

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

Monday, November 5, 2018 WELL WORK PERMIT Horizontal 6A / New Drill

JAY-BEE OIL & GAS, INC. 1720 RT. 22 E

UNION, NJ 070830000

Re: Permit approval for P5S3 47-073-02576-00-00

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.

Please be advised that form WR-35, Well Operators Report of Well Work 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: P5S3

Farm Name: JAY BEE OIL & GAS INC.

U.S. WELL NUMBER: 47-073-02576-00-00

Horizontal 6A New Drill Date Issued: 11/5/2018

API Number: 73-93-74-18

PERMIT CONDITIONS

West Virginia Code § 22-6A-8(d) 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. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.
- 2. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than one hundred (100) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
- 3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
- 4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
- 5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled Water Well Regulations, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
- 6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
- 7. 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
- 8. During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designee immediately.
- 9. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
- 10. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.

API Number: 7311002/2018

PERMIT CONDITIONS

11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, cessation of drilling, sending an email to DEPOOGNotify@wv.gov.

API NO. 47	13 -	0	71/09/2018
OPERAT(OR WELL	NO.	P5S3
Well Pag	d Name:	P5	

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS WELL WORK PERMIT APPLICATION

1) Well Operator: Jay-Bee Oil	& Gas, Inc.	24610	Pleasants	Union	Ben's Run 7.5'
		Operator ID	County	District	Quadrangle
2) Operator's Well Number: P5S	3	Well Pad	Name: P5		
3) Farm Name/Surface Owner:	ay-Bee Oil & Gas	s, Inc. Public Road	d Access: Arvil	la Rd (CR	7)
4) Elevation, current ground: 8	896.1' Ele	evation, proposed p	oost-construction	on: 868.1'	
5) Well Type (a) Gas X	Oil	Unde	rground Storag	e	·
Other					
(b)If Gas Shall	low X	Deep			
Horiz	zontal X				
6) Existing Pad: Yes or No No					
 Proposed Target Formation(s), Marcellus, Target Depth 5900', 	• () / (•	nd Expected Pr	essure(s):	
8) Proposed Total Vertical Depth	5,900'				
9) Formation at Total Vertical De	epth: Marcellus				
10) Proposed Total Measured Dep	pth: 15,173'	···			
11) Proposed Horizontal Leg Len	gth: 7,846.3'				
12) Approximate Fresh Water Str	ata Depths:	127'	· · · · · · · · · · · · · · · · · · ·		
13) Method to Determine Fresh V	Water Depths: A	PI 47-073-00798 Free	shwater, 47-073-0	00636 Saltwa	ater, 47-073-00099 Coal
14) Approximate Saltwater Depth	ns: 1,756.1'				
15) Approximate Coal Seam Dep	ths: 456.1-461.	1'			
16) Approximate Depth to Possib	ole Void (coal mi	ne, karst, other):	N/A	 	
17) Does Proposed well location directly overlying or adjacent to a		ns Yes	No	x	
(a) If Yes, provide Mine Info:	Name:				
	Depth:				
	Seam:				
	Owner:				

WW-6B	
(04/15)	

API NO. 47-73 - 02	37/09/2018
OPERATOR WELL NO.	P5S3
Wall Dad Name: P5	

18)

CASING AND TUBING PROGRAM

ТҮРЕ	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	16	New	J55	40	30'	30'	8.22 CTS
Fresh Water	11 3/4	New	J55	32	300'	300'	142.25 CTS
Coal		7					
Intermediate	8 5/8	New	J55	24	2,000'	2,000'	508.43 CTS
Production	5 1/2	New	P110	17	15,173'	15,173'	2,455' CF1000' from surface
Tubing	N/A						
Liners	N/A						

PMH JOB 12-5-17 /12/5/2017

ТҮРЕ	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	16	17 1/2	.495	3,000#	50	Class A	1.19
Fresh Water	11 3/4	15	.333	1,500#	1,000	Class A	1.26
Coal							
Intermediate	8 5/8	11	.264	2,950#	1,500	Class A	1.45
Production	5 1/2	7 7/8	.304	15,000#	2,500	Type 1 Cement	1.34
Tubing	N/A						
Liners	N/A						

PACKERS

Kind:	N/A	RECEIVED Office of Oil and Gas
Sizes:	N/A	DEC 7 2017
Depths Set:	N/A	WV Department of Environmental Protection

API NO. 47- 73 - 02:	511/ 09/2018
OPERATOR WELL NO.	P5S3
Well Pad Name: P5	

19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Drill and Stimulate a new Horizontal Well. Using a top hole rig, we will drill top hole to kick off point by drilling the conductor, freshwater and intermediate holes. Using a directional rig we will drill the production holes.

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

300-350' per stage 8,500bbls of water, 150,000-400,000lbs of sand, friction reducer, 1# per gallon, scale inhibitor and bacteria prevention 1/4# per gallon 2000 gallons 15% vol acid. 77bpm @ 6500# pressure. DAY 900 12/5/2017

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 21.60
- 22) Area to be disturbed for well pad only, less access road (acres): 10.67

23) Describe centralizer placement for each casing string:

Vertical - Every 500' Bow Centralizer, and 50' from top of ground. Horizontal every 42' Spiral Centralizer, Curve - Every 84' Spiral Centralizer.

24) Describe all cement additives associated with each cement type:

15" hole for the 11 3/4 fresh water case, Class A Cement, 2% Calcium Chloride, 1/4# flake.

11" hole for the 8 5/8 intermediate base, Class A Cement, 2% Calcium Chloride

7 7/8" hole for the 5 1/2 production case, Type1 Cement, Fly Ash, Barite, Finetol 300L, R-3 Celio Flake IVED Sugar, CD-32, FL-62

25) Proposed borehole conditioning procedures:

WV Department of Air Hole: 15" hole for the 11 3/4 fresh water case - Circulate until clean with air. If soaping, slug then dry.

Air Hole: 11" hole for the 8 5/8 intermediate base - Circulate until clean with air. If soaping, slug then

7 7/8" hole for the 5 1/2 production case - Circulate with mud and sweeps for two times bottoms up. If needed weight up mud until no cuttings retrieved, then circulate with mud and sweeps for two times bottoms up.

*Note: Attach additional sheets as needed.

12/5/2017 Jay-Bee Oil & Gas Inc. Date Well Name P5S3
GL Elevation 868.1
KB 14 feet District Union Pleasants County Shane Dowell State West Virginia Input by: Conductor 16" J-55 17.5" Hole 30 feet GL Surface 11 3/4 J-55 15" hole 300 feet GL 11" hole Intermediate 8 5/8 J-55 2000 feet GL Cement Production 5 1/2 P-110 17# 7 7/8 hole 15,173 feet GL

Office of Oil and Gas

DEC 7 2017

WW Department of Environmental Protection

7302576

Total depth 15,173 feet GL Jay-Bee Oil & Gas Inc.
Well Name P5S3
GL Elevation 868.1

