

State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work

API 47 - 095 - 02499-00 County Tyler District Ellsworth
Quad Middlebourne 7.5' Pad Name Moe Pad Field/Pool Name _____
Farm name Jay-Bee Oil & Gas, Inc. Well Number Moe 3
Operator (as registered with the OOG) Jay-Bee Oil & Gas, Inc.
Address 3570 Shields Hill Road City Cairo State WV Zip 26337

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4368726.55 Easting 509677.51
Landing Point of Curve Northing 4368592.00 Easting 509436.14
Bottom Hole Northing 4366359.89 Easting 510209.96

Elevation (ft) 962.3' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine

Mud Type(s) and Additive(s)
Anco Synthetic Based Mud System (oil base)

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Date permit issued 6/28/2018 Date drilling commenced 9/30/2018 Date drilling ceased 10/11/2018
Date completion activities began 1/18/2019 Date completion activities ceased _____
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 300' Open mine(s) (Y/N) depths N
Salt water depth(s) ft N/A Void(s) encountered (Y/N) depths N
Coal depth(s) ft N/A Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:
GCB
6/18/2020

API 47-095 - 02499-00 Farm name Jay-Bee Oil & Gas, Inc. Well number Moe 3

| CASING STRINGS | Hole Size | Casing Size | Depth | New or Used | Grade wt/ft | Basket Depth(s) | Did cement circulate (Y/N) * Provide details below* |
|---------------------------|-----------|-------------|---------|-------------|-------------|-----------------|--|
| Conductor | 30" | 26" | 30' | New | | | Y |
| Surface | 17 1/2" | 13 3/8" | 371' | New | H40-48# | 368'-82' | Y |
| Coal | | | | | | | |
| Intermediate 1 | 11" | 8 5/8" | 2,189' | New | J55-24# | 2149'-349' | Y |
| Intermediate 2 | | | | | | | |
| Intermediate 3 | | | | | | | |
| Production | 7 7/8" | 5 1/2" | 14,563' | New | P110-23# | | Y |
| Tubing | | | | | | | |
| Packer type and depth set | | | | | | | |

Comment Details _____

| CEMENT DATA | Class/Type of Cement | Number of Sacks | Slurry wt (ppg) | Yield (ft ³ /sks) | Volume (ft ³) | Cement Top (MD) | WOC (hrs) |
|----------------|----------------------|-----------------|-----------------|------------------------------|---------------------------|-----------------|-----------|
| Conductor | | | | | | | |
| Surface | Class A | 313 | 15.6 | 1.196 | 375 | CTS | 8 |
| Coal | | | | | | | |
| Intermediate 1 | Class A | 650 | 15.6 | 1.188 | 772 | CTS | 8 |
| Intermediate 2 | | | | | | | |
| Intermediate 3 | | | | | | | |
| Production | Class A | 14,563 | 14.5 | 1.17 | 2,494 | 300' FS | 8 |
| Tubing | | | | | | | |

Drillers TD (ft) 14,606' Loggers TD (ft) 14,606'
 Deepest formation penetrated Marcellus Plug back to (ft) n/a
 Plug back procedure n/a

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Kick off depth (ft) 5,770'

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Check all wireline logs run
 caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____
90 degree
90-70 degree every second joint
70 degree - KOP every third joint
KOP - Surface centralizer placed every 500'

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

API 47- 095 - 02499-00

Farm name Jay-Bee Oil & Gas, Inc.

Well number Moe 3

PERFORATION RECORD

| Stage No. | Perforation date | Perforated from MD ft. | Perforated to MD ft. | Number of Perforations | Formation(s) |
|-----------|------------------|------------------------|----------------------|------------------------|--------------|
| 1 | 1/18/19 | 14062 | 13984 | 97 | Marcellus |
| 2 | 1/19/19 | 13934 | 13806 | 72 | Marcellus |
| 3 | 1/19/19 | 13758 | 13612 | 72 | Marcellus |
| 4 | 1/19/19 | 13562 | 13432 | 72 | Marcellus |
| 5 | 1/21/19 | 13382 | 13252 | 72 | Marcellus |
| 6 | 1/22/19 | 13208 | 13034 | 72 | Marcellus |
| 7 | 1/22/19 | 12992 | 12846 | 72 | Marcellus |
| 8 | 1/23/19 | 12804 | 12650 | 72 | Marcellus |
| 9 | 1/23/19 | 12612 | 12446 | 72 | Marcellus |
| 10 | 1/24/19 | 12408 | 12262 | 72 | Marcellus |
| 11 | 1/24/19 | 12222 | 12072 | 72 | Marcellus |
| 12 | 1/24/19 | 12020 | 11872 | 72 | Marcellus |
| 13 | 1/25/19 | 11830 | 11684 | 72 | Marcellus |
| 14 | 1/26/19 | 11638 | 11502 | 72 | Marcellus |
| 15 | 1/26/19 | 11444 | 11306 | 72 | Marcellus |
| 16 | 1/28/19 | 11256 | 11092 | 72 | Marcellus |

