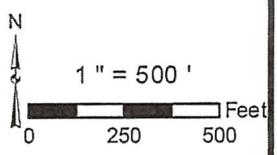
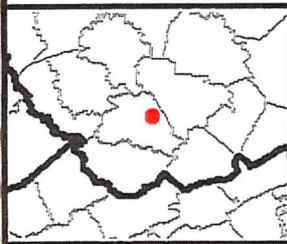
Diversified Gas & Oil Corporation
100 Diversified Way
Pikeville KY, 41051

47-109-00980
Plugging Map

Legend

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

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Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Copyright: © 2013 National Geographic Society, iCubed



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

API: 47-109-00980 WELL NO.: 29-AW

FARM NAME: CXS Minerals, INC.

RESPONSIBLE PARTY NAME: Diversified Production, LLC

COUNTY: Wyoming DISTRICT: Slab Fork

QUADRANGLE: McGraws

SURFACE OWNER: Western Pocahontas Properties

ROYALTY OWNER: DP Bluegrass LLC

UTM GPS NORTHING: 4,167,285.54

UTM GPS EASTING: 460,884.67 GPS ELEVATION: 2452'

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]
Signature

Director Production
Title

2/4/2021
Date

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