

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

API 47 - 095 - 02621 County Tyler District McElroy
Quad Shirley 7.5 Pad Name Doc Field/Pool Name _____
Farm name Francis W. Tennant Sr. & Randy W. Tustin Well Number 3
Operator (as registered with the OOG) Jay Bee Oil and Gas, Inc
Address 16 South Avenue West, Ste 18 City Cranford State NJ Zip 07016

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4366648.56 Easting 519941.26
Landing Point of Curve Northing 4366674.45 Easting 519931.20
Bottom Hole Northing 4365578.73 Easting 521020.06

Elevation (ft) 1,039.9' 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)
Synthetic Based Mud (SOBM), K-49 (Base Oil), Barite, Anco Mul P, Anco Mul S, Anco Mul OW, Anco Mul XL, Anco Mul Mod
Anco Mul OW, Claytone 3, Lime, Calcium Chloride Powder, Phalt S, Mica, Cal-Carb

Date permit issued 07/9/2019 Date drilling commenced 10/28/2019 Date drilling ceased 12/28/2021
Date completion activities began 3/6/2022 Date completion activities ceased 3/27/2022
Verbal plugging (Y/N) NA Date permission granted NA Granted by NA RECEIVED
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Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug AUG 23 2022

Freshwater depth(s) ft 60-90' 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:
SM 03/17/2023
11/23/22

API 47- 095 - 02621 Farm name Francis W. Tennant Sr. & Randy W. Tustin Well number 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	24	18.625	30	N		NA	Y
Surface	17.5	13.375	336	N	48#/H40	50	Y
Coal							
Intermediate 1	11	8.625	2,288	N	24#/J55	100'/2200'	Y
Intermediate 2							
Intermediate 3							
Production	7.875	5-1/2	12,344	N	20#/P110	NA	NO. (per design to 300')
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	Class A, 2%CaCl, 1/4 flake					SURFACE	8
Surface	Class A, 2%CaCl, 1/4 flake	330	15.60	1.1966	394	SURFACE	8
Coal							
Intermediate 1	Class A, 2%CaCl	682	15.6	1.18	808	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	CLASS A, FLY ASH, MPA-170, R-3	2,374	14.50	1.17	2,784	300'	8
Tubing							

Drillers TD (ft) 12,344 MD Loggers TD (ft) 12,344
 Deepest formation penetrated MARCELLUS Plug back to (ft) NA
 Plug back procedure NA

Kick off depth (ft) 6,427'

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 **RECEIVED**
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DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____ AUG 23 2022
5-1/2": Vertical Hole: bow spring every 500'. Horizontal: every 42' spiral centralizer. Curve: every 84' spiral centralizer
8-5/8": Bow Spring every 375'
13-3/8": Bow Spring every joint WV Department of Environmental Protection

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 _____

03/17/2023
SM 11/25

API 47- 095 - 02621 Farm name Francis W. Tennant Sr. & Randy W. Tustin Well number DOC 3

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	3-6-22	12277	12168	72	MARCELLUS
2	3-6-22	12134	11988	72	MARCELLUS
3	3-7-22	11938	11782	72	MARCELLUS
4	3-7-22	11724	11607	72	MARCELLUS
5	3-8-22	11560	11390	72	MARCELLUS
6	3-8-22	11340	11209	72	MARCELLUS
7	3-9-22	11164	11022	72	MARCELLUS
8	3-9-22	10974	10820	72	MARCELLUS
9	3-10-22	10774	10630	72	MARCELLUS
10	3-11-22	10596	10482	72	MARCELLUS
11	3-11-22	10432	10306	72	MARCELLUS
12	3-13-22	10245	10094	72	MARCELLUS
13	3-13-22	10054	9914	72	MARCELLUS
14	3-14-22	9867	9761	72	MARCELLUS
15	3-15-22	9714	9552	72	MARCELLUS
16	3-15-22	9516	9388	72	MARCELLUS

Please insert additional pages as applicable.

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STIMULATION INFORMATION PER STAGE

AUG 23 2022

Complete a separate record for each stimulation stage.

