

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

API 47 - 095 - 02749 County Tyler District McElroy
Quad Shirley Pad Name Grumpy Field/Pool Name _____
Farm name Diana Sampson Well Number 5A
Operator (as registered with the OOG) Jay Bee Oil and Gas, Inc
Address 23 Eganfuskee St. Suite 126 City Jupiter State FL Zip 33477

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4368717.60 Easting 520278.13
Landing Point of Curve Northing 4368877.98 Easting 520577.91
Bottom Hole Northing 4370263.44 Easting 520119.37

Elevation (ft) 1,298.6' 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)
K48 (base oil)

Date permit issued 06/29/2021 Date drilling commenced 10/19/2021 Date drilling ceased 11/01/2021
Date completion activities began 1/9/2022 Date completion activities ceased 1/22/2022
Verbal plugging (Y/N) NA Date permission granted NA Granted by NA

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

Freshwater depth(s) ft 120' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 870' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 501', 640', 734', 893', 956' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:

SM
11/14/2022

API 47- 095 - 02749 Farm name Daina Samsom Well number 5A

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	337	N	48#/H40	50	Y
Coal							
Intermediate 1	11	8.625	2,541	N	24#/J55	100'/2400'	Y
Intermediate 2							
Intermediate 3							
Production	7.875	5-1/2	12,447	N	20#/P110	NA	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	Class A, 2%CaCl, 1/4 flake					SURFACE	8
Surface	Class A, 2%CaCl, 1/4 flake	250	15.60	1.20	300	SURFACE	8
Coal							
Intermediate 1	Class A, 2%CaCl	756	15.6	1.19	899	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	CLASS A, FLY ASH, MPA-170, R-3	1,962	14.50	1.17	2,295	SURFACE	8
Tubing							

Drillers TD (ft) 12,486' Loggers TD (ft) 12,486'
Deepest formation penetrated MARCELLUS Plug back to (ft) NA
Plug back procedure NA

Kick off depth (ft) 6,646'

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 _____
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

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WAS WELL COMPLETED AS SHOT HOLE ☐ Yes ☒ No DETAILS JUL 07 2022

WAS WELL COMPLETED OPEN HOLE? ☐ Yes ☒ No DETAILS _____ WV Department of Environmental Protection

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

11/14/2025
10/31/22

API 47-095 - 02749 Farm name Daina Simpson Well number Grumpy 5A

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	1-09-22	12364	12218	72	Marcellus
2	1-10-22	12170	12012	72	Marcellus
3	1-10-22	11968	11824	72	Marcellus
4	1-11-22	11775	11636	72	Marcellus
5	1-12-22	11592	11424	72	Marcellus
6	1-12-22	11384	11240	72	Marcellus
7	1-12-22	11188	11070	72	Marcellus
8	1-13-22	11025	10920	72	Marcellus
9	1-13-22	10866	10738	72	Marcellus
10	1-14-22	10682	10530	72	Marcellus
11	1-14-22	10482	10345	72	Marcellus
12	1-14-22	10298	10204	72	Marcellus
13	1-15-22	10160	10035	72	Marcellus
14	1-15-22	10160	9891	72	Marcellus
15	1-15-22	9836	9714	72	Marcellus
16	1-15-22	9678	9546	72	Marcellus

Please insert additional pages as applicable.

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)
1	1-10-22	74.6	7141	5519	4644	244524	7699	N/A
2	1-10-22	73.1	7197	6002	4667	250125	8622	N/A
3	1-11-22	75	7232	6417	4636	226009	7468	N/A
4	1-12-22	75	7167	6283	4612	240007	9278	N/A
5	1-12-22	73.2	6986	6574	4591	261052	8718	N/A
6	1-12-22	75.2	6853	5987	4599	259125	8007	N/A
7	1-13-22	75.1	6888	6058	4583	257661	8663	N/A
8	1-13-22	75.4	6960	6112	4297	262638	8388	N/A
9	1-13-22	75	6905	6258	4712	259916	7914	N/A
10	1-14-22	75.2	6818	6237	4975	262012	8018	N/A
11	1-14-22	75.1	6737	5968	4956	250759	8053	N/A
12	1-14-22	75.3	6946	6337	4911	222905	7738	N/A
13	1-15-22	75.2	6859	6012	4573	261483	7954	N/A
14	1-15-22	75.2	6876	5996	4416	258144	8363	N/A
15	1-15-22	74.9	6754	5974	4512	261594	8080	N/A
16	1-15-22	75.1	6610	6022	4628	260060	7918	N/A

Please insert additional pages as applicable.