Well-Site Safety Plan Anti-Collision Schematic

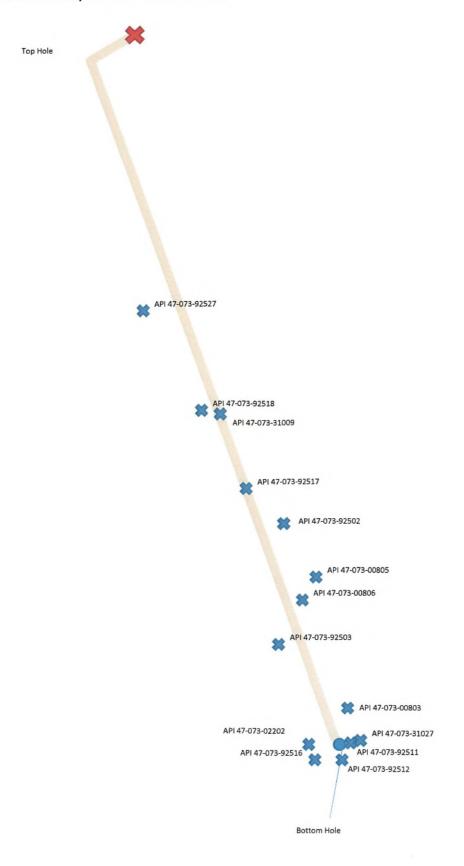
	API See Below Elev. Unknown	API 073-31009 Elev. 835'	API 073-00805 Elev. Unknown	API 073-00806 Elev. 785'	API 073-31027 Elev. 854'	API 073-00803 Elev. 790'	API 073-02202 Elev. 665'	
	073-92527 073-92518 073-92517							
	073-92502 073-92503 073-92516 073-92511 073-92512	Unknown Plugged in 1962	TD Unknown Formation Unknown Not Deep or Marcellus		Unknown Plugged in 1962			
	Formation Unknown Not Deep or Marcellus							
				TD 2,865' Gordon		TD 2,705' Gordon	TD 2,625' Gordon Plugged in 1999	
Јау-Вес	TVD 5,900 feet GL							Total depth
Office of DEC								

office of Oil and Gas

DEC 7 2017

NV Department of Environmental Protection

Well-Site Safety Plan Anti-Collision Schematic



RECEIVED Office of Oil and Gas

DEC 7 2017

WV Department of Environmental Protection

Area of Review P5S3 - API Pending

	API See Below Elev, Unknown	API 073-31009 Elev. 835'	API 073-00805 Elev. Unknown	API 073-00806 Elev. 785'	API 073-31027 Elev. 854'	API 073-00803 Elev. 790'	API 073-02202 Elev. 665'
	073-92527 073-92518 073-92517 073-92502 073-92503 073-92516 073-92511 073-92512 TD Unknown Formation Unknown Not Deep or Marcellus	Unknown Plugged in 1962	TD Unknown Formation Unknown Not Deep or Marcellus		Unknown Plugged in 1962		
						1	(
				TD 2,865' Gordon		TD 2,705' Gordon	TD 2,625' Gordon Plugged in 1
		•					Gordon
Operator	Unknown	Leanard Hart	L&M Petroleum	Gordon Ecological	Leanard Hart	Gordon	Gordon
Well Name	Unknown Multiple	Leanard Hart		Gordon	Leanard Hart	Gordon	Gordon Plugged in 3 Ohio L & M Inc.
			Petroleum Co.	Gordon Ecological Energy, Inc.		Gordon Ecological Energy, Inc.	Ohio L & M
Well Name Perforated	Multiple	2	Petroleum Co. S	Ecological Energy, Inc. 6 Gordon	45	Ecological Energy, Inc. 2 Gordon	Ohio L & M Wagner Gordon Gordon
Well Name Perforated	Multiple Unknown	2 Unknown	Petroleum Co. S Unknown	Ecological Energy, Inc. 6 Gordon Gordon Gantz Berea	45 Unknown	Ecological Energy, Inc. 2 Gordon Gordon Gantz Berea	Ohio L& M Inc. Wagoner Gordon Gantz Berea
Well Name Perforated	Multiple Unknown	2 Unknown	Petroleum Co. S Unknown	Ecological Energy, Inc. 6 Gordon Gordon Gantz Berea Weir	45 Unknown	Ecological Energy, Inc. 2 Gordon Gordon Gantz Berea Weir	Ohio L & M Inc. Wagner Gordon Gordon Gantz Berea Weir
Well Name Perforated Formations Unperforated Producing	Multiple Unknown	2 Unknown	Petroleum Co. S Unknown	Ecological Energy, Inc. 6 Gordon Gordon Gantz Berea Weir Big Injun Keener	45 Unknown	Ecological Energy, Inc. 2 Gordon Gordon Gontz Berea Weir Big Injun Keener	Ohio L & M Inc. Wagoner Gordon Gantz Berea Weir Big Injun Keener
Well Name Perforated Formations Unperforated Producing Formations	Multiple Unknown Unknown	2 Unknown	Petroleum Co. S Unknown	Ecological Energy, Inc. 6 Gordon Gordon Gantz Berea Weir Big Injun Keener Big Lime Maxon	45 Unknown	Ecological Energy, Inc. 2 Gordon Gonto Gontz Berea Weir Big Injun Keener Big Lime Maxon	Ohio L & M Inc. Wagoner Gordon Gantz Berea Weir Big Injun Keener Big Lime Maxon
Well Name Perforated Formations Unperforated Producing	Multiple Unknown	2 Unknown	Petroleum Co. S Unknown	Ecological Energy, Inc. 6 Gordon Gordon Gantz Berea Weir Big Injun Keener Big Lime	45 Unknown	Ecological Energy, Inc. 2 Gordon Gordon Gantz Berea Weir Big Injun Keener Big Ume	Ohio L & M Inc. Wagoner Gordon Gantz Berea Weir Big Injun Keener Big time

API Number	17 -	73	-	0757	6
			-		

Operator's Well No. P5S3

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Jay-Bee Oil & Gas, Inc. OP Code 24610
Watershed (HUC 10) Middle Island Creek Quadrangle Bens Run 7.5'
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 V
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
Underground Injection (UIC Permit Number 47-085-09721
Reuse (at API Number) Off Site Disposal (Supply form WW-9 for disposal location)
Other (Explain Using Contract Haulers (API's 47-085-05151)
[7/5]
Will closed loop system be used? If so, describe: Yes, Centrifuge Drying Shaker System for Top Hole & Horizontal section
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Air Vertical / Horizontal OBM
-If oil based, what type? Synthetic, petroleum, etc. ABS 40 (Aliphatic Base System) Synthetic
Additives to be used in drilling medium? Barite, ABS MUL/VIS, Bentone990, CACL2, CalCarb,FLR, Lime,Multifiber,Permaseal,Nut Plug
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Landfill
-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) Landfill
-Landfill or offsite name/permit number? Meadowfill/Permit 101219WV
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 August 1, 2005, 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) Shane Dowell
Company Official Title Office Manager Office of Oil and Gas
Ompany Official Title Sind Mond Gas
7 2017
Subscribed and sworn before me this day of December 20 1 Whose this of Official Seal Notary Public State Of West Virgin Teresa R. Hall
My commission expires Oct ON 2019 1724 Valley Mill Rd. Waverly, WV 26184 My Commission Expires Oct. 09, 20

