



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

Tuesday, February 16, 2021
WELL WORK PLUGGING PERMIT
Vertical Plugging

NYTIS EXPLORATION COMPANY LLC
PO BOX 8

RAVENSWOOD, WV 26164

Re: Permit approval for DEK-38
47-035-01413-00-00

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: DEK-38
Farm Name: KAY, JOHN P.
U.S. WELL NUMBER: 47-035-01413-00-00
Vertical Plugging
Date Issued: 2/16/2021

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4703501413 P

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.

PLUGGING PROGNOSIS

API# 47-035-01413
West Virginia, Jackson County

Casing Schedule

9 5/8" csg @ 244' cemented w/ 110 sx to surface
7" csg @ 2,377' cemented w/ 75 sx to 625'
4 1/2" csg @ 4,615' cemented w/ 150 sx to 1,800'
Well tubed to unknown depth
TD 4,615'

Completion:

- Oriskany: 4511' - 4513'
- Shale: 3717' - 3860'

Fresh Water: None Reported
Gas Shows: None Reported
Oil Show: None Reported
Coal: None Reported
Elevation: 814'

All Free Pipe will be pulled.

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.
5. TIH w/ tbg to 4,513'. Kill well as needed with 6% bentonite gel. Pump 102' C1A cement plug from **4,513'-4,411' (Oriskany Completion)**. Tag cement and top off if needed
6. TOOH w/ tbg to 4,411'. Pump 6% bentonite gel from 4,411'-3,860'.
7. TOOH w/ tbg to 996'. Pump 177' C1A cement plug from **3,860'-3,617' (Shale Completion)**.
8. TOOH w/ tbg to 2189'. Pump 6% bentonite gel from 3,617'-2,427'.
9. 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/rip as needed.
10. TIH w/ tbg to 2,427'. Pump 100' C1A cement plug from **2,427'-2,327' (7" csg seat)**.
11. TOOH w/ tbg to 2,327'. Pump 6% bentonite gel from 2,327'-814'.
12. TOOH w/ tbg to 814'. Pump 100' C1A cement plug from 814'-714' (**Elevation**).
13. TOOH w/ tbg to 714'. Pump 6% bentonite gel from 714'-294'. TOOH LD tbg.
14. Free point 7" 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.
15. TIH w/ tbg to 294'. Pump 100' C1A cement plug from **294'-194' (9 5/8" csg seat)**.
16. TOOH w/ tbg to 194'. Pump 6% bentonite gel from 194'-100'.
17. TOOH w/ tbg to 100'. Pump 100' C1A cement plug from **100'-surface (Surface)**.
18. Erect monument with API#, date plugged, and company name.
19. Reclaim location and road to WV-DEP specifications.

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(1a)

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7" CASING FREE POINT MAY BE
• ≈ 1750'. THEREFORE FREE POINT
SHOULD BE DONE ABOVE 1900'.

JW m 2/11/2021

Joe Taylor
12-28-20



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STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

OIL & GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

WELL RECORD

Rotary XXX Oil _____
Cable _____ Gas XXX _____
Recycling _____ Comb. _____
Water Flood _____ Storage _____
Disposal _____ (Kind) _____

Quadrangle Ravenswood

Permit No. JAC 1413

Company <u>Kaiser Exploration & Mining Co.</u>	Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Address <u>Box 98, Ravenswood, WV</u>	Size			
Farm <u>John P. Kay et al</u> Acres <u>52</u>	20-16			
Location (waters) <u>Branch of Lick Run</u>	Cond.			
Well No. <u>DEK #38</u> Elev. <u>617</u>	13-10"			
District <u>Union</u> County <u>Jackson</u>	9 5/8	244	244	110 Sax=to surface ✓
The surface of tract is owned in fee by <u>Rachel Kay</u>	8 5/8			
Address <u>2807 Lincoln Ave., St. Albans, WV</u>	7	2377	2377	75 Sax=625'
Mineral rights are owned by <u>John P. Kay et al</u>	5 1/2			
Address <u>as above</u>	4 1/2		4615	150 Sax=1800'
Drilling Commenced <u>August 13, 1977</u>	3			
Drilling Completed <u>September 2, 1977</u>	2			
Initial open flow <u>42 MCFD</u> XXXX bbls.	Liners Used			
Final production <u>50 MCFD</u> cu. ft. per day bbls.				
Well open _____ hrs. before test <u>650</u> RP.				