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11/14/2025
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API 47- 095 - 02749 Farm name Daina Simpson Well number Grumpy 5A

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
17	1-16-22	9504	9387	72	Marcellus
18	1-16-22	9346	9211	72	Marcellus
19	1-16-22	9162	9000	72	Marcellus
20	1-20-22	8951	8806	72	Marcellus
21	1-20-22	8764	8634	72	Marcellus
22	1-21-22	8588	8460	72	Marcellus
23	1-21-22	8419	8287	72	Marcellus
24	1-22-22	8248	8091	72	Marcellus
25	1-22-22	8042	7920	72	Marcellus

Please insert additional pages as applicable.

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	1-16-22	75	6628	6012	4016	259737	7934	N/A
18	1-16-22	75	6545	6116	4012	261733	8319	N/A
19	1-17-22	74.5	6540	6189	3977	257163	7762	N/A
20	1-20-22	74.9	6542	6207	4019	262539	8326	N/A
21	1-21-22	74.8	6652	6222	4199	260191	7891	N/A
22	1-21-22	74.7	6532	6146	4056	259298	7822	N/A
23	1-22-22	75.1	6419	6114	4022	260934	7853	N/A
24	1-22-22	75.1	6535	6158	4102	231346	7431	N/A
25	1-22-22	74.9	6408	6110	4033	255403	7872	N/A

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Please insert additional pages as applicable.

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API 47- 095 - 02749 Farm name Diana Sampson Well number 5A

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Marcellus</u>	<u>7,071'</u> TVD	<u>12,486'</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST ☐ Build up ☐ Drawdown ☒ Open Flow OIL TEST ☐ Flow ☐ Pump

SHUT-IN PRESSURE Surface 2873 psi Bottom Hole _____ psi DURATION OF TEST 24 hrs

OPEN FLOW Gas 4786.0 mcfpd Oil _____ bpd NGL _____ bpd Water 23 bpd GAS MEASURED BY ☒ Estimated ☐ Orifice ☐ Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	0		0		
SEE ATTACHED					

Please insert additional pages as applicable.

Drilling Contractor Precision Drilling
Address 10350 Richmond AVE City Houston State TX Zip 77042

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

Cementing Company American Cementing
Address 3415 MILLENNIUM BLV City Massillon State OH Zip 44646

Stimulating Company CalFrac
Address 2001 Summit View RD City Smithfield State PA Zip 15478

Please insert additional pages as applicable.

Completed by Emily Potesta Telephone 304-628-3111
Signature Emily Potesta Title Regulatory Agent Date 10/18/2022

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

11/14/2025
10/31/22

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 - 02749 ;
Acreage 42.00 ;
Watershed Woodburn Run of Outlet Middle Island Creek (HUC-10) ;
District McElroy ;
County Tyler ;
Public Road Access Wildman Run ;
Generally used farm name Diana Samson .

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 and Gas, INC.
Address 429 Simonton Road
Ellenboro, WV 26346
Telephone 304-628-3111

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PAD-WELL	Grumpy No. 5A			
ELEVATION	1299			
PERMIT	47-095-02629			
	TOP TVD	BOTTOM TVD		
Carroll Sand	340	378		
Murphy Sand	499	523		
1st Cow Run Sand	545	560		
Little Dunkard Sand	636	687		
Dunkard Sand	777	862		
sandstone	990	1005		
2nd Cow Run Sand	1057	1095		
Gas Sand	1141	1147		
1st Salt	1383	1410		
2nd Salt	1600	1648		
3rd Salt	1838	1883		
Maxon				
Big Lime	2285	2340		
Big Injun	2415	2475	Gas show	
Berea				
Gordon	3070	3093	Gas show	
Fifth	3287	3299		
Warren	3745	3795		
Riley	4723	4,740		
Benson	5396	5,398		
Alexander	5655	5,690		
Hamilton	5929	6,577	Gas show	
Upper Marcellus (Geneseo)	6955	6988	Gas show	
Purcell (Tully Lm)	6988	6992		
Marcellus	7040		Gas show	
Cherry Valley				

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Hydraulic Fracturing Fluid Product Component Information Disclosure

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Job Start Date:	1/11/2022
Job End Date:	1/27/2022
State:	West Virginia
County:	Tyler
API Number:	47-095-02749-00-00
Operator Name:	Jay-Bee Oil & Gas, Inc.
Well Name and Number:	Grumpy 5a
Latitude:	39.46760000
Longitude:	-80.76419700
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7,041
Total Base Water Volume (gal):	8,689,679
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	91.66067	
Hydrochloric Acid	CWS	Clean Perforations					
				Listed Below			