Proposed Revegetation Treatme	ent: Acres Disturbed 21.60	Prevegetation pH 6	.8
Lime 2-3	Tons/acre or to correct to pH	6.8	
Fertilizer type 10-20	-20		
Fertilizer amount_500	lb	s/acre	
Mulch Hay 2	Tons/a	ocre	
	Seec	l Mixtures	
Temp	porary	Permanen	t
Seed Type	lbs/acre	Seed Type	lbs/acre
Annual Ryegrass	40	KY Bluegrass	20
Field Bloomgrass	40	Creeping Red Fescue	30
Sudangrass	40	Perennial Ryegrass	10
Attach: Maps(s) of road, location, pit ar provided). If water from the pit creage, of the land application Photocopied section of involved	will be land applied, include dirarea.	ation (unless engineered plans including nensions (L x W x D) of the pit, and dim	this info have been the thin t
Maps(s) of road, location, pit are provided). If water from the pit creage, of the land application	will be land applied, include dirarea.	ation (unless engineered plans including mensions (L x W x D) of the pit, and dim	this info have been nensions (L x W), a
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P5S3

WELL SITE SAFETY PLAN

JAY-BEE OIL & GAS, INC

DMH 12-5-17 90B 12/5/2017

> RECEIVED Office of Oil and Gas

DEC 7 2017

WV Department of Environmental Protection





High St, St Marys, WV 26170 to 5091 Arvilla Rd, Bens Run, WV 26146 Drive 12.6 miles, 20 min



Imagery ©2017 Google, Map data ©2017 Google United States 1 mi

High St

St Marys, WV 26170

- 1. Head northeast on WV-2 N/2nd St toward Fairview Dr
 - Continue to follow WV-2 N

2. Turn right onto Arvilla Rd

3. Turn right to stay on Arvilla Rd

7.4 mi

4.0 mi

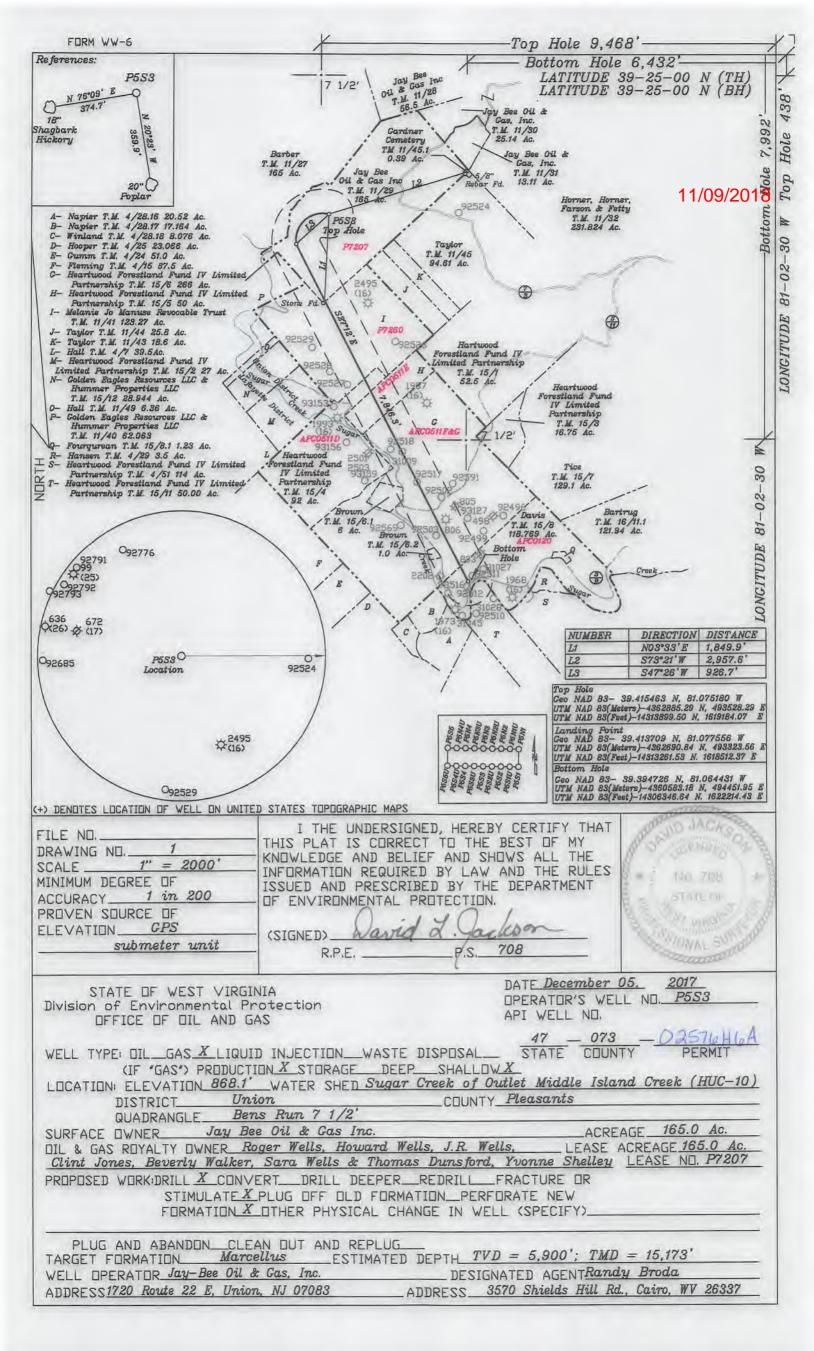
1.3 mi

5091 Arvilla Rd

Bens Run, WV 26146

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.





WW-6A	l
(5/13)	

Operator's	Well No.	P5S3

INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE Chapter 22, Article 6A, Section 5(a)(5) IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
P7207 ✓	Jay-Bee Royalty, LLC	BB Land, LLC	12.5%	318-674
P7260 🗸	Melanie Jo Manuse	BB Land, LLC	12.5%	310-667
APCO 511E ✓	Ila Lee Leatherman	BB Land, LLC	12.5%	312-189
APCO 511FG√	lla Lee Leatherman	BB Land, LLC	12.5%	312-189
APCO 120 V	O.C. & Judith Davis	BB Land, LLC	12.5%	316-632
Affidavit	BB Land, LLC	Jay-Bee Oil & Gas, Inc.		

Acknowledgement of Possible Permitting/Approval In Addition to the Office of Oil and Gas

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator: Jay-Bee Oil & Gas, Inc.

By: Shane Dowell

Its: Office Manager

Page 1 of DEC 7 2017

Environmental Protection

AFFIDAVIT FILED PURSUANT TO W. Va. CODE §§ 22-6-8 & 22-6A-5(a)(5)

STATE OF WEST VIRGINIA

COUNTY OF RITCHIE, to-wit:

Randy Broda, President of Jay-Bee Oil & Gas, Inc. and Randy Broda, Managing Member of BB Land, LLC, being duly sworn, state as follows:

- 1. I, Randy Broda, am the President of the applicant, Jay-Bee Oil & Gas, Inc. In my capacity as President, I am qualified and authorized to certify and verify the information set forth or referenced herein on behalf of the applicant.
- 2. I, Randy Broda, am the Managing Member of BB Land, LLC, which holds the rights to extract, produce or market the oil or gas. In my capacity as Managing Member, I am qualified and authorized to certify and verify the information set forth or referenced herein on behalf of BB Land, LLC.
- 3. We certify that we are authorized by the holders of the right to extract, produce or market the oil or gas, if not the applicant, to state that the applicant has the right to extract, produce or market the oil or gas pursuant to the leasing and other continuing contract information provided in the application(s) for the P5N3, P5N3U, P5N4, P5S1, P5S3, P5S3U, P5S4 wells (API No(s). to be determined), on Form WW-6A1.
- 4. We certify that we are authorized by the owner of the working interest in the well to state that it shall tender to the owner of the oil or gas in place not less than one eighth of the total amount paid to or received by or allowed to the owner of the working interest at the wellhead for the oil or gas so extracted, produced or marketed before deducting the amount to be paid to or set aside for the owner of the oil or gas in place, on all such oil or gas to be extracted, produced or marketed from the well.
- 5. We certify under the penalty of law that we have personally examined and are familiar with the information contained and referenced herein and that, based on our inquiries of those individuals immediately responsible for obtaining the information, we believe that the information is true, accurate and complete. We are aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Further, affiants sayeth naught.
Randy Broda, President of Jay-Bee Oil & Gas, Inc.
Taken, subscribed and sworn to before me, the undersigned Notary Public, this $\underline{5}^{1/2}$ day
of December, 2017 by Randy Broda, President of Jay-Bee Oil & Gas, Inc., on behalf
of the corporation.
My commission expires: APril 18, 2027. My commission expires: APril 18, 2027. OFFICIAL SEAL Commissioner for West Virginia Shane M. Dowell Parkersburg, WV My Commission Expires April 18, 2022
NOTARY PUBLIC
Randy Broda, Managing Member of BB Land, LLC
Taken, subscribed and sworn to before me, the undersigned Notary Public, this 5th day
of December, 2017 by Randy Broda, Managing Member of BB Land, LLC, on
behalf of the company.
My commission expires: April 18, 2027 OFFICIAL SEAL Commissioner for West Virginia Shane M. Dowell Parketsburg, WV My Commission Expires April 18, 2022
NOTARY PUBLIC

DEC 7 2017
Environmental Protection



JAY-BEE OIL & GAS, INC.

December 5, 2017

Permitting Office Office of Oil and Gas West Virginia Dept. of Environmental Protection 601 57th Street SE Charleston, WV 25304

- Jall

RE: P5S3 Well

Permitting Office:

As you know we have applied for a well permit for the P5S3 Well in Pleasants County, West Virginia. This pad is located on what we call the P7207 tract. Sugar Creek Rd runs south of this tract and our proposed well leg runs under these roadways.

You have requested that we review the courthouse records to determine if the Department of Highways has any right to the minerals underneath this section of roadway. Our outside counsel has reviewed documents in the Pleasants County Courthouse and could find no agreement that conveys mineral interests to the Department of Highways. Therefore Jay-Bee believes it has obtained leases from all mineral interests holders necessary to proceed with drilling on this tract after the permit is issued.

If you would have any questions concerning this matter, please feel free to contact our office at the numbers listed below.

Sincerely,

Shane Dowell Office Manager

Office of Oil and Gas

DEC 7 2017

Environmental Protes

Date of Notice Certification: 12/05/2017

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE CERTIFICATION

API No. 47- ____-

			Operator's	Well No. P5S3	
			Well Pad I	Name: P5	·
Notice has Pursuant to the below for the	been given: ne provisions in West Virginia Code tract of land as follows:	§ 22-6A, the Operator has pro	vided the rec	quired parties v	vith the Notice Forms listed
State:	West Virginia	UTM NAD 83	Easting:	493,528.29	
County:	Pleasants	UIMINAD 83	Northing:	4,362,885.29	
District:	Union	Public Road Acc		Arvilla Rd (CR7)	
Quadrangle:	Bens Run 7.5'	Generally used f	arm name:	Jay-Bee Oil & Gas	s, Inc.
Watershed:	Middle Island Creek				
prescribed by it has provid information r of giving the requirements Virginia Cod	West Virginia Code § 22-6A-7(b), the secretary, shall be verified and sed the owners of the surface described the owners of the surface described the owner of the surface described to the owner notice of entry to so of subsection (b), section sixteen to be § 22-6A-11(b), the applicant shall have been completed by the applicant	shall contain the following infi ibed in subdivisions (1), (2) a ection sixteen of this article; (i urvey pursuant to subsection of this article were waived in tender proof of and certify to t	ormation: (1- and (4), subs i) that the re (a), section writing by	4) A certification (b), section (b), section (c), section	on from the operator that (i) tion ten of this article, the deemed satisfied as a result cle six-a; or (iii) the notice yner; and Pursuant to West
that the Ope	West Virginia Code § 22-6A, the Orator has properly served the require		his Notice C	ertification	OOG OFFICE USE
*PLEASE CH	ECK ALL THAT APPLY				ONLY
□ 1. NO	TICE OF SEISMIC ACTIVITY or	NOTICE NOT REQUIRED SEISMIC ACTIVITY WAS			RECEIVED/ NOT REQUIRED
■ 2. NO	TICE OF ENTRY FOR PLAT SUR	VEY or D NO PLAT SURV	EY WAS C	ONDUCTED	☐ RECEIVED
□ 3. NO	TICE OF INTENT TO DRILL or	NOTICE NOT REQUIRED NOTICE OF ENTRY FOR WAS CONDUCTED or			☐ RECEIVED/ NOT REQUIRED
		☐ WRITTEN WAIVER (PLEASE ATTACH)		CE OWNER	
■ 4. NO	TICE OF PLANNED OPERATION				☐ RECEIVED
I	N IO NOTICE				□ RECEIVED
■ 5. PUI	BLIC NOTICE				L RECEIVED

Required Attachments:

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code § 22-6A. Pursuant to West Virginia Code § 22-6A-11(b), the Certification of Notice to the person may be made by affidavition for the postal receipt for certified mailing.

Office of Oil and Gas

DEC 7 2017

WW-6AC (1/12) 11/09/2018

Certification of Notice is hereby given:

THEREFORE, I					hin West Virginia Code § 22-
					f the Notice Forms, identified
					very that requires a receipt or
signature confirm	mation. I certify under penalt	y of law that I have	ve personally	examined and am familiar v	with the information submitted
in this Notice (Certification and all attachm	ents, and that ba	sed on my i	nquiry of those individuals	immediately responsible for
obtaining the int	formation, I believe that the in	nformation is true	, accurate and	d complete. I am aware that	there are significant penalties
	alse information, including the				l
Well Operator:	Jay-Bee Oil & Gas, Inc.		Address:	3570 Shields Hill Rd.	
By:	Shane Dowell			Cairo, WV 26337	
Its:	Office Manager		Facsimile:	304-628-3119	
Telephone:	304-628-3111		Email:	sdowell@jaybeeoil.com	
S S S S S S S S S S S S S S S S S S S	NOTARY Seal Notary Public, State Of West Teresa R. Hall 1724 Valley Mill Rd. Waverly, WV 26184 My Commission Expires Oct. 0	/irginia My Co	ribed and swo	R.Hall	Notary Public

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as 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 or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

Office of Oil and Gas

DEC 7 2017

WV Department of Environmental Protection WW-6A (9-13) 47 0 7 3 0 2 5 7 6
API NO. 47OPERATOR WELL NO. P5S3
Well Pad Name: P5