Please insert additional pages as applicable.

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STIMULATION INFORMATION PER STAGE

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Complete a separate record for each stimulation stage.

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| Stage No. | Stimulations Date | Ave Pump Rate (BPM) | Ave Treatment Pressure (PSI) | Max Breakdown Pressure (PSI) | ISIP (PSI) | Amount of Proppant (lbs) | Amount of Water (bbls) | Amount of Nitrogen/other (units) |
|-----------|-------------------|---------------------|------------------------------|------------------------------|------------|--------------------------|------------------------|----------------------------------|
| 1 | 1/18/19 | 74.3 | 7665 | n/a | 3780 | 178080 | 5963 | n/a |
| 2 | 1/19/19 | 71.9 | 7470 | 7177 | 4725 | 190580 | 6067 | n/a |
| 3 | 1/19/19 | 71.3 | 7080 | 7430 | 3942 | 250120 | 6723 | n/a |
| 4 | 1/19/19 | 70.7 | 7448 | 6597 | 4299 | 199600 | 7191 | n/a |
| 5 | 1/21/19 | 71.7 | 7181 | 6688 | 3948 | 242270 | 6713 | n/a |
| 6 | 1/22/19 | 70.8 | 7039 | 6148 | 4262 | 246300 | 7447 | n/a |
| 7 | 1/22/19 | 71.8 | 6932 | 6614 | 3643 | 247980 | 6969 | n/a |
| 8 | 1/23/19 | 71.5 | 6792 | 6001 | 4636 | 248500 | 6993 | n/a |
| 9 | 1/23/19 | 71 | 6953 | 6617 | 4585 | 249420 | 7304 | n/a |
| 10 | 1/24/19 | 70.4 | 6998 | 6553 | 4526 | 222360 | 6770 | n/a |
| 11 | 1/24/19 | 60.6 | 8226 | 7425 | 4947 | 1684 | 2367 | n/a |
| 12 | 1/24/19 | 79.2 | 7061 | 7074 | 4351 | 203970 | 7340 | n/a |
| 13 | 1/25/19 | 71.3 | 6853 | 6392 | 3765 | 211120 | 6453 | n/a |
| 14 | 1/26/19 | 71.8 | 6687 | 6064 | 3988 | 209270 | 6801 | n/a |
| 15 | 1/26/19 | 70.9 | 6630 | 7220 | 4731 | 207700 | 8478 | n/a |
| 16 | 1/28/19 | 71.6 | 6624 | 6991 | 5068 | 211430 | 6442 | n/a |

Please insert additional pages as applicable.

API 47- 095 - 02499-22 Farm name Jay-Bee Oil & Gas, Inc. Well number Moe 3

PERFORATION RECORD

| Stage No. | Perforation date | Perforated from MD ft. | Perforated to MD ft. | Number of Perforations | Formation(s) |
|-----------|------------------|------------------------|----------------------|------------------------|--------------|
| 17 | 1/29/19 | 11042 | 10906 | 72 | Marcellus |
| 18 | 1/29/19 | 10862 | 10702 | 72 | Marcellus |
| 19 | 1/29/19 | 10664 | 10502 | 72 | Marcellus |
| 20 | 2/3/19 | 10470 | 10312 | 72 | Marcellus |
| 21 | 2/3/19 | 10258 | 10102 | 72 | Marcellus |
| 22 | 2/3/19 | 10056 | 9910 | 72 | Marcellus |
| 23 | 2/4/19 | 9872 | 9744 | 72 | Marcellus |
| 24 | 2/4/19 | 9710 | 9532 | 72 | Marcellus |
| 25 | 2/5/19 | 9472 | 9314 | 72 | Marcellus |
| 26 | 2/8/19 | 9262 | 9152 | 72 | Marcellus |
| 27 | 2/9/19 | 9096 | 8966 | 72 | Marcellus |
| 28 | 2/9/19 | 8914 | 8744 | 72 | Marcellus |
| 29 | 2/10/19 | 8690 | 8534 | 72 | Marcellus |
| 30 | 2/12/19 | 8488 | 8364 | 72 | Marcellus |
| 31 | 2/12/19 | 8310 | 8158 | 72 | Marcellus |
| 32 | 2/12/19 | 8118 | 7962 | 72 | Marcellus |

Please insert additional pages as applicable.

