

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, March 29, 2021 WELL WORK PLUGGING PERMIT Vertical Plugging

NYTIS EXPLORATION COMPANY LLC PO BOX 8 RAVENSWOOD, WV 26164

Re: Permit approval for 1 47-035-01646-00-00

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: 1 Farm Name: GILPIN, O. C. U.S. WELL NUMBER: 47-035-01646-00-00 Vertical Plugging Date Issued: 3/29/2021

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. <u>Failure to adhere to the specified</u> 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.

				4703501646
WW-4	В		1) Da	te December 18th , 2020
Rev. 2/01				erator's
Nev. 2701			11 No. PKE 775	
			3)AP	I Well No. <u>47-035</u> - 01646
		STATE OF WE	ST VIRGINIA	
	DE	PARTMENT OF ENVIR	ONMENTAL PROTECTI	ON
		OFFICE OF (OIL AND GAS	
	APPLI	CATION FOR A PERM	IIT TO PLUG AND AB	ANDON
4)	Well Type: Oil/	Gas X / Liquid	l injection/	Waste disposal/
	(If "Gas, Produ	ction <u>x</u> or Und	lerground storage) Deep/ ShallowX
5)	Location: Elevation 814		Watershed Left For	k Sandy Creek
	District Ray	/enswood	County Jackson	Quadrangle Liverpool
6)	Well Operator Nytis Explo	ration Company LLC	7)Designated Age	_{nt} Jeff Mast
1.1	Address P.O. Box 6			ss P.O. Box 6070
	Charlestor	n, WV 25362		Charleston, WV 25362
8)	Oil and Gas Inspector t _{Name} Joe Taylor	o be notified	9)Plugging Contr	actor sified Production LLC (In-house Rig)
	Address 1478 Claylick Ro	oad		51 Pleasantview Ridge Road
	Ripley, WV 2527			avenswood, 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

DEC 2 8 2020

WV Department of Environmental Protection

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

12

Work order approved by inspector

Date [2-28-20

04/02/2021

PLUGGING PROGNOSIS

API# 47-035-01646 West Virginia, Jackson County

Casing Schedule

10" csg @ 40' cemented w/ 2 sxs 8 5/8" csg @ 2,314' cemented w/ 350 sxs to surface 4 ½" csg @ 5,208' cemented w/ 480 sxs to surface (Calc from 6.25" hole and 1.28 yield) – To be confirmed in field Tubed to an unknown depth TD @ 5,208'

Completion:

Shale: 3,156'- 4,936' and 4,936'- 5,208'

Fresh Water: 104' Salt Water: 1,875' Gas Shows: None Reported Oil Show: None Reported Coal: None Reported Elevation: 832'

- 1. Notify Inspector Joe Taylor @ 304-380-7469, 48 hours prior to commencing operations.
- 2. Check and record pressures on csg/tbg.
- 3. TOOH LD tbg. Inspect tbg.
- 4. Check TD w/ wireline. Pull stretch and calculate 4 ½" csg free point. Adjust csg cut depth accordingly.
- TIH w/ tbg to 5,208'. Kill well as needed with 6% bentonite gel. Pump 272' C1A cement plug from 5,208'- 4,936' (Shale Completion). Tag cement and top off if needed.
- 6. TOOH w/ tbg to 4,936'. Pump 1,880' C1A cement plug from 4,936'- 3,056' (Shale Completion).
- 7. TOOH w/ tbg to 3,056'. Pump 6% bentonite gel from 3,056'-2,364'.
- 8. 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.
- 9. TIH w/ tbg to 2,364'. Pump 100' C1A cement plug from 2,364'-2,264' (8 5/8" csg st).
- 10. TOOH w/ tbg to 2,264'. Pump 6% bentonite gel from 2,264'- 1,875'.
- 11. TOOH w/ tbg to 1,875'. Pump 100' C1A cement plug from 1,875'-1,775' (Salt Water Show).
- 12. TOOH w/ tbg to 1,775'. Pump 6% bentonite gel from 1,775'-832'.
- 13. TOOH w/ tbg to 832'. Pump 100' C1A cement plug from 832'-732' (Elevation).
- 14. TOOH w/ tbg to 194'. Pump 6% bentonite gel from 732'- 100'.
- 15. TOOH w/ tbg to 100'. Pump 100' C1A cement plug from 100'-surface (Surface).

All Free pipe will be pulled.

- 16. Erect monument with API#, date plugged, and company name.
- 17. Reclaim location and road to WV-DEP specifications.

