



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

Austin Caperton, Cabinet Secretary
www.dep.wv.gov

Thursday, April 23, 2020
WELL WORK PLUGGING PERMIT
Vertical Plugging

ALLIANCE PETROLEUM CO., LLC
101 MCQUISTON DRIVE

JACKSON CENTER, PA 16133

Re: Permit approval for 16-115311
47-005-01477-00-00

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 handwritten signature in blue ink, appearing to read 'James A. Martin', is positioned to the right of the typed name and title.

Operator's Well Number: 16-115311
Farm Name: LORADO COAL, LLC
U.S. WELL NUMBER: 47-005-01477-00-00
Vertical Plugging
Date Issued: 4/22/2020

Promoting a healthy environment.

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.

1) Date January 23, 2020
2) Operator's
Well No. 115311
3) API Well No. 47-005 - 01477 P

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 X

5) Location: Elevation 519.35 m Watershed Rocklick Branch of Pond Fork
District Crook County Boone Quadrangle Pilot Knob

6) Well Operator Alliance Petroleum Corporation 7) Designated Agent David Dean
Address 1997 Old Weston Road Address 1997 Old Weston Road
Buckhannon, WV 26201 Buckhannon, WV 26201

8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name Jeffery L. Smith Name R & J Well Service, Inc.
Address 5349 Karen Circle, Apartment #2101 Address P.O. Box 40
Cross Lanes, WV 25313 Hueysville, KY 41640-0040

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

SEE ATTACHED SHEET

RECEIVED
Office of Oil and Gas
JAN 28 2020
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 JEFF SMITH Date _____
OK by phone

PLUGGING PROGNOSIS

115311

West Virginia, Boone County

API # 47-005-01477

Casing Schedule

12 3/4" csg @ 25' grouted to surface

9 5/8" csg @ 510' cemented w/ 200 sx to surface (calculated from 11.75" hole and 1.28 sx/cu ft yield)

7" csg @ 2085' cemented w/ 236 sx to surface (calculated from 8.625" hole and 1.28 yield)

4 1/2" csg @ 3720' cemented w/ 75 sx to 3025' (calculated from 6.75" hole and 1.28 yield)

2 3/8" tbg @ 3389'

Completion

Big Lime @ 3019'- 3206'

Lower Weir @ 3382'- 3395'

Fresh Water: 660'**Coal:** 129'- 131', 453'- 457' (Open Mine)**Gas Shows:** None Reported**Oil Shows:** None Reported**Elevation:** 1704'

1. Notify inspector, Jeffrey Smith 681-313-6743, 48 hrs. prior to commencing operations.
2. Check and record pressures.
3. TOOH w/ tbg, and inspect condition prior to cementing
4. Kill well with 6% bentonite gel as needed.
5. TIH w/ tbg to 3382'. Pump 100' C1A Cement Plug: **3382'- 3282'** Weir Completion
6. TOOH w/ tbg to 3282'. Pump 6% bentonite gel: **3282'- 3019'**
7. TOOH w/ tbg to 3019'. Pump 100' C1A cement plug: **3019'- 2919'** Big Lime Completion
8. TOOH w/ tbg to 2919'. Pump 6% bentonite gel: **2919'- 2500'**
9. TOOH w/ tbg. Free point and cut 4 1/2" csg at free point. If unable to pull 4 1/2" csg at target depth work up hole perforating all plugs as needed. 100' plug to be set 50' in/out of each unsuccessful attempt. Estimated plug: Set 100' C1A cement plug: **2500'- 2400'**
10. TIH w/ tbg to 2400'. Pump 6% bentonite gel: **2400'- 2135'**
11. TOOH w/ tbg to 2135'. Pump 100' C1A cement plug: **2135'- 1935'** (7" csg seat)
12. TOOH w/ tbg to 1935'. Pump 6% bentonite gel: **1935'- 1710'**
13. TIH w/ tbg to 1704'. Pump 100' C1A Cement plug: **1704'- 1604'** (Elevation)
14. TOOH w/ tbg to 1604'. Pump 6% bentonite gel: **1604'- 710'**
15. TOOH w/ tbg to 710'. Pump 100' C1A cement plug: **710'- 610'** (Fresh Water Show)
16. TOOH w/ tbg to 610'. Pump 6% bentonite gel: **610'- 560'**
17. TOOH w/ tbg to 560'. Pump 157' C1A cement plug: **560'- 403'** (9 5/8" csg seat & coal)
18. TOOH w/ tbg to 403'. Pump 6% bentonite gel: **403'- 181'**
19. TOOH w/ tbg to 181'. Pump 181' C1A cement plug from **181' to surface** (Coal)
20. Erect monument with API#, date plugged, & company name.
21. Reclaim location and road to WV-DEP specifications.