WV Department of
Environmental Protection

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)	Environmental Protection Nitrogen/other (units)
1	3-6-22	70.9	6781	N/A	3339	249860	8450	N/A
2	3-7-22	70.7	6676	6143	4800	260624	9946	N/A
3	3-7-22	70.2	6621	6183	4852	260298	8732	N/A
4	3-8-22	71.0	6810	4126	4798	258922	9890	N/A
5	3-8-22	70.2	6478	6124	4763	246965	8431	N/A
6	3-8-22	71.2	6477	5472	4788	259448	8190	N/A
7	3-9-22	70.2	6487	6298	4536	260746	8746	N/A
8	3-9-22	71.2	6564	5607	4606	259609	8167	N/A
9	3-10-22	71.1	6215	5603	4223	260040	8183	N/A
10	3-11-22	71.1	6535	6231	4455	256325	8648	N/A
11	3-11-22	71.3	6437	5696	3913	259980	8158	N/A
12	3-13-22	70.9	6400	5874	3811	262329	8664	N/A
13	3-13-22	71.1	6226	5852	3881	224461	7874	N/A
14	3-14-22	71.1	6254	6308	4185	260014	8128	N/A
15	3-15-22	71.0	6323	6437	4019	259906	8574	N/A
16	3-15-22	71.1	6374	6166	4428	259947	8129	N/A

Please insert additional pages as applicable.

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08/17/2023
11/23

API 47- 095 - 02621 Farm name Francis W. Tennant Sr. & Randy W. Tustin Well number DOC 3

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
17	3-16-22	9350	9207	72	MARCELLUS
18	3-16-22	9168	9026	72	MARCELLUS
19	3-16-22	8992	8831	72	MARCELLUS
20	3-17-22	8788	8624	72	MARCELLUS
21	3-17-22	8585	8436	72	MARCELLUS
22	3-18-22	8402	8278	72	MARCELLUS
23	3-18-22	8203	8088	72	MARCELLUS
24	3-18-22	8056	7926	72	MARCELLUS
25	3-18-22	7880	7731	72	MARCELLUS
26	3-19-22	7682	7542	72	MARCELLUS
27	3-19-22	7494	7314	72	MARCELLUS

Please insert additional pages as applicable.

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STIMULATION INFORMATION PER STAGE

AUG 23 2022

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)	WV Department of Environmental Protection Amount of Nitrogen/other (units)
17	3-16-22	70.8	6309	6056	4172	260082	8557	N/A
18	3-16-22	71.2	6339	5573	4626	259142	8092	N/A
19	3-17-22	70.8	6289	5734	4087	257263	8050	N/A
20	3-17-22	71.1	6311	5497	4119	260006	8622	N/A
21	3-17-22	71.2	6219	5621	4618	260560	8112	N/A
22	3-18-22	71.3	6228	5846	4504	259989	8370	N/A
23	3-18-22	71.1	5961	5777	4799	262664	8056	N/A
24	3-18-22	71.1	6122	5622	4304	262664	8110	N/A
25	3-19-22	70.9	5994	6262	4521	260057	8107	N/A
26	3-19-22	70.9	6153	6606	4390	260154	8351	N/A
27	3-19-22	71.3	6114	5901	4075	268904	8365	N/A

Please insert additional pages as applicable.

SM
03/17/2023
1113

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:

API Permit No. 47- 095 - 02621 _____ ;
Acreage 11.47 _____ ;
Watershed Indian Creek of Outlet Middle Island Creek (HUC-10) _____ ;
District McElroy _____ ;
County Tyler _____ ;
Public Road Access Indian Creek Rd. _____ ;
Generally used farm name Francis W. Tennant Sr. & Randy W. Tustin _____ .

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 429 Simonton Rd. _____
Ellenboro, WV 26346 _____
Telephone 304-628-3111 _____

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PAD-WELL	Doc No. 3			
ELEVATION	1039			
PERMIT	47-095-02621			
	TOP TVD	BOTTOM TVD		
Carroll Sand	340	392		
Murphy Sand	452	499		
1st Cow Run Sand	540	592		
Little Dunkard Sand	667	680		
Dunkard Sand	707	803		
sandstone	917	929		
2nd Cow Run Sand	1043	1058		
Gas Sand	1210	1230		
1st Salt	1310	1354		
2nd Salt	1505	1605		
3rd Salt	1910	1961		
Maxon				
Big Lime	2007	2062		
Big Injun	2132	2211	Gas show	
Berea				
Gordon	2800	2807	Gas show	
Fifth	3008	3012		
Warren	3495	3541		
Riley	4302	4315		
Benson	4993	4996		
Alexander	5403	5450		
Hamilton	5661	6049		
Upper Marcellus (Geneseo)	6713	6746	Gas show	
Purcell (Tully Lm)	6746	6751		
Marcellus	6798		Gas show	
Cherry Valley				