Well treatment details: Attach copy of cementing record. All cementing by Halliburton.

Perforated Oriskany section at 4511'-4513' with (3) omega jet shots/ft. Fractured with 1000 gallons acid, 33,000# sand and 713 bbl. water.

Perforated Brown Shale @ 3717 to 3860 with 25 shots. Fractured with 1000 gal. MCA, 90,000# sand and 952 bbls. water.

Coal was encountered at None Feet _____ Inches _____
Fresh water _____ Feet _____ Salt Water _____ Feet _____
Producing Sand Oriskany, Br. Shale Depth 4511-4513 & 3717-3860

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Red Shale & Shells			0	277		
Sand			277	314		
Slate & Shells			314	518		
Sand			518	558		
Red Rock			558	586		
Slate			586	628		
Red Rock			628	652		
Sand			652	682		
Red Rock			682	704		
Slate			704	744		
Sand			744	762		
Red Rock			762	816		
Slate			816	890		
Sand			890	902		
Red Rock			902	923		
Slate			923	940		
Sand			940	952		
Slate & Shells			952	1054		
Salt Sand			1054	1104		
Shale			1104	1134		
Salt Sand			1134	1184		
Slate			1184	1211		
Salt Sand			1211	1250		

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(over)

* Indicates Electric Log tops in the remarks section.

Formation	Color	Hard or Soft	Top Feet \pm	Bottom Feet	Oil, Gas or Water	* Remarks
Slate			1250	1315		
Salt Sand			1315	1460		
Slate & Shells			1460	1692		
Maxon Sand			1692	1724		
Big Lime			1724	1813		
Shale			1813	1870		
Injun Sand			1870	1976		
Shale & Shells			1976	2279		
Coffee Shale			2279	2292		
Berea Sand			2292	2299		
Gray Shale			2299	3438		
Brown Shale			3438	3891		
Gray Shale			3891	4296		
Marcellus Shale			4296	4428		
Onondaga L.S.			4428	4502		
Oriskany Sand			4502	4524		
Helderberg L.S.			4524	4641		
Log Total Depth				4641		

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Date March 2, 1978

APPROVED *Robert A. Payne*, Owner

By _____ Operations Manager

(Title)

WW-4B
Rev. 2/01

1) Date December 18th, 2020
2) Operator's
Well No. Kay John P Dek 38
3) API Well No. 47-035 - 01413

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 814' Watershed Lower Mill Creek
District Ravenswood County Jackson Quadrangle Ravenswood
- 6) Well Operator Nytis Exploration Company 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 Joe Taylor 9) Plugging Contractor
Address 1478 Claylick Road Name Diversified Production LLC (In-house Rig)
Ripley, WV 25271 Address 1951 Pleasantview Ridge Road
Ravenswood, WV 26164

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

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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

Date

12-28-20

1) Date: 12/18/2020
 2) Operator's Well Number
Kay John P Dek 38
 3) API Well No.: 47 - 035 - 01413

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

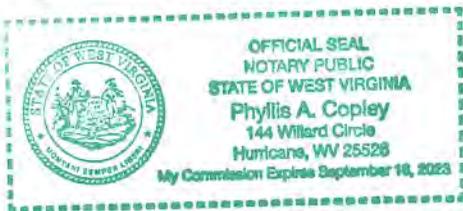
<p>4) Surface Owner(s) to be served:</p> <p>(a) Name <u>Joshua Burge</u> Address <u>49 Affirmed Drive</u> <u>Evans, WV 25241</u></p> <p>(b) Name _____ Address _____</p> <p>(c) Name _____ Address _____</p>	<p>5) (a) Coal Operator</p> <p>Name _____ Address _____</p> <p>(b) Coal Owner(s) with Declaration</p> <p>Name <u>No Declaration</u> Address _____</p> <p>(c) Coal Lessee with Declaration</p> <p>Name _____ Address _____</p>
<p>6) Inspector</p> <p>Address <u>Joe Taylor</u> <u>1478 Claylick Road</u> <u>Ripley WV 25271</u></p> <p>Telephone <u>304-380-7469</u></p>	