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JAN 28 2020

WV Department of
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Well: 115311
47-005-01477P

WR-35
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FEB 24 1989

18-Mar-88
API # 47-005-01477

State of West Virginia
DEPARTMENT OF ENERGY
Division of Oil and Gas

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Well Operator's Report of Well Work

Farm name: SOUTHERN LAND COMPANY Operator Well No.: 16-115311

LOCATION: Elevation: 1710.10 Quadrangle: PILOT KNOB

District: CROOK County: BOONE
Latitude: 13190 Feet South of 37 Des. 52Min. 30 Sec.
Longitude 7830 Feet West of 81 Des. 35 Min. 0 Sec.

Environmental Protection

JAN 28 2020

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Company: ASHLAND EXPLORATION, INC.
P. O. BOX 391
ASHLAND, KY

Asent: FORREST BURKETT

Inspector: JERRY HOLCOMB
Permit Issued: 03/18/88
Well work Commenced: 12/07/88
Well work Completed: 02/07/89
Verbal Plussings
Permission granted on: _____
Rotary Cable _____ Rig
Total Depth (feet) 3731'
Fresh water depths (ft) 660'
Salt water depths (ft) 2010'

Size	Used in	Left	Cement
	Tubins	in Well	Fill Up
	Drillings		Cu. Ft.
12 3/4"	25'	25'	4 sx
9 5/8"	510'	510'	200 sx
7"	2085'	2085'	236 sx
4 1/2"	3720'	3720'	75 sx
2 3/8"		3389'	

Is coal being mined in area (Y/N)? N
Coal Depths (ft): 129-131 open mine
453-457

OPEN FLOW DATA

Lower Weir & Big Lime 3382-3395
3019-3206
Producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow 100 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 1200 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 3 Hours
Static rock Pressure 525 psig (surface pressure) after 72 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

BOONE

Well 115311
API 47-005-014779

Perf L. Weir 40H/3382-3395 - 75 Q foam frac using 500 gal 15% HCl, 241 bbl. 25% Mathanol, 53,800# 20/40 sand & 371,000 SCF N₂ @ 9500 SCF/min. BD @ 1565#, ATP: 1514# @ 25 B/M foam, MTP 1574#, ISIP 1029#, 15 min 720#, TF 336 bbl. - 20 balls-active.

Perf Big Lime 28H/3019-3026 - Acidize w/1000 gal 17% HCl & 2775 gal 20% gelled (40#/M gal system) HCl. Staged job as follows w/acid, N₂ breakdown, gel wtr, gelled acid, gel wtr & gelled acid. BD @ 1690# (w/N₂), ATP 5 bbl/min, ISIP 1300#, TF 182 bbl., T N₂ 88,500 SCF.

<u>FORMATION</u>	<u>TOP</u>	<u>BASE</u>
Sand & Shald	0	1303
Lower Pottsville Sand	1303	2020
Shale	2020	2090
Ravenscliff	2090	2118
Shale	2118	2149
Avis LS	2149	2185
Shale	2185	2214
Stray Maxton	2214	2272
Shale	2272	2340
Upper & Middle Maxton	2340	2501
Shale	2501	2660
Lower Maxton	2660	2686
Shale	2686	2720
Little Lime	2720	2804
Pencil Cave	2804	2808
Big Lime	2808	3149
Shale	3149	3161
Injun	3161	3201
Shale	3201	3250
Weir	3250	3274
Shale	3274	3379
Lower Weir	3379	3497
Shale	3497	3614
Coffee Shale	3614	3632
Berea	3632	3637
Devonian Shale	3637	TD
DTD 3731		
LTD 3720		

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DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

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Office of Oil and Gas

JAN 28 2020

WV Department of
Environmental Protection

WW-4A
Revised 6-07

1) Date: January 23, 2020
2) Operator's Well Number 115311

3) API Well No.: 47 - 47-005 - 01477

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>Lorado, LLC</u>	Name <u>Blackhawk Mining</u>
Address <u>300 Capitol Street, Suite 1401</u>	Address <u>3228 Summit Place, Suite 180</u>
<u>Charleston, WV 25301</u>	<u>Lexington, KY 40509</u>
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>Lorado, LLC</u>
	Address <u>300 Capitol Street, Suite 1401</u>
	<u>Charleston, WV</u>
(c) Name _____	Name <u>Charleston, WV 25302</u>
Address _____	Address _____
6) Inspector <u>Jeffery L. Smith</u>	(c) Coal Lessee with Declaration
Address <u>5349 Karen Circle, Apartment #2101</u>	Name <u>Rockwell Mining, LLC</u>
<u>Cross Lanes, WV 25313</u>	Address <u>3228 Summit Square Place, Suite 180</u>
Telephone <u>681-313-6143</u>	<u>Lexington, KY 40509</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.

