



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

Tuesday, July 23, 2019
WELL WORK PERMIT
Horizontal 6A / New Drill

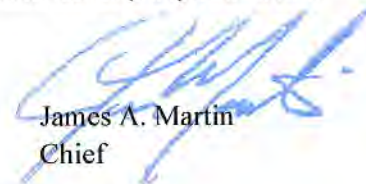
JAY-BEE OIL & GAS, INC.
1720 RT. 22 E
UNION, NJ 07083

Re: Permit approval for GRUMPY 4
47-095-02629-00-00

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: GRUMPY 4
Farm Name: DIANA SAMSON
U.S. WELL NUMBER: 47-095-02629-00-00
Horizontal 6A New Drill
Date Issued: 7/23/2019

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.

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, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov.

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 Tyler McElroy Shirley 7.5'
Operator ID County District Quadrangle

2) Operator's Well Number: Grumpy 4 Well Pad Name: Grumpy

3) Farm Name/Surface Owner: Diana Sampson Public Road Access: Indian Creek Rd

4) Elevation, current ground: 1,299.2' Elevation, proposed post-construction: 1,299.2'

5) Well Type (a) Gas Oil _____ Underground Storage _____

Other _____

(b) If Gas Shallow Deep _____

Horizontal _____

JCB
5/15/2019

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus, Target Depth 7,075', 41-60' thick, 3500# pressure

8) Proposed Total Vertical Depth: 7,075'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 17,007'

11) Proposed Horizontal Leg Length: 7,703.5'

12) Approximate Fresh Water Strata Depths: 120'

13) Method to Determine Fresh Water Depths: API 47-095-00010 for coal. Freshwater/Saltwater 47-095-02161

14) Approximate Saltwater Depths: 870'

15) Approximate Coal Seam Depths: 501', 640', 734', 893', 956'

16) Approximate Depth to Possible Void (coal mine, karst, other): N/A

17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes _____ No

(a) If Yes, provide Mine Info: Name: _____
Depth: _____
Seam: _____
Owner: _____

RECEIVED
Office of Oil and Gas
MAY 22 2019
WV Department of
Environmental Protection

18) CASING AND TUBING PROGRAM

TYPE	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							
Intermediate	8 5/8	New	J55	24	2,000'	2,000'	597.2 CTS
Production	5 1/2	New	P110	17	17,007'	17,007'	2,815.5 CF1000' from surface
Tubing	N/A						
Liners	N/A						

JOB
5/15/2019

TYPE	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			
Sizes:	N/A			
Depths Set:	N/A			

RECEIVED
Office of Oil and Gas
MAY 22 2019
WV Department of
Environmental Protection

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.

JCB
5/15/19

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.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 24.68

22) Area to be disturbed for well pad only, less access road (acres): 16.02

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, Sugar, CD-32, FL-62

25) Proposed borehole conditioning procedures:

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 dry.
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.

Office of Oil and Gas

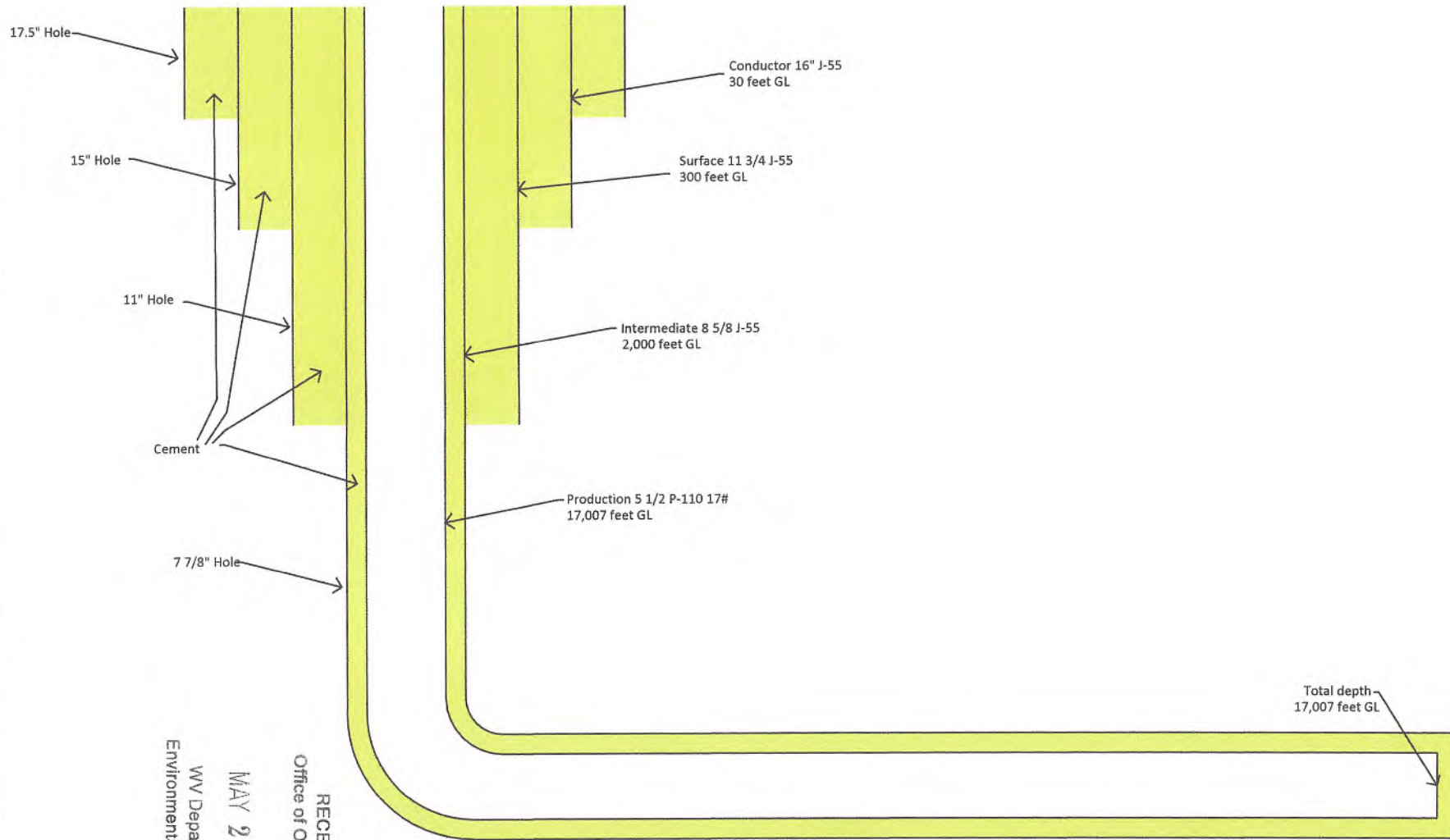
MAY 22 2019

WV Department of
Environmental Protection

*Note: Attach additional sheets as needed.

