

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

API 47- _____ - _____ County _____ District _____
Quad _____ Pad Name _____ Field/Pool Name _____
Farm name _____ Well Number _____
Operator (as registered with the OOG) _____
Address _____ City _____ State _____ Zip _____

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

Elevation (ft) _____ 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)

Date permit issued _____ Date drilling commenced _____ Date drilling ceased _____
Date completion activities began _____ Date completion activities ceased _____
Verbal plugging (Y/N) _____ Date permission granted _____ Granted by _____

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

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

Reviewed by:

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Reviewed by:

API 47- _____ - _____ Farm name _____ Well number _____

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							
Surface							
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
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							
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
Tubing							

Drillers TD (ft) _____ Loggers TD (ft) _____
 Deepest formation penetrated _____ Plug back to (ft) _____
 Plug back procedure _____

Kick off depth (ft) _____

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 _____

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

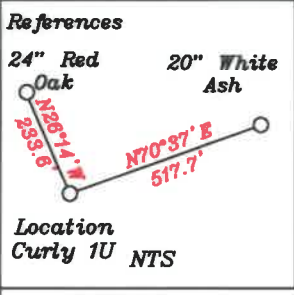
WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

PAD WELL
ELEVATION
PERMIT

Curly 1U
1123
47-095-02446

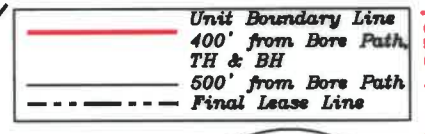
TOP TVD BOTTOM TVD

Red Rock	349	477	
Black slate	618	645	
Red Rock	645	758	
1st Cow Run	677	699	
2nd Cow Run	771	815	
Gas Sand	1241	1255	
1st Salt	1417	1448	
2nd Salt	1612	1699	
3rd Salt	1890	1958	
Maxon			
Big Lime	2023	2080	
Big Injun	2148	2229	show gas
Berea			
Gordon	2816	2825	show gas
Fifth	3024	3032	
Warren	3511	3559	
Riley	4318	4336	
Benson	5009	5013	show gas
Alexander	5419	5466	show gas
Hamilton	5677	6066	
Upper Marcellus (Geneseo)	6428	6450	
Purcell (Tully Lm)	6450	6454	
Marcellus	6490	6534	show gas
Onondaga	6534	6768	
Oriskany	6768	6836	
Hilderburg	6836	7241	
xxxx			
Bass Island	7241	7311	
Salina	7311	8100	
Wills Creek	8100	8333	
Lockport	8333	8511	
Newburg (Williamsport)			
McKenzie	8511	8623	
Keefer			
Rose Hill	8623	9096	
Packer Shell	9096	9143	
Tuscarora	9146	9289	
Medina			
Queenston	9289	10152	
Reedsville	10152	11177	
Utica	11177	11341	
Pt. Pleasants	11341		show gas
Lexington			
Trenton			

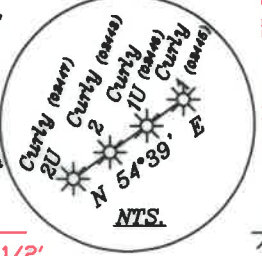


LATITUDE 39-30-00 N (TH)
 LATITUDE 39-27-30 N (BH)

Top Hole 6,245'
 Bottom Hole 3,411'