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 Nytis Exploration Company LLC
 By: Jeff Mast
 Its: Director Production
 Address P.O. Box 6070
Charleston, WV 25362
 Telephone 304-543-6988

Subscribed and sworn before me this 21st day of December 2020
Phyllis A. Copley Notary Public
 My Commission Expires September 16, 2023

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 information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

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Well Number: DEK 38
API: 47-035-01413P

7017 1450 0002 3854 0726

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

For delivery information, visit our website at www.usps.com®.

Evans, WV 25241

OFFICIAL USE

Certified Mail Fee	\$3.55
Extra Services & Fees (check box, add fee as appropriate)	\$2.85
<input type="checkbox"/> Return Receipt (hardcopy)	\$1.00
<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 and Fees	\$7.80

0523
03
Postmark
Here

12/21/2020
DEK 38

Sent To
Joshua Burge
Street and Apt. No., or PO Box No.
49 Affirmed Drive
City, State, ZIP+4®
Evans WV 25241

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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

Operator Name Nytis Exploration Company LLC OP Code 494473563

Watershed (HUC 10) Lower Mill Creek Quadrangle Ravenswood

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: Produced fluid and cement returns

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 2D0190460)
- 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: N/A

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. N/A **FRESH WATER CEL.**

-If oil based, what type? Synthetic, petroleum, etc. N/A RECEIVED Office of Oil and Gas

Additives to be used in drilling medium? N/A DEC 28 2020

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. N/A WV Department of Environmental Protection

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

-Landfill or offsite name/permit number? N/A

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



Subscribed and sworn before me this 21st day of December, 2020

Phyllis A. Copley Notary Public [Signature]

My commission expires September 16, 2023

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

Seed Type lbs/acre

Red Fescue 40

Red Fescue 15

Alsike 5

Alsike Clover 5

Annual Rye 15

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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.