Jay-Bee Oil & Gas Inc.
Well Name: Grumpy 4
GL Elevation: 1299.2'
KB: 14 feet

Date: 4/17/2019
District: McElroy
County: Tyler
State: West Virginia



RECEIVED
Office of Oil and Gas
MAY 22 2019
WV Department of
Environmental Protection

Handwritten: JEB
5/15/2019

Total depth
17,007 feet GL

47 09 5 02 6 2 9

WW-9
(4/16)

API Number 47 - _____ - _____
Operator's Well No. Grumpy 4

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) Outlet Middle Island Creek Quadrangle Shirley 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

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
- Undergound 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))

9eb
5/15/2019

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) Chris Lindsey

Company Official Title Office Manager

RECEIVED
Office of Oil and Gas
MAY 22 2019

WV Department of
Environmental Protection


Subscribed and sworn before me this 7 day of May, 2019

Theresa K. Ritter

My commission expires May 12, 2033

Theresa K. Ritter

Notary Public, State Of West Virginia
Theresa K Ritter
1113 Patterson Fork Road
Salem WV 26426
My commission expires May 12, 2033



Jay-Bee Oil & Gas, Inc.

Proposed Revegetation Treatment: Acres Disturbed 24.68 Prevegetation pH 6.8

Lime 2-3 Tons/acre or to correct to pH 6.8

Fertilizer type 10-20-20

Fertilizer amount 500 lbs/acre

Mulch Hay 2 Tons/acre

Seed Mixtures

Temporary		Permanent	
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 and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), and area in acreage, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [Signature]

Comments: _____

RECEIVED
Office of Oil and Gas

MAY 22 2019

WV Department of
Environmental Protection

Title: Oil & Gas Inspector Date: 5/15/2019

Field Reviewed? Yes No

GRUMPY 4

WELL SITE SAFETY PLAN

RECEIVED
Office of Oil and Gas

MAY 22 2019

WV Department of
Environmental Protection

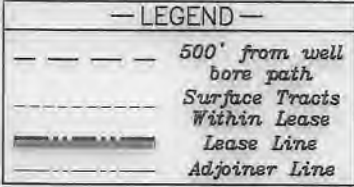
JAY-BEE OIL & GAS, INC

JTB
5/15/2019

References:

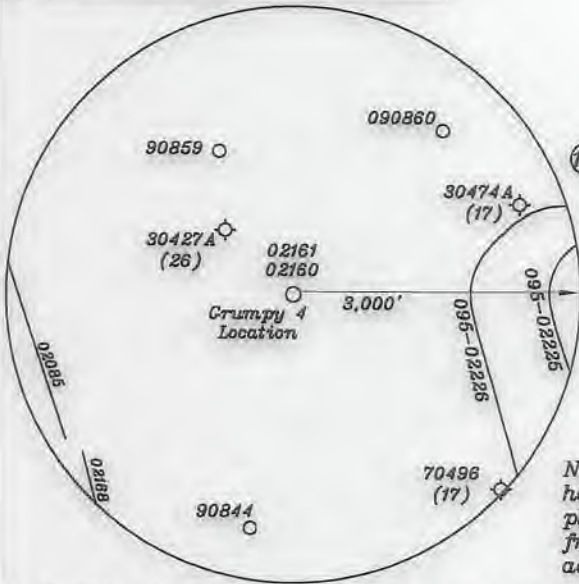


- A- R. Thomas TM 12/ 1.4 14.997 Ac.
- B- Headley TM 11/ 33.1 9.227 Ac.
- C- Yeater, et al TM 6/ 25.1 1.1 Ac.
- D- Titus TM 6/ 25.3 4.83 Ac.
- E- Titus TM 6/ 25.2 1.08 Ac.
- F- Diana Samson TM 6/ 19 42 Ac.
- G- Edgar McHenry Trust TM 6/ 15 15.81 Ac.
- H- Rayburn Heirs TM 6/ 16 15.82 Ac.
- I- Eidle TM 7/ 17 23.73 Ac.
- J- Eidle TM 7/ 18 26.36 Ac.
- K- B.C. Farms Investments, LLC TM 7/ 19 22.85 Ac.



NUMBER	DIRECTION	DISTANCE
L1	S79°03'E	1,914.4'
L2	S51°56'E	3,496.8'
L3	S50°54'E	1,728.7'

NORTH



Note: All wells within 500' of the horizontal leg are shown on this plat based upon information taken from DEP mapping, well plats & aerial photos.

Top Hole—TH	
Geo NAD 83-	39.467676 N, 80.764181 W
UTM NAD 83(Meters)	-4368703.88 N, 520284.86 E
UTM NAD 83(Feet)	-14332988.66 N, 1706967.92 E
Landing Point—LP	
Geo NAD 83-	39.464794 N, 80.759375 W
UTM NAD 83(Meters)	-4368378.34 N, 520699.12 E
UTM NAD 83(Feet)	-14331921.27 N, 1708327.03 E
Bottom Hole—BH	
Geo NAD 83-	39.444415 N, 80.751805 W
UTM NAD 83(Meters)	-4366125.05 N, 521366.53 E
UTM NAD 83(Feet)	-14324528.61 N, 1710483.89 E

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. _____
 DRAWING NO. 1
 SCALE 1" = 2000'
 MINIMUM DEGREE OF ACCURACY 1 in 200
 PROVEN SOURCE OF ELEVATION GPS
submeter unit

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE RULES ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

(SIGNED) David L Jackson
 R.P.E. _____ P.S. 708



STATE OF WEST VIRGINIA
 Division of Environmental Protection
 OFFICE OF OIL AND GAS