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STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

| Stage No. | Stimulations Date | Ave Pump Rate (BPM) | Ave Treatment Pressure (PSI) | Max Breakdown Pressure (PSI) | ISIP (PSI) | Amount of Proppant (lbs) | Amount of Water (bbls) | Amount of Nitrogen/other (units) |
|-----------|-------------------|---------------------|------------------------------|------------------------------|------------|--------------------------|------------------------|----------------------------------|
| 17 | 1/29/19 | 71.7 | 6521 | 6765 | 5022 | 209500 | 6253 | n/a |
| 18 | 1/29/19 | 70.8 | 6928 | 6731 | 3671 | 210820 | 6793 | n/a |
| 19 | 1/29/19 | 70.1 | 6387 | 6356 | 4240 | 218070 | 6513 | n/a |
| 20 | 2/3/19 | 71.4 | 6650 | 6395 | 4281 | 209600 | 6141 | n/a |
| 21 | 2/3/19 | 71.7 | 6670 | 7409 | 3748 | 226120 | 6781 | n/a |
| 22 | 2/3/19 | 71.5 | 6651 | 7172 | 4973 | 192580 | 6102 | n/a |
| 23 | 2/4/19 | 72.1 | 6634 | 6822 | 4192 | 212540 | 6762 | n/a |
| 24 | 2/4/19 | 72.4 | 6351 | 7361 | 4447 | 219200 | 6969 | n/a |
| 25 | 2/5/19 | 71.6 | 6818 | 6250 | 3795 | 220000 | 6750 | n/a |
| 26 | 2/8/19 | 70 | 6364 | 6300 | 4027 | 221880 | 6707 | n/a |
| 27 | 2/9/19 | 70.1 | 6429 | 6429 | 8823 | 222510 | 6499 | n/a |
| 28 | 2/9/19 | 70.2 | 6193 | 6847 | 4827 | 223440 | 6804 | n/a |
| 29 | 2/10/19 | 70.7 | 6143 | 6083 | 4983 | 219750 | 6626 | n/a |
| 30 | 2/12/19 | 71.8 | 6111 | 6595 | 4752 | 213320 | 6595 | n/a |
| 31 | 2/12/19 | 71.8 | 6125 | 7159 | 4508 | 212880 | 6735 | n/a |
| 32 | 2/12/19 | 71.9 | 5924 | 6594 | 4806 | 215660 | 6644 | n/a |

Please insert additional pages as applicable.

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PERFORATION RECORD

| Stage No. | Perforation date | Perforated from MD ft. | Perforated to MD ft. | Number of Perforations | Formation(s) |
|-----------|------------------|------------------------|----------------------|------------------------|--------------|
| 33 | 2/12/19 | 7924 | 7768 | 72 | Marcellus |
| 34 | 2/13/19 | 7722 | 7566 | 72 | Marcellus |
| 35 | 2/13/19 | 7528 | 7382 | 72 | Marcellus |
| 36 | 2/13/19 | 7328 | 7184 | 72 | Marcellus |
| 37 | 2/14/19 | 7142 | 7000 | 72 | Marcellus |
| 38 | 2/14/19 | 6962 | 6830 | 72 | Marcellus |
| 39 | 2/14/19 | 6784 | 6676 | 72 | Marcellus |
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Please insert additional pages as applicable.