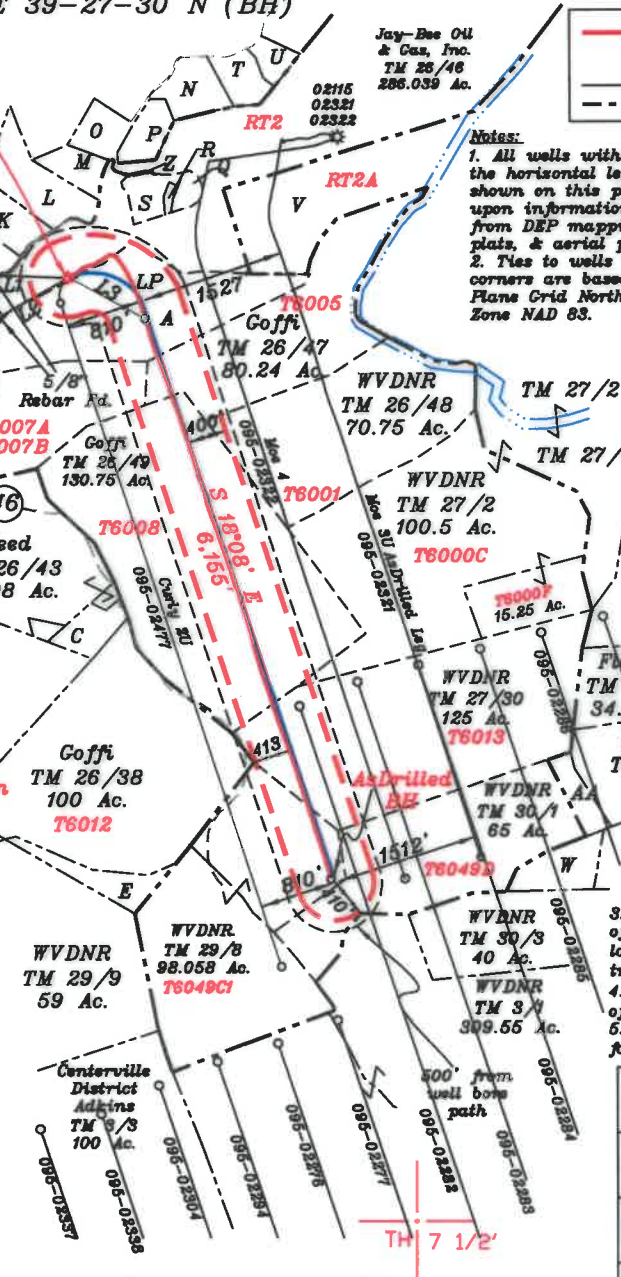


Notes:
 1. All wells within 500' of the horizontal leg are shown on this plat based upon information taken from DEP mapping, well plats, & aerial photos.
 2. Ties to wells and corners are based on State Plane Grid North-WV North Zone NAD 83.

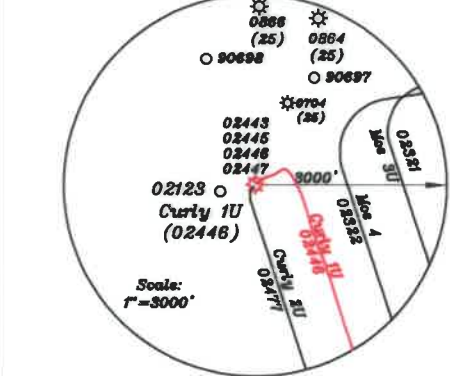


Note: Revised south line of T.M. 29/8 on 8-30-2017

- A- Coffi TM 26-45 52.9 Ac. (7)
- B- Coffi TM 26/44 39 Ac.
- C- Reed et al TM 26/39 8.17 Ac.
- D- Keller TM 26/4 16.20 Ac.
- E- WVDNR TM 29/7 7.5 Ac.
- F- Reed TM 26/42 13 Ac.
- G- Westbrook TM 26/19.4 9.36 Ac.
- H- Jay Bee Oil & Gas TM 26/19.9 0.796 Ac.
- I- Jay Bee Oil & Gas TM 26/46.24 2.369 Ac.
- J- Walton TM 26/46.11 6.43 Ac. TM 26/43
- K- Kanz TM 26/46.4 8.1 Ac. 36.08 Ac.
- L- Patera TM 26/46.15 3.722 Ac.
- M- Ison TM 26/46.10 4.98 Ac.
- N- Patera TM 26/46.7 5.58 Ac.
- O- Jay-Bee Production Co. TM 26/46.16 5.094 Ac.
- P- Shrader TM 26/46.1 5.58 Ac.
- Q- Peek TM 26/46.8 2.079 Ac. Doan
- R- Peek TM 26/46.20 0.652 Ac. Doan
- S- Peek TM 26/46.19 4.59 Ac. Doan
- T- Kanz TM 26/46.3 5.4 Ac.
- U- Holliday TM 26/46.12 3.238 Ac.
- V- Coffi TM 26/46.25 40.25 Ac.
- W- WVDNR TM 30/3 11.06 Ac.
- X- Palmer TM 26/19.11 9.40 Ac.
- Y- Coleman TM 26/46.25 1.39 Ac.
- Z- Peek TM 26/46.21 0.22 Ac. Doan
- AA- WVDNR TM 30/2 6 Ac.



- 3. No water wells were found within 250' of the location. No perennial stream is located within 100' of LOD. No producing trout stream located within 300' of LOD.
- 4. A cabin bears N30°13'W at a distance of 639' from the center of the pad.
- 5. Deep wells 02321 & Curly 2U were found within 3000' of this well bore.



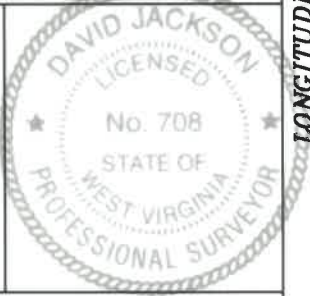
NUMBER	DIRECTION	DISTANCE
L1	S89°19' W	800'
L2	S62°49' W	831'
L3	S60°29' E	946'

Top Hole	NAD 83 (Meters)-4368258.9 N, 508849.4 E
Landing Point	NAD 83 (Meters)-4368193.2 N, 509083.6 E
Bottom Hole	NAD 83 (Meters)-4366351.8 N, 509723.6 E
Top Hole	NAD 83 (Meters)-4368258.8 N, 508849.5 E
Landing Point	NAD 83 (Meters)-4368120.9 N, 509102.7 E
Bottom Hole	NAD 83 (Meters)-4366348.8 N, 509716.2 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 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. Curly 1U
 API WELL NO. _____