DATE April 16, 2019
 OPERATOR'S WELL NO. Crumphy 4
 API WELL NO. _____

WELL TYPE: OIL GAS X LIQUID INJECTION _____ WASTE DISPOSAL _____ STATE COUNTY 02629 H6A PERMIT _____
 (IF "GAS") PRODUCTION X STORAGE _____ DEEP _____ SHALLOW X

LOCATION: ELEVATION 1,299.2' WATER SHED Woodburn Run of Outlet Middle Island Creek (HUC-10)
 DISTRICT McElroy COUNTY Tyler
 QUADRANGLE Shirley 7 1/2'

SURFACE OWNER Diana Samson ACREAGE 42.0 Ac.
 OIL & GAS ROYALTY OWNER Diana Samson LEASE ACREAGE 42.0 Ac.
 LEASE NO. See above

PROPOSED WORK: DRILL X CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION _____ PERFORATE NEW FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
 TARGET FORMATION Marcellus ESTIMATED DEPTH TVD = 7,075'; TMD = 17,007'
 WELL OPERATOR Jay-Bee Oil & Gas, Inc. DESIGNATED AGENT Randy Broda
 ADDRESS 1720 Route 22 E, Union, NJ 07083 ADDRESS 3570 Shields Hill Rd., Cairo, WV 26337

LONGITUDE 80-45-00 W Top Hole 11,774' Bottom Hole 5,070'

95-02629

WW-6A1
(5/13)

Operator's Well No. Grumpy 3

**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
----------------------	-----------------------	-----------------------	---------	-----------

See attached exhibit to WW-6A1

**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

RECEIVED
Office of Oil and Gas

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.

WV Department of
Environmental Protection

Well Operator Jay Bee Oil and Gas, Inc

By: Chris Lindsey

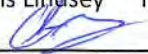
It's Office Manager

95-02629

Grumpy 4 Exhibit to WW 6A1

<u>Lease #</u>	<u>Lessor, Grantor, etc</u>	<u>Lessee, Grantee, etc</u>	<u>Royalty</u>	<u>Deed Book-Page</u>
T1-18 ✓	Special Commisioner Civil Action 14-C-1K	Jay Bee Royalty	Deed	448-457
T3039 ✓	S.A Smith and C,Burke Morris Trust	Jay Bee Production Company	≥12.5%	385-209
T3039 ✓	George and Joann Woodburn	Antero Resources	≥12.5%	395-580
T3039 ✓	Antero Resources	JB Exploration I, LLC	Assignment	417-523
T3045A ✓	Janet Burns	JB Exploration I, LLC	≥12.5%	433-120
T3045A ✓	Benny Woodburn	JB Exploration I, LLC	≥12.5%	443-144
T3045A ✓	Larry Woodurn	JB Exploration I, LLC	≥12.5%	443-147
T3045A ✓	Michael Woodburn	JB Exploration I, LLC	≥12.5%	452-772
T1-09 ✓	Lora Thomas Tyle County Clerk	Jay Bee Production	Deed	354-625; 354-631
T3047 ✓	Ascent ReSources Marcellus, LLC	JB Exploration, I LLC	≥12.5%	496-371
T3047 ✓	Charles Daily	JB Exploration, I LLC	≥12.5%	498-34
T3047 ✓	Fred and Debra Reali	JB Exploration, I LLC	≥12.5%	391-633
T3049 ✓	Fritzi L. Cavalli	JB Exploration, I LLC	≥12.5%	395-208
T3049 ✓	Don Ritz	JB Exploration, I LLC	≥12.5%	387-746
T3049 ✓	Mark Headley	JB Exploration, I LLC	≥12.5%	418-515
T3049 ✓	Carol Morris	JB Exploration, I LLC	≥12.5%	395-228
	Jay Bee Production Company	Jay Bee Oil and Gas,Inc	Affidavit	
	Jay Bee Royalty	Jay Bee Oil and Gas,Inc	Affidavit	

Well Operator Jay Bee Oil and Gas, Inc.

By: Chris Lindsey  Its: Office Manager

Page 2 of 2

RECEIVED
Office of Oil and Gas

MAY 22 2019

WV Department of
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 JB Exploration I, 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 JB Exploration I, 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 JB Exploration I, 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 well Grumpy 1, Grumpy 2, Grumpy 4, Grumpy 6, Grumpy 7 API No(s). pending, 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.

RECEIVED
Office of Oil and Gas
MAY 22 2019
WV Department of
Environmental Protection

Further, affiants sayeth naught.

[Signature]
Randy Broda, President of Jay-Bee Oil & Gas, Inc.

Taken, subscribed and sworn to before me, the undersigned Notary Public, this 10th day of January, 2018 by Randy Broda, President of Jay-Bee Oil & Gas, Inc., on behalf of the corporation.

My commission expires: April 18, 2022



[Signature]
NOTARY PUBLIC

[Signature]
Randy Broda, Managing Member of JB Exploration I, LLC

Taken, subscribed and sworn to before me, the undersigned Notary Public, this 10th day of January, 2018 by Randy Broda, Managing Member of JB Exploration I, LLC, on behalf of the company.

My commission expires: April 18, 2022



[Signature]
NOTARY PUBLIC

RECEIVED
Office of Oil and Gas

MAY 22 2019

WV Department of
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, President of Jay-Bee Production Company, 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 President of Jay-Bee Production Company, which holds the rights to extract, produce or market the oil or gas. In my capacity as President, I am qualified and authorized to certify and verify the information set forth or referenced herein on behalf of Jay-Bee Production Company.

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 well Grumpy 1, Grumpy 2, Grumpy 4, Grumpy 6, Grumpy 7 API No(s). pending, 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.

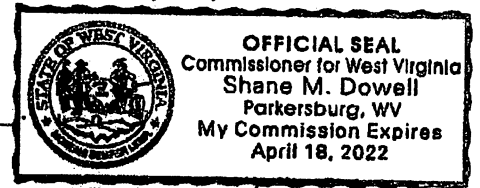
RECEIVED
 MAY 22 2019
 WV Department of
 Environmental Protection

Further, affiants sayeth naught.