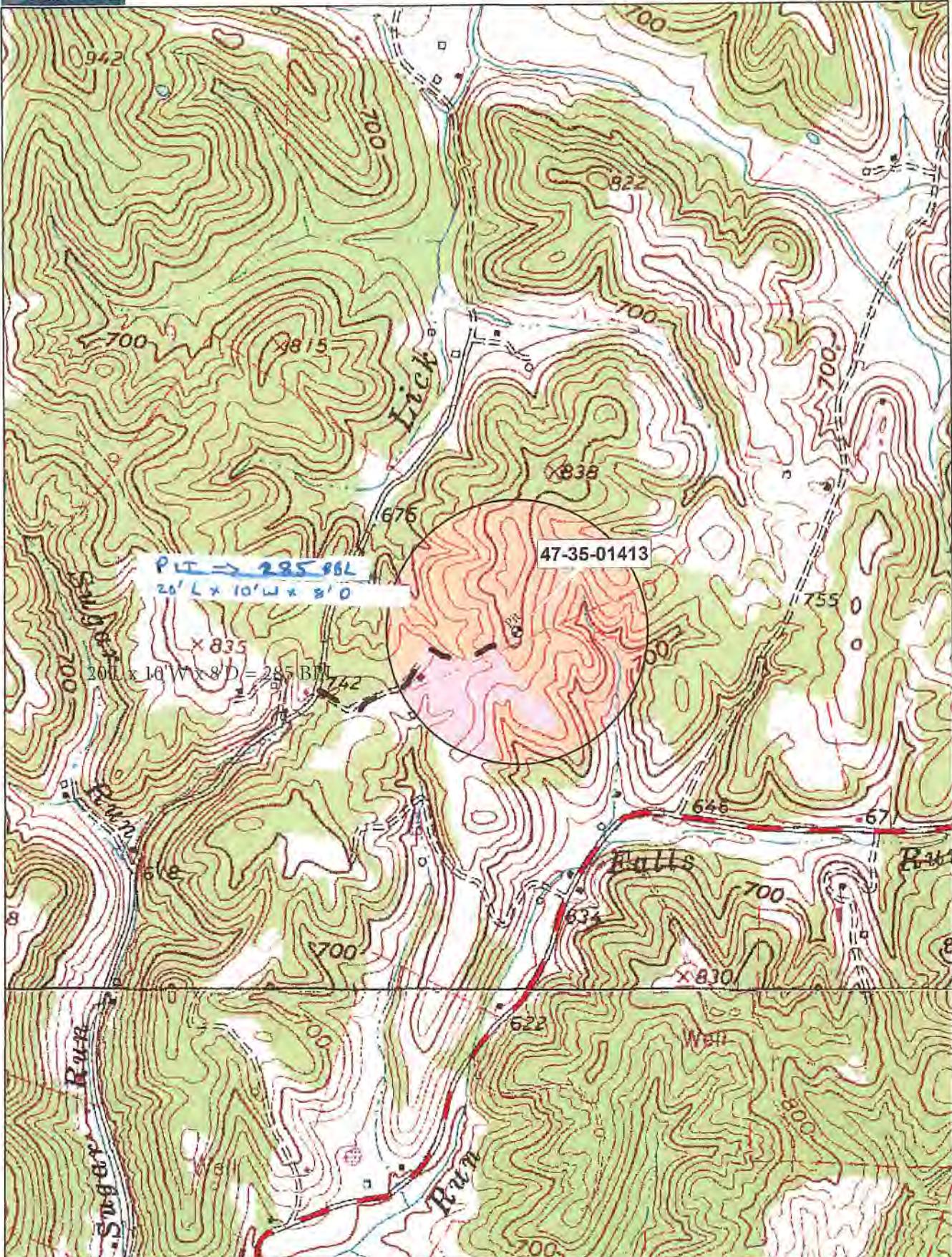
Plan Approved by: _____

Comments: Sediment control is to be in place at all times.

Title: 006 Inspector

Date: 12-28-20

Field Reviewed? () Yes (X) No



Data use subject to license.

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Scale 1 : 12,000



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)

38.882524682,-81.803286700

Lat/Lon WGS 1984

Convert

output coordinates

430326.95,4304046.10

UTM NAD83 Zone 17N

view on Google Maps

options

- display output as degrees/minutes/seconds
- zoom to point

history (copy/paste)

1,38.8825247,-81.8032867,LL
 WGS84(G1674),430326.95,4304046.10,UTM17N
 NAD83(2011)