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF APPLICATION

Noti	ce Time Requirement: notice shall be p	rovided no later than the filing date of permit application.
	e of Notice: 12-5-2017 Date Permit App	lication Filed: 12-5-2017
7	PERMIT FOR ANY	TIFICATE OF APPROVAL FOR THE
	WELL WORK CON	STRUCTION OF AN IMPOUNDMENT OR PIT
Deli	very method pursuant to West Virgini	a Code § 22-6A-10(b)
	PERSONAL REGISTERED	✓ METHOD OF DELIVERY THAT REQUIRES A
	SERVICE MAIL	RECEIPT OR SIGNATURE CONFIRMATION
regis sedir the s soil ard description operation operati	tered mail or by any method of delivery that the ment control plan required by section sever urface of the tract on which the well is or indigas leasehold being developed by the pribed in the erosion and sediment control plator or lessee, in the event the tract of land e coal seams; (4) The owners of record of the work, if the surface tract is to be used for the boundment or pit as described in section nines a water well, spring or water supply source in a water well, spring or water supply source in the work activity is to take place. (c) extended to be the sheriff required to be maintained ission of this article to the contrary, notice to example the section of the series of the sheriff requires, in part, that the repurveyor or surface owner subject to not application Notice WSSP Notice	impoundment or pit as required by this article shall deliver, by personal service or by at requires a receipt or signature confirmation, copies of the application, the erosion and of this article, and the well plat to each of the following persons: (1) The owners of record of a proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oposed well work, if the surface tract is to be used for roads or other land disturbance as lan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, on which the well proposed to be drilled is located [sic] is known to be underlain by one or as surface tract or tracts overlying the oil and gas leasehold being developed by the proposed the placement, construction, enlargement, alteration, repair, removal or abandonment of any cof this article; (5) Any surface owner or water purveyor who is known to the applicant to be located within one thousand five hundred feet of the center of the well pad which is used to comestic animals; and (6) The operator of any natural gas storage field within which the (1) If more than three tenants in common or other co-owners of interests described in the pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any of a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any ce and water testing as provided in section 15 of this rule.
_	JRFACE OWNER(s) le: Jay-Bee Oil & Gas, Inc.	COAL OWNER OR LESSEE Name:
	ress: 3570 Shields Hill Rd	Address:
	WV 26337	
Nam	e:	COAL OPERATOR
Add	ress:	
	TREACT ON THE COLOR	Address:
	JRFACE OWNER(s) (Road and/or Otherect Jay-Bee Oil & Gas, Inc.	
	ress: 3570 Shields Hill Rd	■ SURFACE OWNER OF WATER WELL
	140 L 00 0 0 0	AND/OR WATER PURVEYOR(s) Name: Jay-Bee Oil & Gas, Inc.
		
דומווו	e:	Cairo, WV 26337
Auu	ress:	☐ OPERATOR OF ANY NATURAL GAS STORAGE FIELD
T S T	JRFACE OWNER(s) (Impoundments or	Ditc) Nome:
∐ sc Nam	• • • •	Address:
		Addiess. Office RECEILS
Addi	ress:	*Please attach additional forms if necessary DFC
		Pits) Name: Address: Please attach additional forms if necessary Physical Pitch Pits) Name: Address: Physical Pitch Please attach additional forms if necessary Physical Pitch Physi
		Environmental Protection

WW-6A (8-13)

API NO. 47-OPERATOR WELL NO. P553 Well Pad Name: P5

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(b), notice is hereby given that the undersigned well operator has applied for a permit for well work or for a certificate of approval for the construction of an impoundment or pit.

This Notice Shall Include:

Pursuant to W. Va. Code § 22-6A-10(b), this notice shall include: (1) copies of the application; (2) the erosion and sediment control plan required by section seven of this article; and (3) the well plat.

Pursuant to W. Va. Code § 22-6A-10(f), this notice shall include: (1) a statement of the time limits for filing written comments; (2) who may file written comments; (3) the name and address of the secretary for the purpose of filing the comments and obtaining additional information; and (4) a statement that the persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Pursuant to W. Va. Code R. § 35-8-5.7.a, the operator shall provide the Well Site Safety Plan to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Pursuant to W. Va. Code R. § 35-8-15.2.c, this notice shall: (1) contain a statement of the surface owner's and water purveyor's right to request sampling and analysis; (2) advise the surface owner and water purveyor of the rebuttable presumption for contamination or deprivation of a fresh water source or supply; advise the surface owner and water purveyor that refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability; (3) advise the surface owner and water purveyor of his or her independent right to sample and analyze any water supply at his or her own expense; advise the surface owner and water purveyor whether or not the operator will utilize an independent laboratory to analyze any sample; and (4) advise the surface owner and or water purveyor that he or she can obtain from the Chief a list of water testing laboratories in the subject area capable of and qualified to test water supplies in accordance with standard acceptable methods.

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Oil and Gas Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-7 2017 and-gas/pages/default.aspx.

Well Location Restrictions

WV Department of Environmental Protection Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

WW-6A (8-13)

API NO. 47-

OPERATOR WELL NO. P5S3

Well Pad Name: P5

examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

Water Well Testing:

Pursuant to West Virginia Code § 22-6A-10(d), notification shall be made, with respect to surface landowners identified in subsection (b) or water purveyors identified in subdivision (5), subsection (b) of this section, of the opportunity for testing their water well. The operator shall provide an analysis to such surface landowner or water purveyor at their request.

Water Testing Laboratories:

Pursuant to West Virginia Code § 22-6A-10(i), persons entitled to notice pursuant to subsection (b) of this section may contact the department to ascertain the names and locations of water testing laboratories in the subject area capable and qualified to test water supplies in accordance with standard accepted methods. In compiling that list of names the department shall consult with the state Bureau for Public Health and local health departments. A surface owner and water purveyor has an independent right to sample and analyze any water supply at his or her own expense. The laboratory utilized by the operator shall be approved by the agency as being certified and capable of performing sample analyses in accordance with this section.

Rebuttable Presumption for Contamination or Deprivation of a Fresh Water Source or Supply:

W. Va. Code § 22-6A-18 requires that (b) unless rebutted by one of the defenses established in subsection (c) of this section, in any action for contamination or deprivation of a fresh water source or supply within one thousand five hundred feet of the center of the well pad for horizontal well, there is a rebuttable presumption that the drilling and the oil or gas well or either was the proximate cause of the contamination or deprivation of the fresh water source or supply. (c) In order to rebut the presumption of liability established in subsection (b) of this section, the operator must prove by a preponderance of the evidence one of the following defenses: (1) The pollution existed prior to the drilling or alteration activity as determined by a predrilling or prealteration water well test. (2) The landowner or water purveyor refused to allow the operator access to the property to conduct a predrilling or prealteration water well test. (3) The water supply is not within one thousand five hundred feet of the well. (4) The pollution occurred more than six months after completion of drilling or alteration activities. (5) The pollution occurred as the result of some cause other than the drilling or alteration activity. (d) Any operator electing to preserve its defenses under subdivision (1), subsection (c) of this section shall retain the services of an independent certified laboratory to conduct the predrilling or prealteration water well test. A copy of the results of the test shall be submitted to the department and the surface owner or water purveyor in a manner prescribed by the secretary. (e) Any operator shall replace the water supply of an owner of interest in real property who obtains all or part of that owner's supply of water for domestic, agricultural, industrial or other legitimate use from an underground or surface source with a comparable water supply where the secretary determines that the water supply has been affected by contamination, diminution or interruption proximately caused by the oil or gas operation, unless waived in writing by that owner. (f) The secretary may order the operator conducting the oil or gas operation to: (1) Provide an emergency drinking water supply within twenty-four hours; (2) Provide temporary water supply within seventy-two hours; (3) Within thirty days begin activities to establish a permanent water supply or submit a proposal to the secretary outlining the measures and timetables to be used in establishing a permanent supply. The total time in providing a permanent water supply may not exceed two years. If the operator demonstrates that providing a permanent replacement water supply cannot be completed within two years, the secretary may extend the time frame on case-by-case basis; and (4) Pay all reasonable costs incurred by the real property owner in securing a water supply. (g) A person as described in subsection (b) of this section aggrieved under the provisions of subsections (b), (e) or (f) of this section may seek relief in court... (i) Notwithstanding the denial of the operator of responsibility for the damage to the real property owner's water supply or the status of any appeal on determination of liability for the damage to the real property owner's water supply, the operator may not discontinue providing the required water service until authorized to do so by the secretary or a court of competent jurisdiction.