[Signature]
Randy Broda, President of Jay-Bee Oil & Gas, Inc.

Taken, subscribed and sworn to before me, the undersigned Notary Public, this 10th day of January, 2018 by Randy Broda, President of Jay-Bee Oil & Gas, Inc., on behalf of the corporation.

My commission expires: April 18, 2022

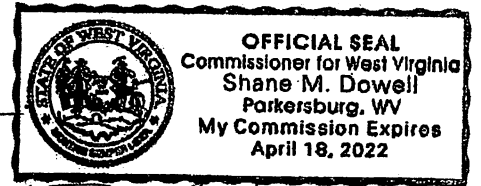


[Signature]
NOTARY PUBLIC

[Signature]
Randy Broda, President of Jay-Bee Production Company

Taken, subscribed and sworn to before me, the undersigned Notary Public, this 10th day of January, 2018 by Randy Broda, President of Jay-Bee Production Company, on behalf of the company.

My commission expires: April 18, 2022



[Signature]
NOTARY PUBLIC

RECEIVED
Office of Oil and Gas
MAY 22 2019
WV Department of
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 Jay-Bee Royalty, 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 Jay-Bee Royalty, 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 Jay-Bee Royalty, 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 Grumpy 1, Grumpy 2, Grumpy 4, Grumpy 6, Grumpy 7 well API No(s) pending, 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.

RECEIVED
Office of Oil and Gas
MAY 22 2019
West Virginia Department of
Environmental Protection

DEP

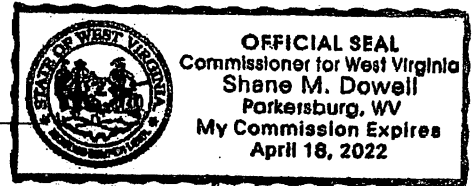
Further, affiants sayeth naught.

[Handwritten signature of Randy Broda]

Randy Broda, President of Jay-Bee Oil & Gas, Inc.

Taken, subscribed and sworn to before me, the undersigned Notary Public, this 10th day of January, 2018 by Randy Broda, President of Jay-Bee Oil & Gas, Inc., on behalf of the corporation.

My commission expires: April 18, 2022



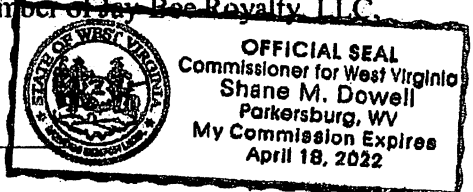
[Handwritten signature of Notary Public]
NOTARY PUBLIC

[Handwritten signature of Randy Broda]

Randy Broda, Managing Member of Jay-Bee Royalty, LLC

Taken, subscribed and sworn to before me, the undersigned Notary Public, this 10th day of January, 2018 by Randy Broda, Managing Member of Jay-Bee Royalty, LLC, on behalf of the company.

My commission expires: April 18, 2022



[Handwritten signature of Notary Public]
NOTARY PUBLIC

RECEIVED
Office of Oil and Gas

MAY 22 2019

WV Department of
Environmental Protection

**JAY-BEE OIL & GAS, INC.**

May 6, 2019

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

RE: Grumpy 2 Well; Grumpy 4 Well

Permitting Office:

As you know we have applied for a well permit for the Grumpy 7 Well in Tyler County, West Virginia. This pad is located on what we call the T1-18 tract. Our well leg runs beneath Woodburn Run (CR 13/9).

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 Tyler 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,

Chris Lindsey
Office Manager

RECEIVED
Office of Oil and Gas

MAY 22 2019

WV Department of
Environmental Protection

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

Date of Notice Certification: 05/07/2019

API No. 47- 095 - 02629
Operator's Well No. Grumpy 1, 2, 4, 6, 7
Well Pad Name: Grumpy

Notice has been given:

Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forms listed below for the tract of land as follows:

State:	<u>West Virginia</u>	UTM NAD 83	Eastings:	<u>520,583.53</u>
County:	<u>Tyler</u>		Northing:	<u>4,368,706.42</u>
District:	<u>McElroy</u>	Public Road Access:	<u>Indian Creek Rd</u>	
Quadrangle:	<u>Shirley 7.5'</u>	Generally used farm name:	<u>Diana Sampson</u>	
Watershed:	<u>Outlet Middle Island Creek</u>			

Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may be prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that (i) it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article, the information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as a result of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the notice requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to West Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of section ten of this article have been completed by the applicant.

Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:

*PLEASE CHECK ALL THAT APPLY

- 1. NOTICE OF SEISMIC ACTIVITY or NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED
- 2. NOTICE OF ENTRY FOR PLAT SURVEY or NO PLAT SURVEY WAS CONDUCTED
- 3. NOTICE OF INTENT TO DRILL or NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)
- 4. NOTICE OF PLANNED OPERATION
- 5. PUBLIC NOTICE
- 6. NOTICE OF APPLICATION

OOG OFFICE USE ONLY

RECEIVED/
NOT REQUIRED

RECEIVED

RECEIVED/
NOT REQUIRED

RECEIVED

RECEIVED
RECEIVED

Office of Oil and Gas
 RECEIVED

MAY 22 2019

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 affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

WV Department of
Environmental Protection

Certification of Notice is hereby given:

THEREFORE, I Chris Lindsey, have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification and all attachments, 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 and imprisonment.

Well Operator: Jay-Bee Oil & Gas, Inc.
By: Chris Lindsey
Its: Office Manager
Telephone: 304-628-3111



Address: 3570 Shields Hill Rd.
Cairo, WV 26337
Facsimile: 304-628-3119
Email: clindsey@jaybeoil.com



Subscribed and sworn before me this 7 day of May.
Theresa K Ritter Notary Public
My Commission Expires May 12, 2033

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.

RECEIVED
Office of Oil and Gas
MAY 22 2019
WV Department of
Environmental Protection

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

Notice Time Requirement: notice shall be provided no later than the **filing date of permit application.**

Date of Notice: 5/7/2019 **Date Permit Application Filed:** 5/13/2019

Notice of:

- PERMIT FOR ANY WELL WORK
- CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

Delivery method pursuant to West Virginia Code § 22-6A-10(b)

- PERSONAL SERVICE
- REGISTERED MAIL
- METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") 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.