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STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

| Stage No. | Stimulations Date | Ave Pump Rate (BPM) | Ave Treatment Pressure (PSI) | Max Breakdown Pressure (PSI) | ISIP (PSI) | Amount of Proppant (lbs) | Amount of Water (bbls) | Amount of Nitrogen/other (units) |
|-----------|-------------------|---------------------|------------------------------|------------------------------|------------|--------------------------|------------------------|----------------------------------|
| 33 | 2/12/19 | 72.5 | 6075 | 7286 | 4672 | 212730 | 5808 | n/a |
| 34 | 2/13/19 | 72.1 | 5891 | 6672 | 4997 | 219490 | 6531 | n/a |
| 35 | 2/13/19 | 72.1 | 5847 | 7038 | 4704 | 212200 | 6494 | n/a |
| 36 | 2/13/19 | 71.9 | 5921 | 7328 | 5226 | 214760 | 6503 | n/a |
| 37 | 2/14/19 | 72.2 | 5867 | 7499 | 5023 | 224230 | 6084 | n/a |
| 38 | 2/14/19 | 71.8 | 5941 | 7203 | 5213 | 221530 | 6454 | n/a |
| 39 | 2/14/19 | 72.4 | 5900 | 8147 | 5345 | 221300 | 5816 | n/a |
| 40 | 2/14/19 | 72.1 | 5749 | 5490 | 4691 | 218740 | 5720 | n/a |
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Please insert additional pages as applicable.

API 47- 095 - 02499-00 Farm name Jay-Bee Oil & Gas, Inc. Well number Moe 3

| <u>PRODUCING FORMATION(S)</u> | <u>DEPTHS</u> | | |
|-------------------------------|---------------|------------|--------------------------|
| <u>Marcellus</u> | <u>6,418'</u> | <u>TVD</u> | <u>14,593'</u> <u>MD</u> |
| _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ |

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 2350 psi Bottom Hole _____ psi DURATION OF TEST 24 hrs

OPEN FLOW Gas 7900 mcfpd Oil 316 bpd NGL n/a bpd Water 790 bpd GAS MEASURED BY Estimated Orifice Pilot

| LITHOLOGY/ FORMATION | TOP | BOTTOM | TOP | BOTTOM | DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC) |
|-------------------------|-------------------------|--------------------|-------------------|-------------------|--|
| | DEPTH IN FT NAME TVD | DEPTH IN FT TVD | DEPTH IN FT MD | DEPTH IN FT MD | |
| Hamilton | 0 | 5550 | 0 | | |
| Upper Marcellus | 5550 | 6305 | | | |
| Parcell Lime | 6305 | 6327 | | | |
| Shale | 6327 | 6331 | | | |
| Lower Marcellus | 6331 | 6368 | | | |
| Onondaga | 6368 | 6417 | | | |
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Please insert additional pages as applicable.

Drilling Contractor Patterson UTI
Address 207 Carlton Drive City Eighty Four State PA Zip 15330

Logging Company Stratgraph NE Inc.
Address 116 Ellsworth Avenue City Marietta State OH Zip 45750

Cementing Company BJ Services
Address 3415 Millennium Boulevard City Massillon State OH Zip 44646

Stimulating Company Frac Tech
Address 600 Town Center Boulevard, Suite 120 City Cannonsburg State PA Zip 15317

Please insert additional pages as applicable.

Completed by Kim Swiger Telephone 304-628-3111
Signature *Kim Swiger* Title Permitting Agent Date 5/19/2020

State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Discharge Monitoring Report
Oil and Gas General Permit

Company Name: Jay-Bee Oil & Gas, Inc.
API No: 47-095-02499 County: Tyler
District: Ellsworth Well No: Moe 3
Farm Name: Jay-Bee Oil & Gas, Inc.
Discharge Date/s From:(MMDDYY) _____ To: (MMDDYY) _____
Discharge Times. From: n/a To: n/a
Total Volume to be Disposed from this facility (gallons): NO DISCHARGE
Disposal Option(s) Utilized (write volumes in gallons):

- (1) Land Application: _____ (Include a topographical map of the Area.)
(2) UIC: _____ Permit No. _____
(3) Offsite Disposal: _____ Site Location: _____
(4) Reuse: _____ Alternate Permit Number: _____
(5) Centralized Facility: _____ Permit No. _____
(6) Other method: _____ (Include an explanation) _____

Follow Instructions below to determine your treatment category:

Optional Pretreatment test: n/a Cl- mg/l n/a DO mg/l

1. Do you have permission to use expedited treatment from the Director or his representative?
(Y/N) N If yes, who? n/a and place a four (4) on line 7.
If not go to line 2
2. Was Frac Fluid or flowback put into the pit? (Y/N) N If yes, go to line 5. If not, go to line 3.
3. Do you have a chloride value pretreatment (see above)? (Y/N) n/a If yes, go to line 4
If not, go to line 5.
4. Is the Chloride level less than 5000 mg/l? (Y/N) n/a If yes, then enter a one (1) on line 7.
5. Do you have a pretreatment value for DO? (See above) (Y/N) n/a If yes, go to line 6
If not, enter a three (3) in line 7.
6. Is the DO level greater than 2.5 mg/l?(Y/N) n/a If yes, enter a two (2) on line 7. If not, enter a three (3) on line 7.
7. n/a is the category of your pit. Use the Appropriate section.
8. Comments on Pit condition: n/a

Name of Principal Exec. Officer: Randy Broda

Title of Officer: President

Date Completed: 5/19/2020

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the 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.

Signature of a Principal Exec. Officer or Authorized agent.

OIL AND GAS RECLAMATION NOTICE

TO:

Name _____

Address _____

Name _____

Address _____

Name _____

Address _____

Pursuant to West Virginia Code 22-7, notice is hereby given that the undersigned well operator is commencing the reclamation of the surface disturbance caused by well work required by West Virginia Code 22-6-30 on the tract of land as follows:

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Environmental Protection

API Permit No. 47- 095 - 02499 _____;

Acreage _____;

Watershed Middle Island Creek _____;

District Ellsworth _____;

County Tyler _____;

Public Road Access Klondike Road _____;

Generally used farm name Jay-Bee Oil & Gas, Inc. _____.

This tract of land was utilized in connection with the well work authorized by the permit listed above issued by the Office of Oil and Gas of the West Virginia Department of Environmental Protection.

Any claim for oil and gas production damage compensation from the undersigned must be made within 2 years of the publication of this notice.

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

Address 3570 Shields Hill Road _____

Cairo, WV 26337 _____

Telephone 304-628-3111 _____

Hydraulic Fracturing Fluid Product Component Information Disclosure

| | |
|--------------------------------|-------------------------|
| Job Start Date: | 1/18/2019 |
| Job End Date: | 2/15/2019 |
| State: | West Virginia |
| County: | Tyler |
| API Number: | 47-095-02499-00-00 |
| Operator Name: | Jay-Bee Oil & Gas, Inc. |
| Well Name and Number: | Moe 3 |
| Latitude: | 39.46806600 |
| Longitude: | -80.88749500 |
| Datum: | NAD27 |
| Federal Well: | NO |
| Indian Well: | NO |
| True Vertical Depth: | 5,900 |
| Total Base Water Volume (gal): | 11,070,780 |
| Total Base Non Water Volume: | 77,001 |

Hydraulic Fracturing Fluid Composition:

| Trade Name | Supplier | Purpose | Ingredients | Chemical Abstract Service Number (CAS #) | Maximum Ingredient Concentration in Additive (% by mass)** | Maximum Ingredient Concentration in HF Fluid (% by mass)** | Comments |
|--------------------|----------------------|-------------------------|-------------|--|--|--|----------|
| Water | Supplied by Operator | Base Fluid | Water | 7732-18-5 | 100.00000 | 90.92951 | |
| Other Chemical (s) | Listed Above | See Trade Name (s) List | Water | 7732-18-5 | 55.00000 | 0.01407 | |