Written Comment:

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within things of the location or construction of the applicant's proposed well work within things of the location or construction of the applicant's proposed well work within things of the location or construction of the applicant's proposed well work within things of the location or construction of the applicant's proposed well work within things of the location or construction of the applicant's proposed well work within things of the location or construction of the applicant's proposed well work within things of the location or construction of the applicant's proposed well work within things of the location application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written comments as to the location or construction of the applicant's proposed well work to the Secretary at: DEC

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

WV Department of Environmental Protection

Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water. NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.

4707302576

WW-6A (8-13) API NO. 47- - 11/09/2018

OPERATOR WELL NO. P5S3

Well Pad Name: P5

Time Limits and Methods for Filing Comments.

The law requires these materials to be served on or before the date the operator files its Application. You have **THIRTY (30) 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.

Pursuant to West Virginia Code § 22-6A-11(c)(2), Any objections of the affected coal operators and coal seam owners and lessees shall be addressed through the processes and procedures that exist under sections fifteen, seventeen and forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article. The written comments filed by the parties entitled to notice under subdivisions (1), (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the secretary in the permit issuance process, but the parties are not entitled to participate in the processes and proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article.

Comment Requirements

Your comments must be in writing and 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.

Disclaimer: All comments received will be placed on our web site http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

Permit Denial or Condition

The Chief has the power to deny or condition a well work permit. Pursuant to West Virginia Code § 22-6A-8(d), the permit may not be issued or be conditioned, including conditions with respect to the location of the well and access roads prior to issuance if the director determines that:

- (1) The proposed well work will constitute a hazard to the safety of persons;
- (2) The plan for soil erosion and sediment control is not adequate or effective;
- (3) Damage would occur to publicly owned lands or resources; or
- (4) The proposed well work fails to protect fresh water sources or supplies.

A permit may also be denied under West Virginia Code § 22-6A-7(k), the secretary shall deny the issuance of a permit if the secretary determines that the applicant has committed a substantial violation of a previously issued permit for a horizontal well, including the applicable erosion and sediment control plan associated with the previously issued permit, or a substantial violation of one or more of the rules promulgated under this article, and in each instance has failed to abate or seek review of the violation within the time prescribed by the secretary pursuant to the provisions of subdivisions (1) and (2), subsection (a), section five of this article and the rules promulgated hereunder, which time may not be unreasonable.

Pursuant to West Virginia Code § 22-6A-10(g), any person entitled to submit written comments to the secretary pursuant to subsection (a), section eleven of this article, shall also be entitled to receive from the secretary a copy of the permit as issued or a copy of the order modifying or denying the permit if the person requests receipt of them as a part of the written comments submitted concerning the permit application. Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

WW-6A (8-13) 4707302576

Notice is hereby given by:

Well Operator: Jay-Bee Oil & Gas, Inc.

Address: 3570 Shields Hill Rd. Cairo, WV 26337

Telephone: 304-628-3111 Cairo, WV 26337
Email: sdowell@jaybeeoil.com Facsimile: 304-628-3119

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as 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 or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

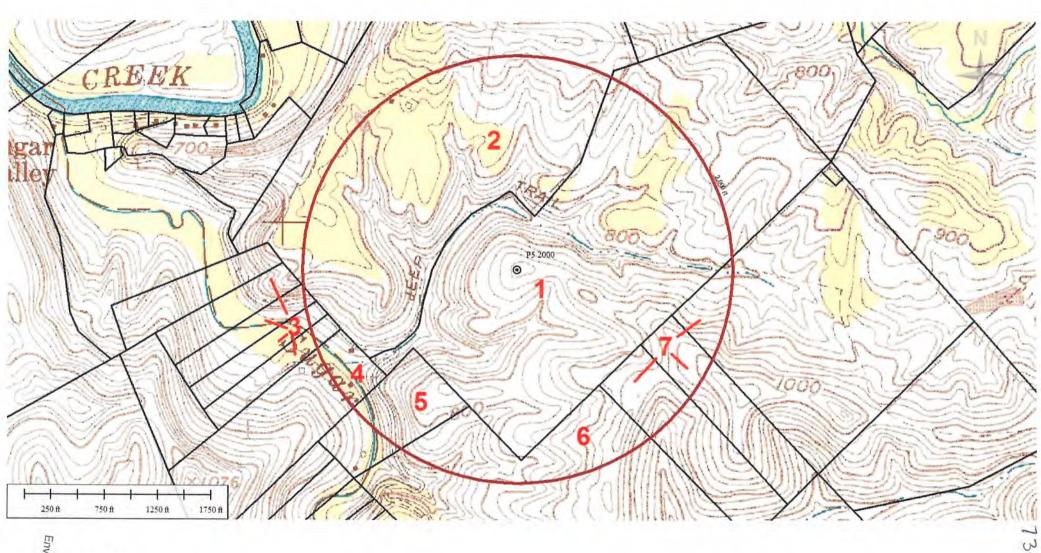
Official Seal
Notary Public, State Of West Virginia
Teresa R. Hall
1724 Valley Mill Rd.
Waverly, WV 26184
My Commission Expires Oct. 09, 2019

Subscribed and sworn before me this 5th day of 200, 2017

My Commission Expires

P5S3 WW6A Notice Packet Listing

First	Surname	Address	City	State	Zip
Jay-Bee Oil & G	as, Inc.	3570 Shields Hill Rd	Cairo	wv	26337
Darin	Barber	11378 Dupont Rd.	Washington	wv	26181
Golden Eagle R	esources	600 Jefferson St. Suite 200	Houston	TX	77002
Clinton	Hall Jr. et al	1892 Hebron Rd.	St. Marys	WV	26170
Hummer Prope	rties	112 Collins Ave	Pennsboro	wv	26415
Melanie Jo Manuse Revocable Trust		152 Clarendon Rd	Newberry	sc	29108
Matthew & Dawna Taylor		145 Lamp Hill Rd	St. Marys	wv	26170



Office of Oil and Gas

DEC 7 2017

WW Department of Environmental Protection

73-02576

WW-70 Rev. 7/01

Affidavit of Personal Service

State Of West Virginia
County Of Ritchie
The undersigned, being first duly sworn, says that the undersigned served a true and complete copy of all sides of
(1) Notice on Form WW-2(A) X / WW-3(A) / WW-4(A) / WW-5(A) / WW-6(A)X WSSP(A) / WW-10
Jay-Bee Oil & Gas, Inc.,
by delivering the same in Ritchie County, State of West Virginia on the 4 day of December , 20 17 in the manner specified below.
[COMPLETE THE APPROPRIATE SECTION]
For an individual: [] Handing it to him / her / or, because he / she / refused to take it who offered it, by leaving it in his / her / presence. [] Handing it to a member of his or her family above the age of 16 years named who resides at the usual place of abode of the person to be
served, and asking the family member to give it to the person to be served as soon as possible.
For a partnership: [] Handing it to
For a limited partnership: [] Handing it to the general partner, named, or, because the general partner refused to take it when I tried to hand it over, by leaving it in the presence of the general partner.
For a corporation: [X] Handing it to the corporation's employee X / officer / director / attorney in fact / named Teresa Hall
(Signature of person executing service)
Taken, subscribed and sworn before me this 4th day of December 2017. My commission expires April 18, 2022
OFFICIAL SEAL Commissioner for West Virginia Shane M. Dowell IF Notherstring, WUTSIDE THE STATE) My Commission Expires April 18, 2022