Application Notice WSSP Notice E&S Plan Notice Well Plat Notice is hereby provided to:

SURFACE OWNER(s)
Name: Jill Hoover
Address: 101 Woodburn Run Alma, WV 26320

COAL OWNER OR LESSEE
Name: _____
Address: _____

Name: _____
Address: _____

COAL OPERATOR
Name: _____
Address: _____

SURFACE OWNER(s) (Road and/or Other Disturbance)
Name: _____
Address: _____

RECEIVED
Office of Oil and Gas

Name: _____
Address: _____

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)
Name: _____
Address: _____
MAY 22 2019
WV Department of Environmental Protection

SURFACE OWNER(s) (Impoundments or Pits)
Name: _____
Address: _____

OPERATOR OF ANY NATURAL GAS STORAGE FIELD
Name: _____
Address: _____

*Please attach additional forms if necessary

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 Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Well Location Restrictions

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

RECEIVED
Office of Oil and Gas
MAY 2 2013

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 thirty days after the application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written comments to the location or construction of the applicant's proposed well work to the Secretary at:

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

RECEIVED
Office of Oil and Gas
may file written
comments after the
MAY 22 2019
to the
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.**

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.

RECEIVED
Office of Oil and Gas

MAY 22 2019

WV Department of
Environmental Protection

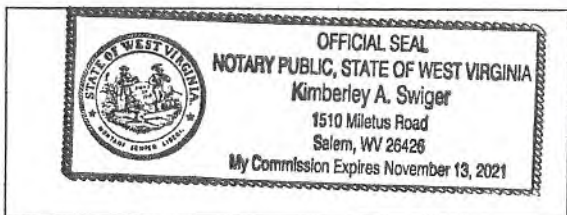
Notice is hereby given by:

Well Operator: Jay Bee Oil and Gas, Inc
Telephone: 304-628-3111
Email: clindsey@jaybeoil.com

Address: 3570 Shields Hill Rd.
Cairo, WV 26337
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.



Subscribed and sworn before me this 7th day of May 2019.
Kimberley A. Swiger Notary Public
My Commission Expires Nov. 13, 2021

RECEIVED
Office of Oil and Gas
MAY 22 2019
WV Department of
Environmental Protection

WW-2B1

Well No. Grumpy 1,2,4,6,7

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:

<input checked="" type="checkbox"/>	Contractor Name	<u>Reliance Laboratories</u>
<input checked="" type="checkbox"/>	Well operator's private laboratory	

Well Operator	<u>Jay-Bee Oil & Gas, INC</u>
Address	<u>3570 Shields Hill Rd / 1720 Route 22 East</u> <u>Cairo, WV 26337 / Union, NJ 07083</u>
Telephone	<u>304-628-3111</u>

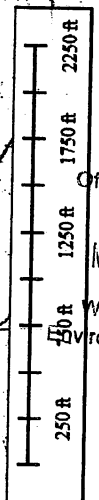
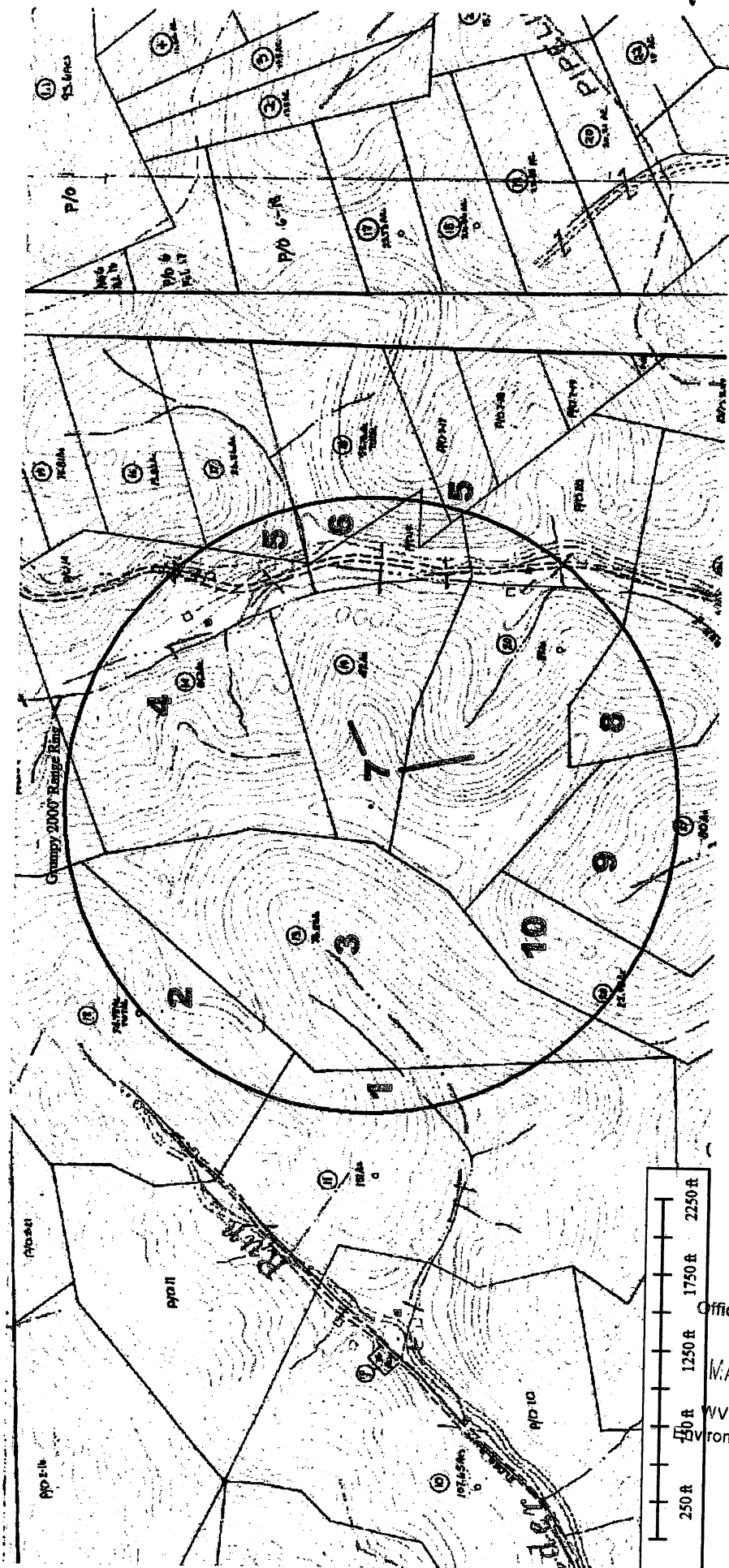
FOR OPERATOR'S USE ONLY: Below, or on an attached page, list those persons which were given this notice. Place an asterisk beside the one(s) that contacted you and requested sampling and analyses. If there were no requests made, indicate by underling which one you have selected to sample and analyze.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