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|---------------|------|--------------------------|-------|--------------|----------|---------|--|
| | | | Water | 7732-18-5 | 85.00000 | 0.44690 | |
| | | | Water | 7732-18-5 | 55.00000 | 0.01388 | |
| | | | Water | 7732-18-5 | 50.00000 | 0.04432 | |
| 100 Mesh Sand | FTSI | Proppant | | Listed Below | | | |
| | | | | | | | |
| ICI-3240 | FTSI | Biocide | | Listed Below | | | |
| | | | | | | | |
| CI-150 | FTSI | Acid Corrosion Inhibitor | | Listed Below | | | |
| | | | | | | | |
| HVG-1 4.0 | FTSI | Water gelling agent | | Listed Below | | | |
| | | | | | | | |
| FRW-1450 | FTSI | Friction Reducer | | Listed Below | | | |
| | | | | | | | |
| 30/50 White | FTSI | Proppant | | Listed Below | | | |
| | | | | | | | |
| CS-1000 SI | FTSI | Scale Inhibitor | | Listed Below | | | |
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|---|------|----------|---|------------|--------------|---------|--|--|--|
| SPB-1 | FTSI | Breaker | | | Listed Below | | | | |
| 20/40 White | FTSI | Proppant | | | Listed Below | | | | |
| 10.1%-15.0% HCL | FTSI | Acid | | | Listed Below | | | | |
| 40/70 White | FTSI | Proppant | | | Listed Below | | | | |
| Items above are Trade Names with the exception of Base Water. Items below are the individual ingredients. | | | | | | | | | |
| | | | Silica, Quartz | 14808-60-7 | 100.00000 | 3.25316 | | | |
| | | | Silica, Quartz | 14808-60-7 | 100.00000 | 2.98255 | | | |
| | | | Silica, Quartz | 14808-60-7 | 100.00000 | 1.47413 | | | |
| | | | Silica, Quartz | 14808-60-7 | 100.00000 | 0.67128 | | | |
| | | | Hydrogen Chloride | 7647-01-0 | 15.00000 | 0.07887 | | | |
| | | | Distillates (petroleum), hydrotreated light | 64742-47-8 | 30.00000 | 0.02659 | | | |
| | | | Cationic Polyacrylamide | 9003-05-8 | 30.00000 | 0.02659 | | | |
| | | | Petroleum Distillate | 64742-47-8 | 55.00000 | 0.00925 | | | |
| | | | Raffinates, Sorption Process | 64741-85-1 | 55.00000 | 0.00925 | | | |
| | | | Guar gum | 9000-30-0 | 55.00000 | 0.00925 | | | |
| | | | Phosphonic Acid, {Nitrilotris (methylene)} Tris | 6419-19-8 | 35.00000 | 0.00883 | | | |
| | | | Sodium Perborate Tetrahydrate | 10486-00-7 | 98.00000 | 0.00626 | | | |

| | | | | | |
|--|---|-------------|----------|---------|--|
| | Dazomet (Tetrahydro-3,5-dimethyl-2H-1,3,5-thiadiazine-2-thione. | 533-74-4 | 24.00000 | 0.00614 | |
| | Sodium Hydroxide | 1310-73-2 | 23.00000 | 0.00586 | |
| | Alcohols, C11-14-iso-, C13-rich, ethoxylated | 78330-21-9 | 5.00000 | 0.00443 | |
| | Phosphonic Acid, ((Dimethylamino) Methylene) Bis - | 29712-30-9 | 5.00000 | 0.00126 | |
| | Methanol | 67-56-1 | 90.00000 | 0.00085 | |
| | Suspending Agent | 1302-78-9 | 5.00000 | 0.00084 | |
| | Quartz | 14808-60-7 | 4.00000 | 0.00067 | |
| | Phosphorous Acid | 10294-56-1 | 2.00000 | 0.00050 | |
| | Isotridecanol, ethoxylated | 9043-30-5 | 2.00000 | 0.00034 | |
| | Orthophosphoric acid | 7664-38-2 | 0.75000 | 0.00019 | |
| | Thiourea-formaldehyde Copolymer | 68527-49-1 | 10.00000 | 0.00009 | |
| | Fatty Acids, Tall Oil | 61790-12-3 | 10.00000 | 0.00009 | |
| | Alcohol Ethoxylate Surfactants | Proprietary | 10.00000 | 0.00009 | |
| | Sodium Metaborate | 7775-19-1 | 1.40000 | 0.00009 | |
| | Propargyl Alcohol | 107-19-7 | 5.00000 | 0.00005 | |
| | N-olefins | Proprietary | 3.00000 | 0.00003 | |
| | Hydrochloric acid | 7647-01-0 | 0.00500 | 0.00000 | |

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Office of Oil and Gas
JUN 12 2020
WV Department of Environmental Protection

* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water
** Information is based on the maximum potential for concentration and thus the total may be over 100%
*** If you are calculating a percentage of total ingredients do not add the water volume below the green line to the water volume above the green line

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.
Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