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03/17/2023

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	3/6/2022
Job End Date:	3/19/2022
State:	West Virginia
County:	Tyler
API Number:	47-095-02621-00-00
Operator Name:	Jay-Bee Oil & Gas, Inc.
Well Name and Number:	Doc 3
Latitude:	39.44917900
Longitude:	-80.76824000
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,825
Total Base Water Volume (gal):	9,788,804
Total Base Non Water Volume:	0



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	91.88494	
DynaRate™ 6459	CWS	Friction Reducer					
				Listed Below			

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Hydrochloric Acid	CWS	Clean Perforations					
				Listed Below			
Sand (Proppant)	CWS	Propping Agent					
				Listed Below			
CalGuard™ 9100	CWS	Corrosion Inhibitor					
				Listed Below			
MBC 12:3	CWS	Microbiocide					
				Listed Below			
CalBreak™ 5700	CWS	Breaker					
				Listed Below			
CalGel™ 4000	CWS	Gel Slurry					
				Listed Below			
DynaScale™ 3511	CWS	Scale Inhibitor					
				Listed Below			
Other Chemical (s)	Listed Above	See Trade Name (s) List					
				Listed Below			
Items above are Trade Names with the exception of Base Water . Items below are the individual ingredients.							
			Crystalline silica (Quartz)	14808-60-7	100.00000	7.83873	
			Hydrochloric acid	7647-01-0	37.00000	0.15269	

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			Calcite	471-34-1	1.00000	0.05418
			Illite	12173-60-3	1.00000	0.02420
			Goethite	1310-14-1	0.10000	0.00784
			Biotite	1302-27-8	0.10000	0.00784
			Apatite	64476-38-6	0.10000	0.00784
			Guar gum	9000-30-0	60.00000	0.00641
			Distillates (petroleum), hydrotreated middle	64742-46-7	60.00000	0.00641
			Glutaraldehyde	111-30-8	14.00000	0.00326
			Ilmenite	98072-94-7	0.10000	0.00242
			Ethanol	64-17-5	3.00000	0.00070
			Alkyl dimethyl benzyl ammonium chloride	68424-85-1	3.00000	0.00070
			Didecyl dimethyl ammonium chloride	7173-51-5	3.00000	0.00070
			Quaternary ammonium compounds, bis (hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-58-2	5.00000	0.00053
			Oxirane, 2-methyl-, polymer with oxirane, monodecyl ether	37251-67-5	1.50000	0.00016
			Ethylene Glycol	107-21-1	40.00000	0.00010
			Ammonium chloride (NH ₄)Cl	12125-02-9	5.00000	0.00008
			Distillates (petroleum), hydrotreated light	64742-47-8	3.00000	0.00008
			Diethylene glycol, monomethyl ether	34590-94-8	20.00000	0.00005
			Hydrogen peroxide (H ₂ O ₂)	7722-84-1	8.00000	0.00004
			Ethoxylated Alcohols	68131-39-5	10.00000	0.00002
			Cinnamaldehyde	104-55-2	10.00000	0.00002
			Formic acid	64-18-6	10.00000	0.00002
			Tar bases, quinolone derivs, benzyl chloride- quatenized	72480-70-7	10.00000	0.00002

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			Organic Acid Ether	Proprietary		0.00001	Proprietary CAS & Additive Concentration
			Inorganic Acid Salt	Proprietary		0.00001	Proprietary CAS & Additive Concentration
			Isopropyl alcohol	67-63-0	5.00000	0.00001	
			Inorganic Salt	Proprietary		0.00001	Proprietary CAS & Additive Concentration
			Proprietary Polymer 1	Proprietary		0.00001	Proprietary CAS & Additive Concentration

* 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

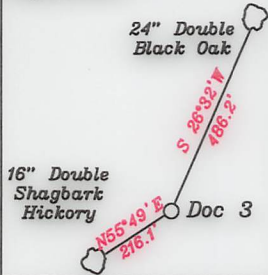
Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