RECEIVED
Office of Oil and Gas

MAY 22 2019

WV Department of
Environmental Protection

95-02629



RECEIVED
 Office of Oil and Gas
 MAY 22 2019
 WV Department of
 Environmental Protection

Grumpy Topo Water Well Reference

Reference	Map	Parcel	First	Surname	Address	City	State	Zip
1	6	11	CLIFFORD WARNER & ANDREW HAUGHT		771 MCELROY CREEK RD	ALMA	WV	26320
2	6	12	GARY L ROBERTS & BEVERLY C PYLES		512 LYNN ST	FOLLANSBEE	WV	26037
3	6	13	CURTIS TYRONE & SARAH MICHELLE	TALLMAN	1880 BADGER RUN RD	SISTERSVILLE	WV	26175
4	6	14	ANDREA S.	AKERS	656 GORRELS RUN RD	MIDDLEBOURNE	WV	26149
5	6,7	17, 17	RONALD & JANET	THOMPSON	1769 WALNUT FORK RD	LIMA	WV	26377
6	6	18	ARTHUR THOMAS & LOIS JEAN	BLOOM	935 GENTEEL RIDGE	WELLSBURG	WV	26070
7	6	19, 20	DIANNA	SAMSON	8235 HOLY LEAF DR	SPRING	TX	77379
8	6	21	HELEN	(TITUS) AYERS	1040 WOODBURN RUN	ALMA	WV	26320
9	6	27	SOLOMON KILE ESTATE c/o WILLIAM KILE		71 ALYSSA DR	PICKERINGTON	OH	43147
10	6	28	CLOYDE	WESTBROOK	406 PARK AVE	MIDDLEBOURNE	WV	26149

RECEIVED
 Office of Oil and Gas
 MAY 22 2019
 WV Department of
 Environmental Protection

95-02629

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF INTENT TO DRILL

Pursuant to W. Va. Code § 22-6A-16(b), the Notice of Intent to Drill is only required if the notice requirements of W. Va. Code § 22-6A-10(a) have NOT been met or if the Notice of Intent to Drill requirement has NOT been waived in writing by the surface owner.

Notice Time Requirement: Notice shall be provided at least TEN (10) days prior to filing a permit application.

Date of Notice: 05/07/2019 Date Permit Application Filed: 05/17/2019

Delivery method pursuant to West Virginia Code § 22-6A-16(b)

- HAND DELIVERY
- CERTIFIED MAIL RETURN RECEIPT REQUESTED

Pursuant to W. Va. Code § 22-6A-16(b), at least ten days prior to filing a permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner notice of its intent to enter upon the surface owner's land for the purpose of drilling a horizontal well: Provided, That notice given pursuant to subsection (a), section ten of this article satisfies the requirements of this subsection as of the date the notice was provided to the surface owner: Provided, however, That the notice requirements of this subsection may be waived in writing by the surface owner. The notice, if required, shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative.

Notice is hereby provided to the SURFACE OWNER(s):

Name: JILL M. HOOVER
Address: 101 WOODBURN RUN ALMA WV 26320

Name: RICHARD DOTSON (LIFE)
Address: 4349 INDIAN CREEK RD ALMA WV 26320

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(b), notice is hereby given that the undersigned well operator has an intent to enter upon the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: West Virginia UTM NAD 83 Easting: 520, 583.53
County: Tyler Northing: 4,368,706.42
District: McElroy Public Road Access: Indian Creek Rd.
Quadrangle: Shirley 7.5' Generally used farm name: Diana Samson
Watershed: Outlet Middle Island Creek

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(b), this notice shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Notice is hereby given by:

Well Operator: Jay Bee Oil and Gas, Inc
Address: 3570 Shields Hill Rd
Cairo, WV 26337
Telephone: 304-628-3111
Email: clindsey@jaybeeoil.com
Facsimile: 304-628-3119

Authorized Representative: Chris Lindsey
Address: 3570 Shields Hill Rd
Cairo, WV 26337
Telephone: 304-628-3111
Email: clindsey@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.

RECEIVED
Office of Oil and Gas
MAY 23 2019
WV Department of
Environmental Protection

WW-6A5
(1/12)

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

Notice Time Requirement: notice shall be provided no later than the **filing date of permit application.**

Date of Notice: 05/07/2019 **Date Permit Application Filed:** 05/17/2019

Delivery method pursuant to West Virginia Code § 22-6A-16(c)

CERTIFIED MAIL HAND
RETURN RECEIPT REQUESTED DELIVERY

Pursuant to W. Va. Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The information required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. (d) The notices required by this section shall be given to the surface owner at the address listed in the records of the sheriff at the time of notice.

Notice is hereby provided to the SURFACE OWNER(s)

(at the address listed in the records of the sheriff at the time of notice):

Name: JILL M. HOOVER

Address: 101 WOODBURN RUN ALMA WV 26320

Name: RICHARD DOTSON (LIFE)

Address: 4349 INDIAN CREEK RD ALMA WV 26320

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: <u>West Virginia</u>	UTM NAD 83	Easting: <u>520,583.53</u>
County: <u>Tyler</u>		Northing: <u>4,368,706.42</u>
District: <u>McElroy</u>	Public Road Access: <u>Indian Creek Rd</u>	
Quadrangle: <u>Shirley 7.5'</u>	Generally used farm name: <u>Diana Samson</u>	
Watershed: <u>Outlet Middle Island Creek</u>		

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1) A copy of this code section; (2) The information required to be provided by **W. Va. Code § 22-6A-10(h)** to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Well Operator: Jay-Bee Oil & Gas, Inc
Telephone: 304-628-3111
Email: clindsey@jaybeeoil.com

Address: 3570 Shields Hill Rd
Cairo, WV 26337
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.