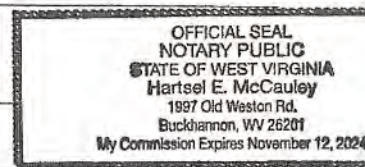
The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

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.

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Office of Oil and Gas

Well Operator	<u>Alliance Petroleum Corporation</u>	<u>JAN 28 2020</u>
By:	<u><i>Donald Dean</i></u>	
Its:	<u>Vice President Production</u>	
Address	<u>1997 Old Weston Road</u>	<u>WV Department of</u>
	<u>Buckhannon, WV 26201</u>	<u>Environmental Protection</u>
Telephone	<u>304-614-2963</u>	

Subscribed and sworn before me this 24th day of January 2020
Hartsel E. McCauley Notary Public
My Commission Expires November 12, 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.

WW-9
(5/16)

API Number 47 - 005-01477
Operator's Well No. 115311

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

Operator Name Alliance Petroleum Corporation OP Code 494506333

Watershed (HUC 10) Rocklink Branch of Pond Fork Quadrangle Crook

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: Plugging returns/Cement

Will a synthetic liner be used in the pit? Yes No If so, what ml.? 20

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 Any fluid recovered will be hauled and disposed of properly)

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 David Dean

Company Official (Typed Name) David Dean

Company Official Title Vice President Production

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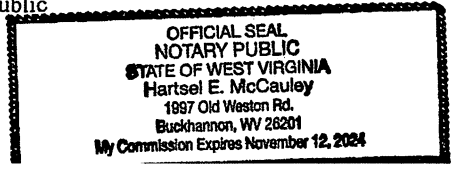
JAN 28 2020

WV Department of
Environmental Protection

Subscribed and sworn before me this 24th day of January, 2020

Hartsel E. McCauley Notary Public

My commission expires: November 12, 2024



+/-

Proposed Revegetation Treatment: Acres Disturbed _____ 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	Seed Type	lbs/acre
Red Fescue	40	Red Fescue	15
Alsike	5	Alsike Clover	5
Annual Rye	15		

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: _____

Comments: _____

Title: _____ Date: _____

Field Reviewed? () Yes () No

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 JAN 28 2020
 WV Department of
 Environmental Protection

47-005-01477P



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

115311

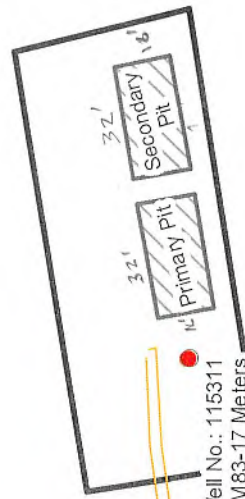
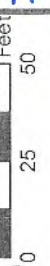
Plugging Map

Legend

- Public Roads
- ▨ Pits
- Well
- Access Road
- ⊗ Sediment Control
- ▭ Pad

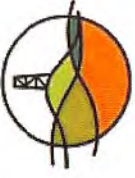


1" = 50'



Well No.: 115311
 UTM 83-17 Meters
EAST North: 446302.94
WEST East: 4188123.51
 Elev.: 519.35