References

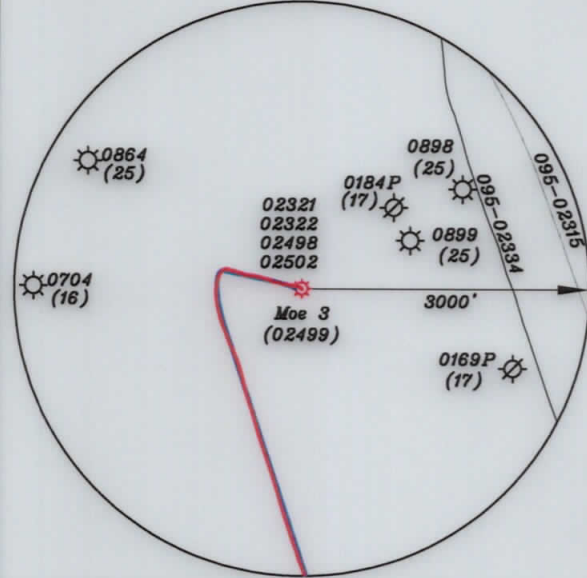


— LEGEND —

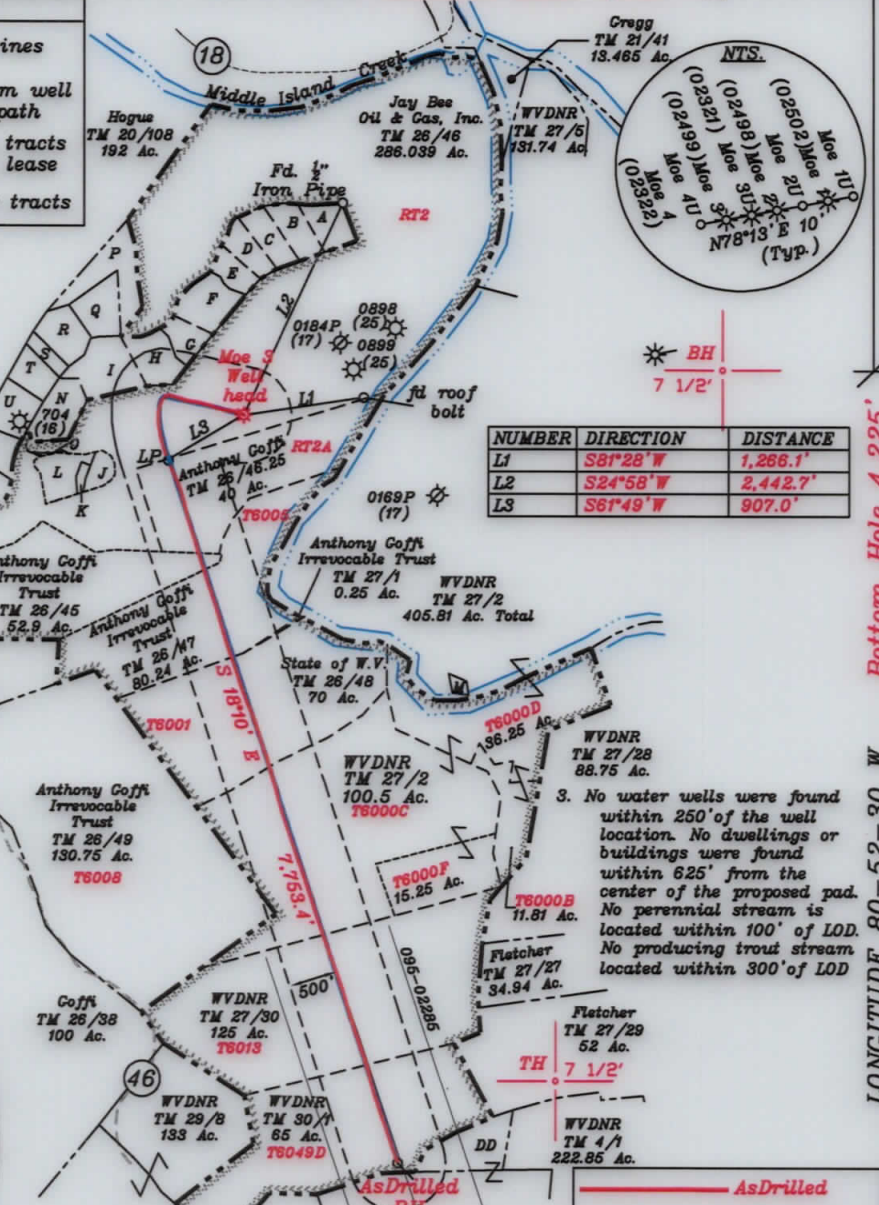
- Lease lines
- 500' from well bore path
- Surface tracts within lease
- Adjoiner tracts