RECEIVED
Office of Oil and Gas
MAY 9 2019
WV Department of
Environmental Protection

95-02629

WW-70
Rev. 7/01

Affidavit of Personal Service

State Of West Virginia

County Of Harrison

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) / WW-3(A) ___ / WW-4(A) / WW-5(A) ___ / WW-6(A) ___ WSSP
- (2) Application on Form WW-2(B) / WW-3(B) ___ / WW-4(B) ___ / WW-5(B) ___ / WW-6(B) ___ E&S
- (3) Plat showing the well location on Form WW-6, and WW-6A5 MSDS ___
- (4) Construction and Reclamation Plan on Form WW-9
- (5) WW6A1 WMP WW6RW/AW ___

--all with respect to operator's Well No. Grumpy 1, 2, 4, 6, 7 located in McElroy District, Tyler County, West Virginia, upon the person or organization named--

Jay-Bee Oil & Gas, Inc.; JB Exploration I, LLC; Jay Bee Production Company

--by delivering the same in Harrison County, State of West Virginia on the 7th day of May, 2019 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 when 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 ___, a partner of the partnership or, because the partner refused to take it when I handed it over, by leaving it in the presence of the partner.

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:

Handing it to the corporation's employee ___ / officer / director ___ / attorney in fact ___ / named Brian Paugh, Its-Vice President of Land

[Signature]
(Signature of person executing service)

Taken, subscribed and sworn before me this 7th day of May 2019.
My commission expires Nov. 13, 2021

Kimberly A. Swiger
Notary Public

RECEIVED
Office of Oil and Gas
MAY 22 2019

(AFFIX SEAL IF NOTARIZED OUTSIDE THE STATE)



WV Department of Environmental Protection



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

Byrd E. White, III
Secretary of Transportation

June 21, 2019

Jimmy Wriston, P. E.
Deputy Secretary/
Acting 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 Doc Pad, Tyler County
Grumpy 6 Well site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2014-0113 issued to Jay-Bee Oil & Gas, Inc. for access to the State Road for a well site located off of Tyler County Route 13 SLS.

This operator is in compliance with §22-6A-20 of the WV Code. 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 October 1, 2018.

Very Truly Yours,

A handwritten signature in cursive script that reads "Gary K. Clayton".

Gary K. Clayton, P.E.
Regional Maintenance Engineer
Central Office O&G Coordinator

Cc: Chris Lindsey
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.

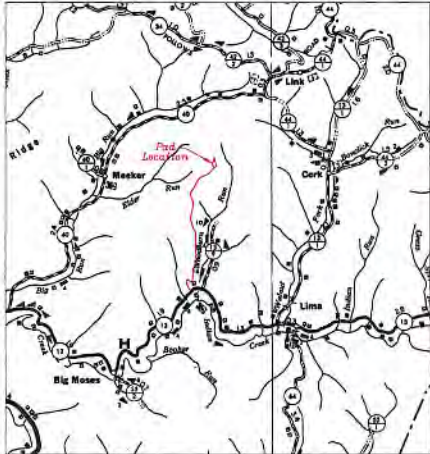
Sincerely,

Chris Lindsey
Office Manager

RECEIVED
Office of Oil and Gas

MAY 22 2019

WV Department of
Environmental Protection



Grumpy Well Pad As-Built Site Plan

McElroy District, Tyler County, WV
Prepared for JAY BEE OIL & GAS

Date: December 18, 2017

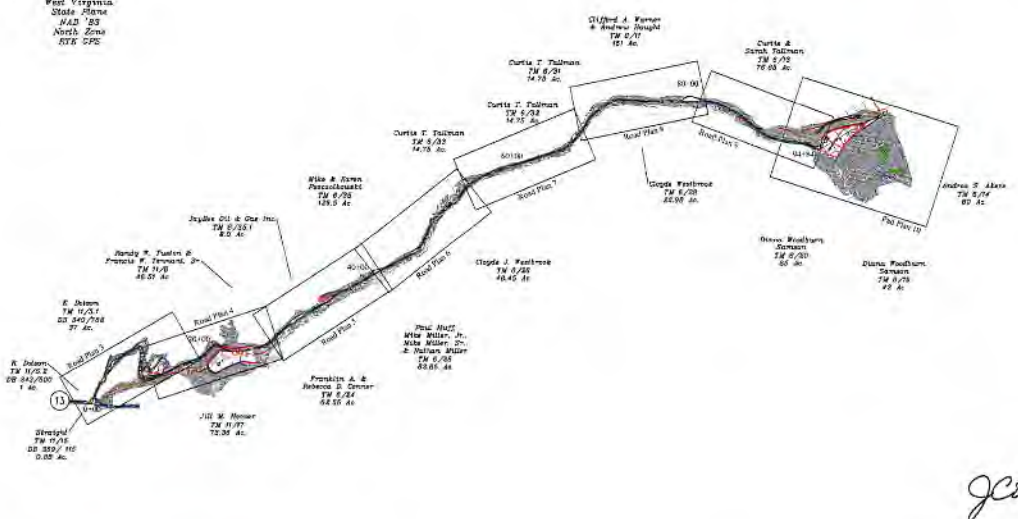
**WVDEP OOG
ACCEPTED AS-BUILT**
6/17/2019

Sheet	Description
1	Cover
2	Details & Notes
3	Road Plan & Profile
4	Road Plan & Profile
5	Road Plan & Profile
6	Road Plan & Profile
7	Road Plan & Profile
8	Road Plan & Profile
9	Road Plan & Profile
10	Pad Plan
11	Pad Sections
12	Pad Sections
13	Reclamation Plan



West Virginia
State Plane
NAD 83
North Zone
SFR DPS

Revisions:	
05-15-2019	Revised note 6 on Sheet 2



CENTER GRUMPY PAD
Geographic NAD 83
Latitude: 39.467839
Longitude: 80.764185
Pad Elev: 868.14'

CENTER ROAD INT.
(Sta: 0+00)
Geographic NAD 83
Latitude: 39.445329
Longitude: 80.769228