WELL TYPE: OIL X GAS X LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF 'GAS') PRODUCTION X STORAGE _____ DEEP X SHALLOW _____
 LOCATION: ELEVATION 1,124.9' WATER SHED Middle Island Creek
 DISTRICT Ellsworth COUNTY Tyler
 QUADRANGLE Middlebourne 7 1/2'
 SURFACE OWNER Jay-Bee Oil & Gas Inc. ACREAGE 286.039 Ac.
 OIL & GAS ROYALTY OWNER Ridgetop Capital LP, & Ridgetop Capital II, LP PLEASE ACREAGE 286.039 Ac.
 LEASE NO. RT2

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

PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
 TARGET FORMATION Point Pleasant ESTIMATED DEPTH TVD = 11,396' TMD = 18,010'
 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
 Top Hole 13,164'
 Bottom Hole 4,259'

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	11/7/2018
Job End Date:	12/6/2018
State:	West Virginia
County:	Tyler
API Number:	47-095-02446-00-00
Operator Name:	Jay-Bee Oil & Gas, Inc.
Well Name and Number:	Curly 1U
Latitude:	39.46386100
Longitude:	-80.89712700
Datum:	NAD27
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	8,000
Total Base Water Volume (gal):	13,725,600
Total Base Non Water Volume:	80,163



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	87.62676	
Other Chemical (s)	Listed Above	See Trade Name (s) List					
			Water	7732-18-5	50.00000	0.05108	

			Water	7732-18-5	55.00000	0.01378	
			Water	7732-18-5	85.00000	0.31447	
			Water	7732-18-5	55.00000	0.01355	
10.1%-15.0% HCL	FTSI	Acid					
				Listed Below			
FRW-1450	FTSI	Friction Reducer					
				Listed Below			
100 Mesh Sand	FTSI	Proppant					
				Listed Below			
30/50 White	FTSI	Proppant					
				Listed Below			
CS-1000 SI	FTSI	Scale Inhibitor					
				Listed Below			
HVG-1 4.0	FTSI	Water gelling agent					
				Listed Below			
CI-150	FTSI	Acid Corrosion Inhibitor					
				Listed Below			

40/70 White	FTSI	Proppant					
				Listed Below			
ICI-3240	FTSI	Biocide					
				Listed Below			
SPB-1	FTSI	Breaker					
				Listed Below			
30/50 CarboLite	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	4.85980	
			Silica, Quartz	14808-60-7	100.00000	4.78037	
			Silica, Quartz	14808-60-7	100.00000	1.94090	
			Mullite	1302-93-8	85.00000	0.19694	
			Silicon Dioxide	7631-86-9	35.00000	0.08109	
			Hydrogen Chloride	7647-01-0	15.00000	0.05549	
			Silica Crystalline- Cristobalite	14464-46-1	20.00000	0.04634	
			Cationic Polyacrylamide	9003-05-8	30.00000	0.03065	
			Distillates (petroleum), hydrotreated light	64742-47-8	30.00000	0.03065	
			Petroleum Distillate	64742-47-8	55.00000	0.01640	
			Guar gum	9000-30-0	55.00000	0.01640	
			Raffinates, Sorption Process	64741-85-1	55.00000	0.01640	
			Phosphonic Acid, {Nitrilotris (methylene)} Tris	6419-19-8	35.00000	0.00862	

			Sodium Perborate Tetrahydrate	10486-00-7	98.00000	0.00802	
			Dazomet (Tetrahydro-3, 5-dimethyl-2H-1, 3, 5-thiadiazine-2-thione.	533-74-4	24.00000	0.00601	
			Sodium Hydroxide	1310-73-2	23.00000	0.00576	
			Alcohols, C11-14-iso-, C13-rich, ethoxylated	78330-21-9	5.00000	0.00511	
			Suspending Agent	1302-78-9	5.00000	0.00149	
			Phosphonic Acid, {(Dimethylamino) Methylene} Bis -	29712-30-9	5.00000	0.00123	
			Quartz	14808-60-7	4.00000	0.00119	
			Isotridecanol, ethoxylated	9043-30-5	2.00000	0.00060	
			Methanol	67-56-1	90.00000	0.00059	
			Phosphorous Acid	10294-56-1	2.00000	0.00049	
			Orthophosphoric acid	7664-38-2	0.75000	0.00018	
			Sodium Metaborate	7775-19-1	1.40000	0.00011	
			Alcohol Ethoxylate Surfactants	Proprietary	10.00000	0.00007	
			Thiourea-formaldehyde Copolymer	68527-49-1	10.00000	0.00007	
			Fatty Acids, Tall Oil	61790-12-3	10.00000	0.00007	
			Propargyl Alcohol	107-19-7	5.00000	0.00003	
			N-olefins	Proprietary	3.00000	0.00002	
			Hydrochloric acid	7647-01-0	0.00500	0.00000	

* 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)