RECEIVED Office of Oil and Gas

DEC 28 2020

WV Department of Environmental Protection

12-28-20

FORM IV-35 (REVERSE)

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

			AVERAGE
PERFORATIONS	75 Q FOAM VOLUME	SAND VOLUME	INJECTION RATE
5208-4936 (15)	38,000 gal	64,000#	39.5 BPM
4559-3156 (15)	38,000 gal	64,000#	40.00 BPM

TORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	<u>REMARKS</u> Including indication of all fresh and salt water, coal, oil and gas
SHALE	0	18	
SAND	18	46	
SANDY SHALE	46	138	Fresh water 1" stream @ 104'
SAND	138	169	
SHALE	169	628	
SAND	628	632	
SHALE	632	680	
SAND	680	720	
SHALE	720	820	
SAND	820	825	
R. R.	825	855	
SHALE	855	960	
SAND	960	983	
SHALE	983	1,170	
SALT SANDS & SHALE	1,170	1,945	Salt water 1-1/2" stream @ 1,875'
BIG LIME	1,945	2,040	
SHALE	2,040	2,065	
BIG INJUN	2,065	2,110	
SHALE	2,110	2,480	
COFFEE SHALE	2,480	2,495	
BEREA	2,495	2,497	
DEVONIAN SHALE	2,497	TD	RECEIVED
			Office of Oil and G
			DEC 2 8 2020
			WV Department o Environmental Protect
			Environmental Protec

(Attach separate sheets as necessary)

ILING OMPAN Operator By: Date:

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 well, encountered in the drilling of a well."

WELL LOG

4703501646

WW-4A Revised 6-07

1) Date: 12/18/2020

2) Operator's Well Number

PKE 775

3) API Well No.: 47 -

- 01646

035

47035016466

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

4)	Surface Ow	ner(s) to be served:	5) (a) Coal Operator		
	(a) Name	David G & Gladys J Wade	Name		-
	Address	5620 Liverpool Road	Address		
		Leroy, WV 25252			-
	(b) Name		(b) Coal Own	ner(s) with Declaration	
	Address		Name	No Declaration	_
			Address		-
	(c) Name		Name		_
	Address		Address		_
	manicos	<u></u>			
6)	Inspector	Joe Taylor	(c) Coal Less	see with Declaration	
	Address	1478 Claylick Road	Name		
		Ripley WV 25271	Address		
	Telephone	304-380-7469			

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

- 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.

OF WEST UN	OFFICIAL SEAL NOTARY PUBLIC	Well Operator	Nytis Exploration Company LLC	RECEIVED
	STATE OF WEST VIRGINIA	By:	Jeff Mast	RECEIVED Office of Oil and Gas
	Phyllis A. Copley	Its:	Director Production	
	144 Willard Circle Hurricane, WV 25528	Address	P.O. Box 6070	DEC 28 2020
My (Commission Expires September 14, 2023		Charleston, WV 25362	- 0 2020
Dessesson		Telephone	304-543-6988	WV Department of Environmental Protection
	an darre b	a 21st de	av of December 2020	
Subceribed a	id sworn before me thi			
Subscribed a	nd sworn before me thi	ho a. Coply	Notary Public	

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 <u>depprivacyoffier@wv.gov</u>.

47-035-01646P Well: PKE775



1/13/01 to DEOP

Operator's Well Number

PKE 775 (47-035-01646) P

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: RECEIVED Office of Oil and Gas

Chief, Office of Oil and Gas Department of Environmental Protection 601 57th St. SE Charleston, WV 25304 (304) 926-0450

FEB 1 1 2021

WV Department of Environmental Protection

<u>Time Limits and methods for filing comments.</u> 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.

<u>Comments must be in writing.</u> 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 War Date 1-11-21 Name By Its

FOR EXECUTION BY A CORPORATION,

Date

Signature

Date

	4703501646
WW-9 (5/16)	A PI Number 47 - 035 - 01646 Operator's Well No. PKE 775
DEPARTMENT OF EN OFFICE	OF WEST VIRGINIA IVIRONMENTAL PROTECTION OF OIL AND GAS SPOSAL & RECLAMATION PLAN
Operator Name Nytis Exploration Company LLC	OP Code 494473563
Watershed (HUC 10) Left Fork Sandy Creek	Quadrangle Liverpool
Do you anticipate using more than 5,000 bbls of water to cor Will a pit be used? Yes No No	WELL EFFLUENT WILL BE CONTAINED IN TAKES FORE DISPOSING OFF-SITE. GINEM
Will a synthetic liner be used in the pit? Yes	No If so, what ml.? 20
Proposed Disposal Method For Treated Pit Wastes:	
and the second of the second	vide a completed form WW-9-GPP)
Underground Injection (UIC Per	
Reuse (at API Number)
Off Site Disposal (Supply form V	₩W-9 for disposal location)
Other (Explain	
Will closed loop systembe used? If so, describe: N/A	
Drilling medium anticipated for this well (vertical and horizo	ontal)? Air, freshwater, oil based, etc. N/A
-If oil based, what type? Synthetic, petroleum, etc.	BECEIVED
Additives to be used in drilling medium? N/A	DEC 28 2020
Drill cuttings disposal method? Leave in pit, landfill, remov	and officite etc. N/A
-If left in pit and plan to solidify what medium will	Environment of
-Landfill or offsite name/permit number? N/A	

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 Cas 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	STATE OF WEST VIRGINIA Phyllis A. Copley
Company Official (Typed Name) Jeff Mast	Hurricana, WV 25528
Company Official Title Director Production	
Subscribed and sworn before me this 21st day of Puppis Q. Ca	December, 20 20 pluy Notary Public
My commission expires September	16,0023

4703501646P

Form WW-9	Operator's Well 1	No. PKE 775
Proposed Revegetation Treatment: Acres Disturbed 1 +	/- Preveg etation 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	Permanen	ıt
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.