47-005-01477P



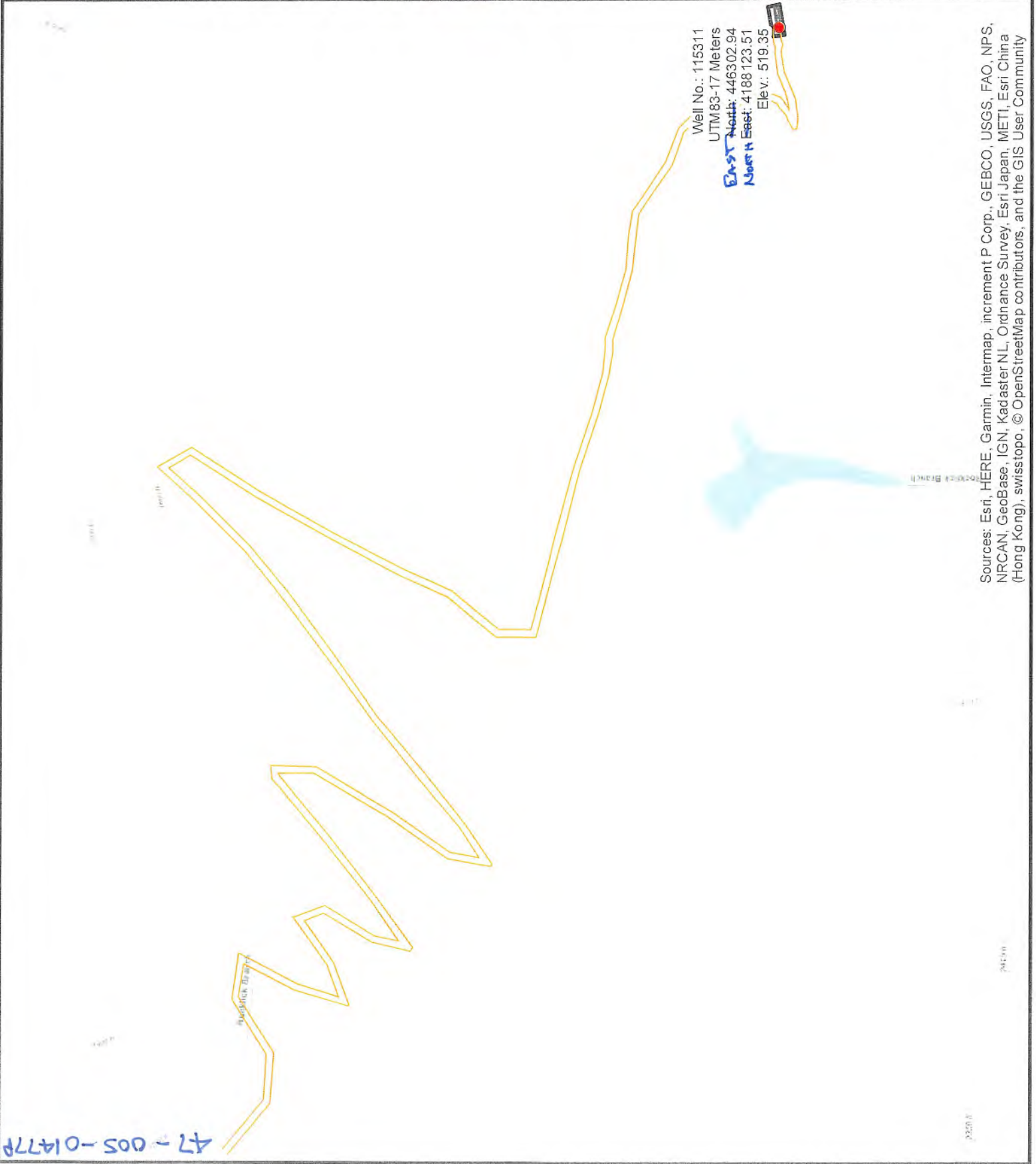
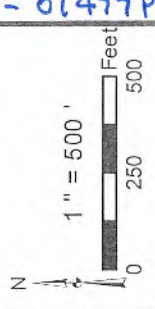
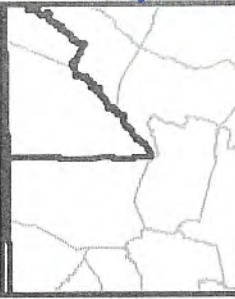
Diversified Gas & Oil Corporation
100 Diversified Way
Pikeville KY, 41051

115311

Plugging Map

Legend

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



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community

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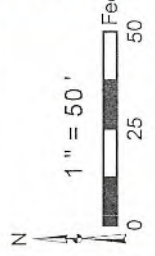
Diversified Gas & Oil Corporation
100 Diversified Way
Pikeville KY, 41051

115311

Plugging Map

Legend

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



Well No.: 115311
 UTM 83-17, Meters
 North: 446302.94
 East: 4188123.51
 Elev.: 519.35

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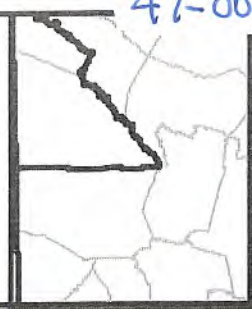
Diversified Gas & Oil Corporation
100 Diversified Way
Pikeville KY, 41051

115311

Plugging Map

Legend

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



Well No.: 115311
 UTM83-17 Meters
 North: 446302.94 N
 East: 4188123.51 E
 Elev.: 519.35

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

115311

Plugging Map

APT 47-005-01477

Legend

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

*Not Sand
pits*



1" = 700'





WW-7
8-30-06



West Virginia Department of Environmental Protection
Office of Oil and Gas

WELL LOCATION FORM: GPS

API: 47-005-01477 WELL NO.: 115311

FARM NAME: Southern Land Company

RESPONSIBLE PARTY NAME: Jeff Mast

COUNTY: Boone DISTRICT: Crook

QUADRANGLE: Pilot Knob

SURFACE OWNER: Lorado Coal, LLC

ROYALTY OWNER: Southern Land Company

UTM GPS NORTHING: 446,302.94 EASTING 1703.5 FT

UTM GPS EASTING: 4,188,123.51 NORTHING GPS ELEVATION: 519.35 m

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

Engineer III
Title

1/23/2020
Date

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JAN 28 2020
WV Department of
Environmental Protection