Ingredient information for chemicals subject to 29 CFR 1910.1200(l) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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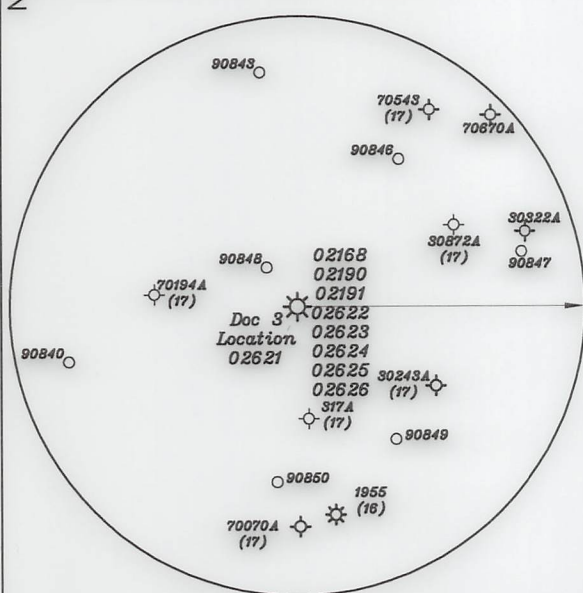
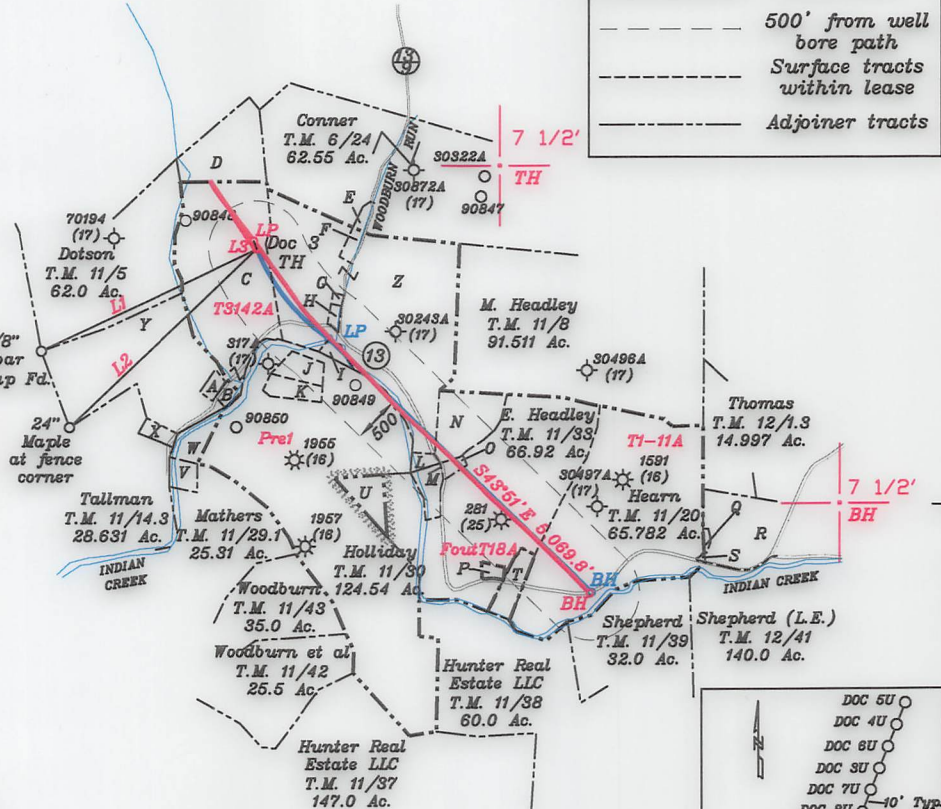
References:



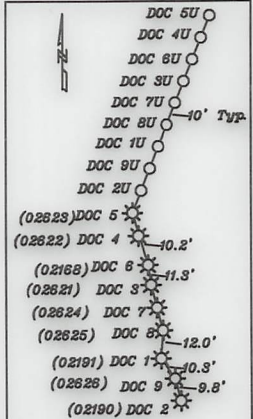
— LEGEND —

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

- A- R. Dotson T.M. 11/5.2 1.0 Ac.
- B- Straight T.M. 11/15 0.88 Ac.
- C- Tennant & Tustin T.M. 11/6 46.51 Ac.
- D- Jay Bee Oil & Gas, Inc T.M. 6/35.1 8.0 Ac.
- E- Fields & Leisure T.M. 11/52 1.25 Ac.
- F- Hoover T.M. 11/17.4 1.12 Ac. **T3048A**
- G- Hoover T.M. 11/17.2 0.25 Ac. **T3048B3**
- H- Lancaster T.M. 11/17.3 0.6 Ac. **T3048B2**
- I- Mt. Zion Cemetery T.M. 11/16 0.88 Ac. **Pre1**
- J- Victory Cemetery Association T.M. 11/30.4 3.76 Ac. **Pre2,3**
- K- Victory Cemetery Association T.M. 11/30.5 2.70 Ac. **Pre2,3**
- L- Wilson & Black T.M. 11/17.1 0.65 Ac. **T3048A3**
- M- Wilson & Black T.M. 11/31 2.4 Ac. **T3048A4**
- N- M. Headley T.M. 11/33.1 9.227 Ac. **FoudT18B**
- O- Eureka T.M. 11/32 0.88 Ac. **FoudT18A**
- P- T. Headley T.M. 11/34 0.78 Ac. **FoudT18A**
- Q- Lancaster T.M. 12/1.1 0.298 Ac.
- R- Thomas T.M. 12/1.2 14.702 Ac.
- S- Thomas T.M. 12/67.1 0.095 Ac.
- T- Lancaster T.M. 11/35 1.32 Ac. **FoudT18A**
- U- Holliday T.M. 11/30.1 12 Ac.
- V- Holliday T.M. 11/30.2 0.56 Ac.
- W- Holliday T.M. 11/30.3 0.52 Ac.
- X- Woodburn et al T.M. 11/14.1 2.0 Ac.
- Y- E. Dotson T.M. 11/5.1 37.0 Ac.
- Z- Hoover T.M. 11/17 73.36 Ac. **T3048A**



Top Hole - TH	
Geo NAD 83-	39.449166 N, 80.768237 W
UTM NAD 83(Meters)-	4366648.56 N, 519941.26 E
UTM NAD 83(Feet)-	14326246.15 N, 1705840.63 E
Landing Point - LP	
Geo NAD 83-	39.449399 N, 80.768953 W
UTM NAD 83(Meters)-	4366674.45 N, 519931.20 E
UTM NAD 83(Feet)-	14326331.09 N, 1705807.62 E
Bottom Hole - BH	
Geo NAD 83-	39.439500 N, 80.755733 W
UTM NAD 83(Meters)-	4365578.73 N, 521020.06 E
UTM NAD 83(Feet)-	14322736.22 N, 1709379.99 E



NUMBER	DIRECTION	DISTANCE
L1	N64°43'E	2,479.8'
L2	N46°31'E	2,684.7'
L3	N20°17'W	91.2'

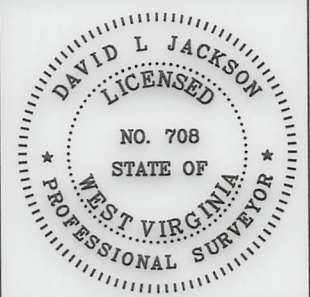
Top Hole - TH	
Geo NAD 83-	39.449166 N, 80.768239 W
UTM NAD 83(Meters)-	4366648.62 N, 519941.10 E
UTM NAD 83(Feet)-	14326246.36 N, 1705840.10 E
Landing Point - LP	
Geo NAD 83-	39.446676 N, 80.765536 W
UTM NAD 83(Meters)-	4366372.88 N, 520174.40 E
UTM NAD 83(Feet)-	14325341.69 N, 1706605.50 E
Bottom Hole - BH	
Geo NAD 83-	39.439531 N, 80.755676 W
UTM NAD 83(Meters)-	4365582.16 N, 521024.93 E
UTM NAD 83(Feet)-	14322747.46 N, 1709395.96 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 August 05, 2022
 OPERATOR'S WELL NO. Doc 3
 API WELL NO. _____

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

LOCATION: ELEVATION 1,039.9' WATER SHED Indian Creek of Outlet Middle Island Creek (HUC-10)
 DISTRICT McElroy COUNTY Tyler
 QUADRANGLE Shirley 7 1/2'

SURFACE OWNER Francis W. Tennant Sr. & Randy W. Tustin ACREAGE 46.51 Ac.
 OIL & GAS ROYALTY OWNER Arnold Schulberg LEASE ACREAGE 46.51 Ac.
 LEASE NO. See Above **03/17/2023**

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 = 6,829'; TMD = 12,433'
 WELL OPERATOR Jay-Bee Oil & Gas, Inc. DESIGNATED AGENT Deborah Broda-Morgan
 ADDRESS 16 South Ave. W., Ste 118, Cranford NJ 07016 ADDRESS 429 Simonton Rd., Ellenboro, WV 26346