- A-Sulser TM. 20-110 4.412 Ac.
- B-Kelly et al TM. 26-46.18 4.323 Ac.
- C-Kelly et al TM. 26-46.17 4.114 Ac.
- D-Johnson TM. 26-46.23 3.598 Ac.
- E-Johnson TM. 26-46.22 2.92 Ac.
- F-Holliday TM. 26-46.13 5.94 Ac.
- G-Holliday TM. 26-46.12 3.238 Ac.
- H-Kanz TM. 26-46.3 5.4 Ac.
- I-Patera TM. 26-46.7 7.32 Ac.
- J-Peek TM. 26-46.8 2.079 Ac. DOAN
- K-Peek TM. 26-46.20 0.652 Ac. DOAN
- L-Peek TM. 26-46.19 4.59 Ac. DOAN
- M-WVDNR TM. 27-3 0.44 Ac.
- N-Shrader TM. 26-46.1 5.58 Ac.
- O-Peek TM. 26-46.21 0.22 Ac.
- P-JayBee TM. 26-46.14 8.692 Ac.
- Q-Pittman TM. 26-46.2 5.135 Ac.
- R-Johnson TM. 26-46.9 5 Ac.
- S-Patera TM. 26-46.6 1.702 Ac.
- T-Patera TM. 26-46.15 3.722 Ac.
- U-JayBee TM. 26-46.16 5.094 Ac.
- V-Ison TM. 26-46.10 4.98 Ac.
- W-Doty TM. 26-46.5 13.14 Ac.
- X-Kanz TM. 26-46.4 8.1 Ac.
- Y-Walton TM. 26-46.11 6.43 Ac.
- Z-JayBee TM. 26-46.24 3.059 Ac.
- AA-Palmer TM. 26-19.11 9.40 Ac.
- BB-Westbrook TM. 26-19.4 9.36 Ac.
- CC-JayBee Oil & Gas, Inc. TM. 26-19.9 1.496 Ac.
- DD-WVDNR TM. 30-3 51.06 Ac.

NORTH



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



| NUMBER | DIRECTION | DISTANCE |
|--------|-----------|----------|
| L1 | S81°28'W | 1,266.1' |
| L2 | S24°58'W | 2,442.7' |
| L3 | S61°49'W | 907.0' |

As Drilled
Permitted

- Notes:
- All wells within 500' of the horizontal leg are shown on this plat based upon information taken from DEP mapping, well plats, & aerial photos.
 - Ties to wells and corners are based on State Plane Grid North-WV North Zone NAD 83.

Top Hole - TH
UTM NAD 83(Meters)-4368726.66 N, 509677.67 E
Landing Point - LP
UTM NAD 83(Meters)-4368599.39 N, 509437.78 E
Bottom Hole - BH
UTM NAD 83(Meters)-4368359.95 N, 510210.47 E
Top Hole - TH
UTM NAD 83(Meters)-4368726.55 N, 509677.51 E
Landing Point - LP
UTM NAD 83(Meters)-4368592.00 N, 509436.14 E
Bottom Hole - BH
UTM NAD 83(Meters)-4368359.89 N, 510209.96 E

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 October 01, 2019
OPERATOR'S WELL NO. Moe 3
API WELL NO. _____

WELL TYPE: OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____ STATE 47 COUNTY 095 PERMIT 02499
(IF "GAS") PRODUCTION X STORAGE _____ DEEP _____ SHALLOW X

LOCATION: ELEVATION 962.3' WATER SHED Outlet Middle Island Creek (HUC-10)
DISTRICT Ellsworth COUNTY Tyler
QUADRANGLE Middlebourne 7 1/2'

SURFACE OWNER Jay Bee Oil & Gas, Inc. ACREAGE 286.03 ac.
OIL & GAS ROYALTY OWNER Ridgetop Capital LP and Ridgetop Capital II, LP LEASE ACREAGE 286.03 ac.
LEASE NO. RT2

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

PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
TARGET FORMATION Marcellus ESTIMATED DEPTH TVD = 6,418' TMD = 14,593'
WELL OPERATOR Jay-Bee Oil & Gas, Inc. DESIGNATED AGENT Randy Broda
ADDRESS 60 Walnut Avenue, Suite 190, Clark, NJ 07066 ADDRESS 3570 Shields Hill Rd., Cairo, WV 26337

LONGITUDE 80-52-30 W
Bottom Hole 4,225'
Top Hole 11,632'