DOC PAD DISTURBED AREAS (LIMITS OF DISTURBANCE)	
Route 13 NW	Road= 265 Sq. Ft. Total= 0.01 Ac.
R. Dotson T.M. 12/S 2	Road= 2,870 Sq. Ft. Total= 0.07 Ac.
E. Dotson T.M. 11/S 1	Road= 1,030 Sq. Ft. Total= 0.02 Ac.
Randy W. Tuttle & Francis W. Tennant, Sr. T.M. 6/19	Road= 219,420 Sq. Ft. Pad= 94,055 Sq. Ft. Total= 7.20 Ac.
Jill M. Hoover T.M. 11/17	Pad= 381,070 Sq. Ft. Total= 4.38 Ac.
Road Total= 5.13 Acres Pad Total= 6.36 Acres	
TOTAL DOC PAD PERMITTED LDD: 13.64 Acres MODIFIED LDD: 11.47 Acres	

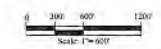
GRUMPY PAD DISTURBED AREAS (LIMITS OF DISTURBANCE)	
Randy W. Tuttle & Francis W. Tennant, Sr. T.M. 11/6	Road= 15,175 Sq. Ft. Total= 0.35 Ac.
Jill M. Hoover T.M. 11/17	Road= 3,490 Sq. Ft. Total= 0.08 Ac.
Franklin A. & Rebecca D. Conner T.M. 6/24	Road= 9,225 Sq. Ft. Total= 0.21 Ac.
Jay Bee Oil & Gas Inc. T.M. 6/25 1	Road= 56,335 Sq. Ft. Total= 1.28 Ac.
Mike & Karen Pizzozzi/Roberts T.M. 6/25	Road= 65,710 Sq. Ft. Total= 1.51 Ac.
Paul Huff, Mike Miller Jr., Mike Miller Sr., & Nathan Miller T.M. 6/25	Road= 5,045 Sq. Ft. Total= 0.12 Ac.
Doyde J. Westbrook T.M. 6/26	Road= 28,835 Sq. Ft. Total= 0.66 Ac.
Curtis T. Tallman T.M. 6/28	Road= 58,120 Sq. Ft. Total= 1.33 Ac.
Doyde Westbrook T.M. 6/28	Road= 33,025 Sq. Ft. Total= 0.76 Ac.
Clifford A. Warner & Andrew Haight T.M. 6/31	Road= 1,340 Sq. Ft. Total= 0.03 Ac.
Curtis & Sarah Tallman T.M. 6/13	Road= 81,175 Sq. Ft. Pad= 145,960 Sq. Ft. Total= 5.21 Ac.
Diana Woodsum Sampson T.M. 6/19	Road= 19,635 Sq. Ft. Pad= 801,105 Sq. Ft. Total= 7.36 Ac.
Andrea S. Alera T.M. 6/14	Pad= 250,965 Sq. Ft. Total= 5.75 Ac.
Road Total= 8.66 Acres Pad Total= 16.00 Acres	
TOTAL GRUMPY PAD PERMITTED LDD: 44.62 Acres TOTAL GRUMPY PAD MODIFIED LDD: 34.68 Acres	

WEST VIRGINIA 811
CALL BEFORE YOU DIG!
Dial 811 or 800.245.4848
www.WV811.com

Design Certification
The drawings, construction notes and reference diagrams attached hereto have been prepared in accordance with the West Virginia Code of State Rules, Division of Environmental Protection, Office of Oil and Gas.

The information reflects a gas well drilling pad and road.

Joshua R. Cook RPE 17950
Date: 05-15-2019



North Central Engineering, LLC
Joshua Cook, RPE
P.O. Box 5108
Bridgetown, WV 26030
Cell: 304-239-1623
E-Mail: jcook@NorthCentralEngineering.com

Jackson Surveying Inc.
COVER
SHEET 1
GRUMPY WELL PAD
AS-BUILT

877 W. Main St.
Cherburg, WV 26003
304-612-9800



LEGEND

- Existing Features
- Proposed Features
- Right of Way
- LOD (Permit)
- LOD (Modified)
- Property Line
- Creek
- Ditch/Drain
- Existing Fence
- Setline
- Overhead Utilities



GRUMPY PAD

	Northing	Eastng
#1	4,368,688.771	520,263.113
#2	4,368,688.294	520,263.036
#3	4,368,688.936	520,263.432
#4	4,368,688.411	520,263.405

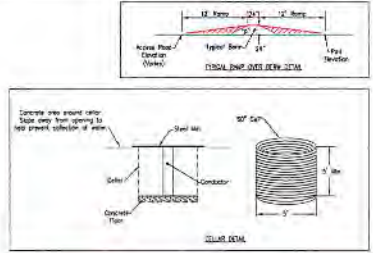
CENTER GRUMPY PAD
 Geographic NAD 83
 Latitude: 39.467839
 Longitude: 80.764185
 Pad Elev: 868.14'

CENTER ROADLINE
 (Sta. 0+00)
 Geographic NAD 83
 Latitude: 39.445529
 Longitude: 80.769228

Curtis & Sarah Taltman
 TM 6/19
 70.85 Ac.

Diana Woodburn
 Surveyor
 TM 6/20
 55 Ac.

**WV DEP OOG
 ACCEPTED AS-BUILT**
 6/7/2019

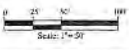


- Notes:
- (1) Direct all surface water away from slope repair areas.
 - (2) Construct/Reinforce 24" kerbs as req'd.
 - (3) Install standard drainage pipe discharge to grade areas.
 - (4) Repair/Revegetate slope wash areas.
 - (5) Use 125# denier fabric on all disturbed areas.

Andrew S. Akers
 TM 6/14
 80 Ac.

JCS
 5/17/2019

Diana Woodburn
 Surveyor
 TM 6/20
 42 Ac.



North Central Engineering, LLC
 Joshua Cook, RPE
 P.O. Box 626
 Bridgeport, WV 26330
 Cell: 304-298-1583
 E-Mail: jcook@NorthCentralEngineering.com



Jackson Surveying Inc.
 PAD PLAN
 SHEET 10
 GRUMPY WELL PAD
 AS-BUILT