P5 Water Well Reference

Reference	Map	Parcel	First	Surname	Address	City	State	Zip
1	11	29	Jay-Bee Oil & Gas, I	nc.	3570 Shields Hill Rd	Cairo	WV	26337
2	11	27	Darin	Barber	11378 Dupont Rd.	Washington	wv	26181
3	11	35	Golden Eagle Resou	rces	600 Jefferson St. Suite 200	Houston	TX	77002
4	11	34	Clinton	Hall Jr. et al	1892 Hebron Rd.	St. Marys	wv	26170
5	11	40	Hummer Properties		112 Collins Ave	Pennsboro	WV	26415
6	11	41	Melanie Jo Manuse	Revocable Trust	152 Clarendon Rd	Newberry	SC	29108
7	11	43,44,45	Matthew & Dawna	Taylor	145 Lamp Hill Rd	St. Marys	wv	26170

WW-2B1

Well No.	P5S3	

West Virginia Department of Environmental Protection Office of Oil and Gas

NOTICE TO SURFACE OWNERS

The well operator named below is preparing to file for a permit from the state to drill a new well. Before a well work permit can be filed with the Chief of the Office of Oil and Gas, the well operator is required to have given notice of the right to request water well or spring analytical testing. This notice shall be given to the owners or occupants of land which have a water well or spring being utilized for human consumption, domestic animals, or other general use and which is located within 1000 feet of the proposed well site.

With this form, the operator is giving you notice of your right to request analytical testing. The operator is required to sample and analyze the water wells or springs of all owners or occupants who request it. Therefore, if you wish to have your water well or spring tested, contact the operator named below.

All sampling shall be completed prior to drilling. Within thirty (30) days of the receipt of such sample analyses the operator shall submit the results to the Chief of the Office of Oil and Gas and to the owners or occupants who may have requested them.

If no water well or spring is located within 1000 feet, the Chief may require the operator to sample and analyze water from a water well or spring within 2000 feet of the proposed well site.

Be advised, you have the right to sample and analyze any water supply at your own expense.

The laboratory used by the operator to analyze the samples will be approved by the Chief. The operator named below has decided to use the following laboratory to analyze the water samples:

Contractor Name		Reliance Laboratories	
x Well operator's pr	ivate laboratory		
Well Operator	Jay-Bee Oil & Gas, INC	:	
Address	3570 Shields Hill Rd /	1720 Route 22 East	
	Cairo, WV 26337 /	Jnion, NJ 07083	
Telephone	304-628-3111		

FOR OPERATOR'S USE ONLY: Below, or on an attached page, list those persons which were given this notice. Place an asterisk beside the one(s) that contacted you and requested sampling and analyses. If there were no requests made, indicate by underling which one you have selected to sample and analyze. If there are no water wells or springs within 1000 feet of the proposed site please indicate such.

RECEIVED Office of Oil and Gas

DEC 7 2017

WW-6A3 (1/12)

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF ENTRY FOR PLAT SURVEY

		uirement:	Notice shall be prov	rided at least SEVEN (7) da	ys but no more than	n FORTY-FIVE (45) days prior to
entry Date		-13-2017	Date of Plan	nned Entry: 1-20-2017		
			to West Virginia C			
		_				
	PERSONAL		REGISTERED	METHOD OF DE		
	SERVICE		MAIL	RECEIPT OR SIG	NATURE CONFIR	MATION
on to but n bene- owned and S Secret enab	the surface to more than ath such tracter of minerals Sediment Coretary, which see the surface	ract to cond forty-five d that has fill underlying trol Manua statement sl owner to co	duct any plat survey ays prior to such en led a declaration pur g such tract in the coal and the statutes ar hall include contact obtain copies from the	s required pursuant to this a try to: (1) The surface ownersuant to section thirty-six, county tax records. The notion of rules related to oil and gainformation, including the	rticle. Such notice ser of such tract; (2) a tricle six, chapter to se shall include a state se exploration and p	shall provide notice of planned entry shall be provided at least seven days to any owner or lessee of coal seams wenty-two of this code; and (3) any attement that copies of the state Erosion roduction may be obtained from the age on the Secretary's web site, to
	ce is hereby		0:	П		
	SURFACE C				L OWNER OR LE	
Nam	e:			Name:		
Addr						
Nam						
Addr	ess:			■ MIN	ERAL OWNER(s)	
Nam	e:			Address:	5302 Pike Road St. Marys	WV 26170-8672
Addı	ess:					
Addı	ess:			*please atta	ch additional forms if ne	ecessary
Noti Pursu a pla State Cour	ce is hereby pant to West t survey on the true west ty:	y given: Virginia Cone tract of la st Virginia sisants		*please atta notice is hereby given that t Approx. Lati Public Road	ne undersigned well	l operator is planning entry to conduct 39.415463 X -81.075180 Arvilla Rd (CR7)
Noti Pursu a pla State Cour Distr	ce is hereby uant to West t survey on th : Wes nty: Plex ict: Unic	y given: Virginia Cone tract of la st Virginia osants	ode § 22-6A-10(a), rand as follows:	*please atta notice is hereby given that t Approx. Lati Public Road Watershed:	ne undersigned well tude & Longitude: Access:	l operator is planning entry to conduct 39.415463 X -81.075180 Arvilla Rd (CR7) Middle Island Creek
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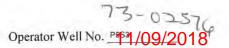
Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as 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 or your personal information; please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

P5S3 WW6A3 Listing

Surface Owner	Address	City	State	Zip
Charles Bunner	5302 Pike Road	St. Marys	WV	26170-8672
Darin J. & Mary R. Barber c/o Edith C. Barber	11378 Dupont Road	Washington	WV	26181-351 5
Edith C. Barber	11378 Dupont Road	Washington	WV	26181-3515
HFP, LLC	P. O. Box 418	Kenova	WV	25530 /
Richard J. Wells	286 Bent Tree Trail	Guntersville	AL	35979 /
Ross Wells	c/o: Richard J. Wells 286 Bent Tree Trail	Guntersville	AL	35979 /
Melanie Jo Manuse Revocable Trust	152 Clarendon Rd.	Newsberry	SC	29108 -
Berry Properties	2684 Merrimont Dr.	Troy	ОН	45373
Matthew & Donna Taylor	145 Lamp Hill Rd.	St. Marys	WV	26170

WW-6A5 (1/12)



STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF PLANNED OPERATION

Date of Notic			
Delivery met	hod pursuant to West Virginia Cod	e § 22-6A-16(c)	
■ CERTI	FIED MAIL	☐ HAND	
	RN RECEIPT REQUESTED	DELIVERY	
return receipt the planned of required to be drilling of a l damages to the	requested or hand delivery, give the speration. The notice required by the provided by subsection (b), section thorizontal well; and (3) A proposed se surface affected by oil and gas oper	surface owner whose land will be used f is subsection shall include: (1) A copy en of this article to a surface owner who surface use and compensation agreeme ations to the extent the damages are com	ication, an operator shall, by certified mail for the drilling of a horizontal well notice of of this code section; (2) The information see land will be used in conjunction with the nt containing an offer of compensation for appensable under article six-b of this chapter, isted in the records of the sheriff at the time
Notice is her	eby provided to the SURFACE OW	(NER(s)	
	s listed in the records of the sheriff at		
(at the addres	s listed in the records of the sheriff at	mie time of money.	
Name: Jay-Bee		Name:	
Name: Jay-Bee Address: 3570	Oil & Gas, Inc.	The state of the s	
Name: Jay-Bee Address: 3570 Cairo, WV 26337 Notice is her	Oil & Gas, Inc. Shields Hill Rd eby given:	Name:Address:	well operator has developed a planned
Name: Jay-Bee Address: 3570 Cairo, WV 26337 Notice is her Pursuant to W operation on State: County:	Oil & Gas. Inc. Shields Hill Rd eby given: /est Virginia Code § 22-6A-16(c), not	Name:	
Name: Jay-Bee Address: 3570 Cairo, WV 26337 Notice is her Pursuant to W operation on State: County: District:	eby given: /est Virginia Code § 22-6A-16(c), not the surface owner's land for the purpo	Name: Address: Address: Lice is hereby given that the undersigned ose of drilling a horizontal well on the treatment of the control of the	act of land as follows: 493,528.29
Name: Jay-Bee Address: 3570 Cairo, WV 26337 Notice is her Pursuant to W operation on State: County: District: Quadrangle:	eby given: /est Virginia Code § 22-6A-16(c), not the surface owner's land for the purpowest Virginia Pleasants Union Bens Run 7.5'	Name: Address: Address: ice is hereby given that the undersigned ose of drilling a horizontal well on the treatment of the control of the c	act of land as follows: 493,528.29 4,362,885.29
Name: Jay-Bee Address: 3570 Cairo, WV 26337 Notice is her Pursuant to W operation on State: County: District:	eby given: /est Virginia Code § 22-6A-16(c), not the surface owner's land for the purpowest Virginia Pleasants Union	Name: Address: Address: Lice is hereby given that the undersigned ose of drilling a horizontal well on the treatment of the control of the	act of land as follows: 493,528.29 4,362,885.29 Arvilla Rd (CR7)
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Name: Jay-Bee Address: 3570 Cairo, WV 26337 Notice is her Pursuant to W operation on State: County: District: Quadrangle: Watershed: This Notice S Pursuant to W to be provide horizontal we surface affect information r headquarters,	eby given: /est Virginia Code § 22-6A-16(c), not the surface owner's land for the purpowest Virginia Pleasants Union Bens Run 7.5' Middle Island Creek Shall Include: /est Virginia Code § 22-6A-16(c), thi do by W. Va. Code § 22-6A-10(b) to all; and (3) A proposed surface use an ed by oil and gas operations to the elelated to horizontal drilling may be located at 601 57th Street, SE, Coault.aspx.	Name: Address: Basting: Northing: Public Road Access: Generally used farm name: As notice shall include: (1)A copy of this a surface owner whose land will be d compensation agreement containing a extent the damages are compensable unobtained from the Secretary, at the WV	act of land as follows: 493,528.29 4,362,885.29 Arvilla Rd (CR7) Jay-Bee Oil & Gas, Inc. code section; (2) The information required used in conjunction with the drilling of a n offer of compensation for damages to the der article six-b of this chapter. Additional Department of Environmental Protection or by visiting—www.dep.wv.gov/oil-and-
Name: Jay-Bee Address: 3570 Cairo, WV 26337 Notice is her Pursuant to W operation on State: County: District: Quadrangle: Watershed: This Notice S Pursuant to W to be provide horizontal we surface affect information r headquarters, gas/pages/def	eby given: /est Virginia Code § 22-6A-16(c), not the surface owner's land for the purpowest Virginia Pleasants Union Bens Run 7.5' Middle Island Creek Shall Include: /est Virginia Code § 22-6A-16(c), thi do by W. Va. Code § 22-6A-10(b) to all; and (3) A proposed surface use an ed by oil and gas operations to the elelated to horizontal drilling may be located at 601 57th Street, SE, Coault.aspx.	Name: Address: Address: Lice is hereby given that the undersigned ose of drilling a horizontal well on the trace of the Leasting: Worthing: Public Road Access: Generally used farm name: Is notice shall include: (1)A copy of this of a surface owner whose land will be discompensation agreement containing a extent the damages are compensable unobtained from the Secretary, at the Witharleston, WV 25304 (304-926-0450)	act of land as follows: 493,528.29 4,362,885.29 Arvilla Rd (CR7) Jay-Bee Oil & Gas, Inc. code section; (2) The information required used in conjunction with the drilling of a n offer of compensation for damages to the der article six-b of this chapter. Additional Department of Environmental Protection or by visiting—www.dep.wv.gov/oil-and-

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as 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 or your personal information, please contact DEP's Chief Privacy Officer at deprivacyofficer@wv.gov.

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DEC 7 2017



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

1900 Kanawha Boulevard East • Building Five • Room 110 Charleston, West Virginia 25305-0430 • (304) 558-3505

July 19, 2018

Thomas J. Smith, P. E. Secretary of Transportation/ Commissioner of Highways

Jill M. Newman Deputy Commissioner

James A. Martin, Chief Office of Oil and Gas Department of Environmental Protection 601 57th Street, SE Charleston, WV 25304

Subject: DOH Permit for the P5 Pad, Pleasants County P5S3 Well site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #03-2018-0350 issued to Jay-Bee Oil & Gas, Inc. for access to the State Road for a well site located off of Pleasants County Route 7 SLS.

The operator has signed a DISTRICT WIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated January 3, 2012.

Very Truly Yours,

Gary K. Clayton, P.E.

Lary K. Clayton

Regional Maintenance Engineer Central Office O&G Coordinator

Cc: Shane Dowell

Jay-Bee Oil & Gas, Inc.

CH, OM, D-6

File



JAY-BEE OIL & GAS, INC.

Permitting Office Office of Oil and Gas West Virginia Dept. of Environmental Protection 601 57th Street SE Charleston, WV 25304

RE: Frac Additives

Permitting Office:

As requested on the Well Permit Checklist, the CAS numbers are referenced for all submitted permits on WW6B, page 1, and listed below:

- Water (7732-18-5)
- Sand (14808-60-7, 1344-28-1, 1309-37-1, 13463-67-7)
- Friction Reducer (64742-47-8)
- Scale Inhibitor (107-21-1, 111-46-6)
- Bacteria Prevention (111-30-8, 7173-51-5, 68424-85-1, 64-17-5)
- 15% Vol Acid (7647-01-0)
- Citric Acid (77-92-9)
- Guar Gum (9000-30-0)
- Corrosion Inhibitor (67-56-1, 107-19-7)
- Surfactant (111-76-2)

If you would have any questions concerning this matter, please feel free to contact our office at the numbers listed below.

Sincerely,

Shane Dowell Office Manager

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Office of Oil and Gas

DEC 7 2017

WV Department of Environmental Protection