RECEIVED	
Office of Oil and	Gas

TIF	0	0 1	2021	0
DEC	, 4	06	UZI	J .

mments: Seclinent control i	A Place of All Time.	WV Department o Environmental Protec
17		
	the the	7
	- for the second	
le: <u>COG Thyle-for</u> Id Reviewed? ()Yes	Date: 12-28-70	

12/15/2020

input coordinates

enter comma delimited coordinates. examples: 38 15 30.1, -81 25 15.2 (lat, lon as degrees minutes seconds)

38.123456, -81.123456 (lat, lon as decimal degrees) 500000, 4100000 (UTM as easting, northing) 1987654.32, 364123.45 (WV state plane as easting, northing)

V

V

38.891740967,-81.567537314

Lat/Lon WGS 1984

Convert

output coordinates

450781.29,4304915.28

UTM NAD83 Zone 17N

view on Google Maps

options

display output as degrees/minutes/seconds

🗹 zoom to point

history (copy/paste)

1,38.8917410,-81.5675373,LL WGS84(G1674),450781.29,4304915.28,UTM17N NAD83(2011)

> RECEIVED Office of Oil and Gas

DEC 28 2020

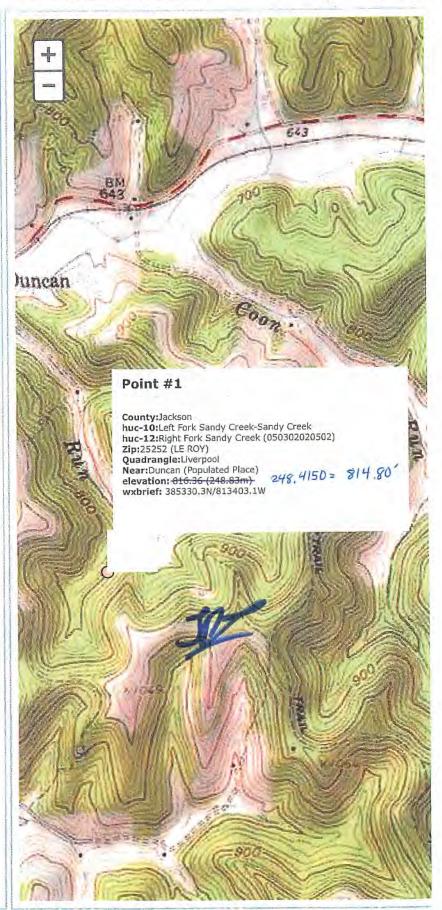
WV Department of Environmental Protection

notes about datum conversions

1. Conversions between NAD27 and NAD83. This converts between NAD27 and NAD83(1986) using the NADCON transformation. Newer realizations of NAD83, such as NAD83(CORS96) and NAD83(2011) can differ from NAD83(1986) by a meter or so. This conversion uses the Esri transformation NAD 1927_To_NAD_1983_NADCON.

2. Conversions between NAD27 and WGS84. Basically this just applies the NADCON transformation from NAD27 to NAD83(1986). NAD83(1986) is the original realization of NAD83, which is practically identical to the original WGS84. The difference between the

4703501646



clear markers O street map O image O topo

WW-7		
8-30-06	St. WEST VICE	
Offi	ment of Environmental ice of Oil and Gas CATION FORM: GPS	
АРІ: 47-035-01646	well NO.: P	KE 775
EADM NAME. O.C. Gilpin	1	
RESPONSIBLE PARTY NAME:	Nytis Exploration Co	mpany LLC
COUNTY: Jackson	DISTRICT: Ray	venswood
OUADRANGLE: Liverpool		
SURFACE OWNER: David		
ROYALTY OWNER: D.P. B		
UTM GPS NORTHING: $4,304$	4,915	
UTM GPS EASTING: 450,78	GPS ELEVATI	ION: 814 (ft)
The Responsible Party named above preparing a new well location plat above well. The Office of Oil and of the following requirements: 1. Datum: NAD 1983, Zon height above mean sea 2. Accuracy to Datum – 3 3. Data Collection Method Survey grade GPS: Post I	for a plugging permit or assigned A Gas will not accept GPS coordinate ne: 17 North, Coordinate Units: me level (MSL) – meters. .05 meters d:	es that do not meet Office of Oil and Gas
Real- Mapping Grade GPS X : Po	Time Differential 🗙	
	eal-Time Differential	
I the undersigned, hereby certify the	e topography map showing the we his data is correct to the best of my on required by law and the regulation of Gas.	knowledge and
1AD	Director Production	12/18/2020
Signature	Title	Date