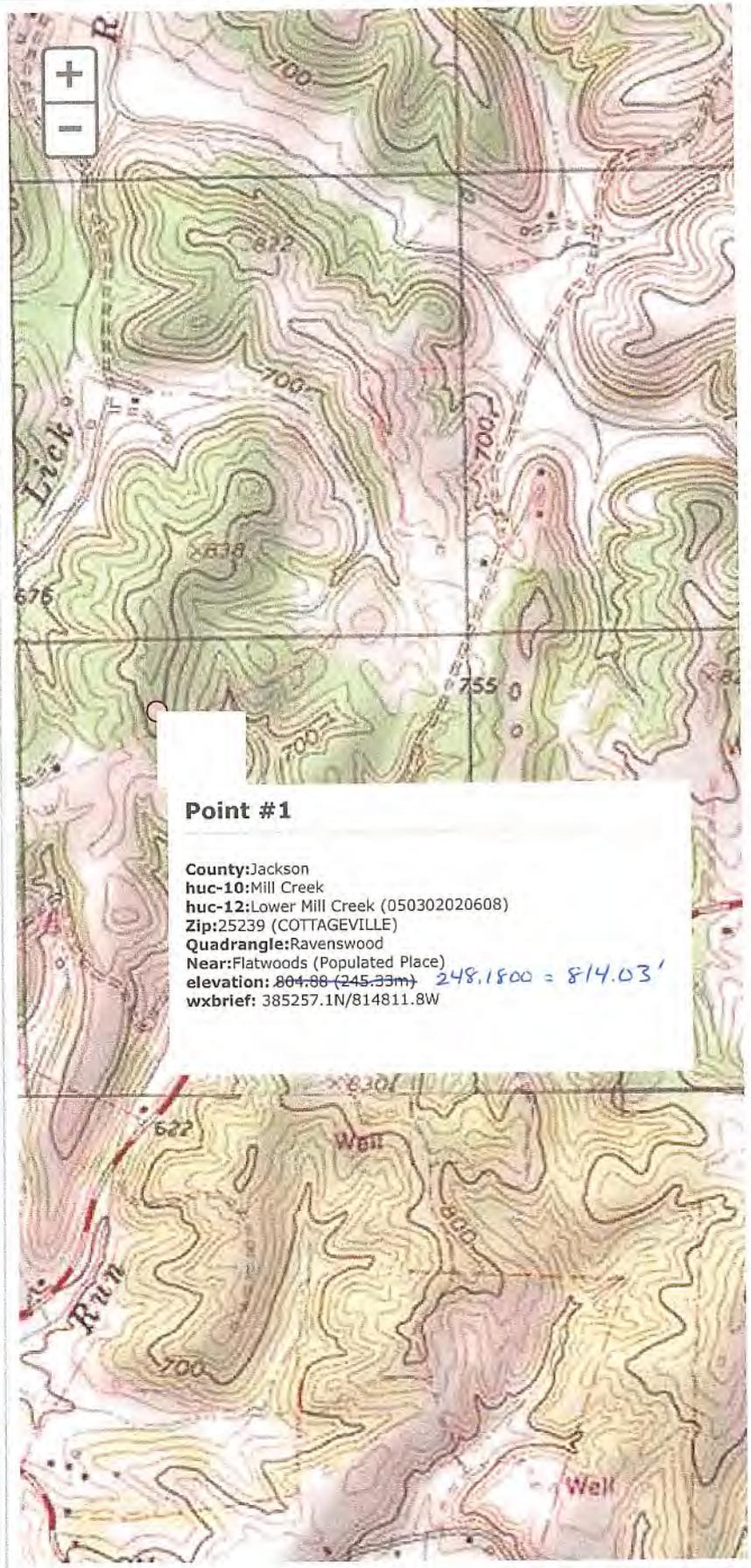
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notes about Department of Environmental Protection conversions

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



clear markers street map image topo

WW-7
8-30-06



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

API: 47-035-01413 WELL NO.: Kay John P Dek 38
FARM NAME: Rachel Kay
RESPONSIBLE PARTY NAME: Nytis Exploration Company LLC
COUNTY: Jackson DISTRICT: Ravenswood
QUADRANGLE: Ravenswood
SURFACE OWNER: Joshua Burge
ROYALTY OWNER: Coalaton P. Neal Jr.
UTM GPS NORTHING: 4,304,046
UTM GPS EASTING: 430,326 GPS ELEVATION: 814 (ft)

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

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- 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

12/18/2020
Date

Well Number: Kay John P DEK 38
API: 47-035-01413P

11/10/2016

PLUGGING PERMIT CHECKLIST

Plugging Permit

- WW-4B
- WW-4B signed by inspector
- WW-4A
- SURFACE OWNER WAIVER or PROOF THAT APPLICATION WAS SENT BY REGISTERED OR CERTIFIED MAIL
- COAL OWNER/COAL OPERATOR/COAL LESSEE WAIVERS or PROOF THAT APPLICATION WAS SENT BY REGISTERED OR CERTIFIED MAIL
- WW-9 PAGE 1 (NOTARIZED)
- WW-9 PAGE 2 with attached drawing of road, location, pit and proposed area for land application
- WW-9 GPP PAGE 1 and 2 if well effluent will be land applied
- RECENT MYLAR PLAT OR WW-7
- WELL RECORDS/COMPLETION REPORT
- TOPOGRAPHIC MAP OF WELL, SHOWING PIT IF PIT IS USED
- MUST HAVE VALID BOND IN OPERATOR'S NAME
- CHECK FOR \$100 IF PIT IS USED

No Coal

N/A

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