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CalBreak™ 5700	CWS	Breaker					
				Listed Below			
Sand (Proppant)	CWS	Propping Agent					
				Listed Below			
DynaScale™ 3511	CWS	Scale Inhibitor					
				Listed Below			
MBC 12:3	CWS	Microbiocide					
				Listed Below			
DynaRate™ 6459	CWS	Friction Reducer					
				Listed Below			
CalGuard™ 9100	CWS	Corrosion Inhibitor					
				Listed Below			
CalGel™ 4000	CWS	Gel Slurry					
				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	8.04971	
			Hydrochloric acid	7647-01-0	37.00000	0.15813	

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		Calcite	471-34-1	1.00000	0.05517	
		Illite	12173-60-3	1.00000	0.02532	
		Guar gum	9000-30-0	60.00000	0.00882	
		Distillates (petroleum), hydrotreated middle	64742-46-7	60.00000	0.00882	
		Apatite	64476-38-6	0.10000	0.00805	
		Goethite	1310-14-1	0.10000	0.00805	
		Biotite	1302-27-8	0.10000	0.00805	
		Glutaraldehyde	111-30-8	14.00000	0.00318	
		Ilmenite	98072-94-7	0.10000	0.00253	
		Quaternary ammonium compounds, bis (hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-58-2	5.00000	0.00073	
		Ethanol	64-17-5	3.00000	0.00068	
		Alkyl dimethyl benzyl ammonium chloride	68424-85-1	3.00000	0.00068	
		Didecyl dimethyl ammonium chloride	7173-51-5	3.00000	0.00068	
		Oxirane, 2-methyl-, polymer with oxirane, monodecyl ether	37251-67-5	1.50000	0.00022	
		Ethylene Glycol	107-21-1	40.00000	0.00012	
		Ammonium chloride ((NH4)Cl)	12125-02-9	5.00000	0.00007	
		Distillates (petroleum), hydrotreated light	64742-47-8	3.00000	0.00007	
		Diethylene glycol, monomethyl ether	34590-94-8	20.00000	0.00006	
		Ethoxylated Alcohols	68131-39-5	10.00000	0.00003	
		Hydrogen peroxide (H2O2)	7722-84-1	8.00000	0.00003	
		Formic acid	64-18-6	10.00000	0.00003	
		Tar bases, quinolone derivs, benzyl chloride- quaternized	72480-70-7	10.00000	0.00003	
		Cinnamaldehyde	104-55-2	10.00000	0.00003	

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			Isopropyl alcohol	67-63-0	5.00000	0.00002	
			Proprietary Polymer 1	Proprietary		0.00001	Proprietary CAS & Additive Concentration
			Inorganic Acid Salt	Proprietary		0.00001	Proprietary CAS & Additive Concentration
			Inorganic Salt	Proprietary		0.00001	Proprietary CAS & Additive Concentration
			Organic Acid Ether	Proprietary		0.00001	Proprietary CAS & Additive Concentration

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* 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)

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Company: Jay-Bee Oil & Gas

Well: Grumpy 5A

Location: Tyler Co., WV

Rig: Precision 823

API No: 47-095-02749-00-00

Start Date: 10/21/21

Start Depth: 320

Job Number: 68143

Magnetic Declination: -7.75

Grid Correction: 0.15

Total Correction: -7.9

North reference: Grid

End Date: 10/30/21

Calculation Method: Minimum Curvature

Proposed Azimuth: 354.42

Depth Ref: RKB

Field: Marcellus

Location Lat/Long: 39.467799, -80.764259

End Depth: 12486

Minimum Curvature
354.42
1313 ft
UL 07/2022
Department of Environmental Protection

Place # 3

Survey Tool Type	Bit Depth (ft)	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Direction	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates +N/-S (ft)	+E/-W (ft)	Closure Distance (ft)	Angle (deg)	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')	Run #
TIP	319.67	319.67	0.14	315.04	N 45.0 W	0	319.67	-0.33	-0.35	-0.21	0	0	0	0	0	0
1st Svy	447	358	0.22	223.17	S 43.2 W	38	358.00	-0.34	-0.37	-0.29	0.47	218.38	0.69	0.21	-239.68	1
Velocity	492	403	0.11	224.29	S 44.3 W	45	403.00	-0.43	-0.46	-0.38	0.60	219.49	0.24	-0.24	2.49	1
Velocity	536	447	0.53	253.32	S 73.3 W	44	447.00	-0.49	-0.55	-0.61	0.82	227.67	0.99	0.95	65.98	1
Velocity	581	492	1.11	262.91	S 82.9 W	45	491.99	-0.54	-0.67	-1.24	1.41	241.72	1.32	1.29	21.31	1
Velocity	625	536	1.80	260.49	S 80.5 W	44	535.98	-0.60	-0.83	-2.34	2.49	250.42	1.57	1.57	-5.50	1
Velocity	669	580	2.49	269.81	S 89.8 W	44	579.95	-0.56	-0.95	-3.98	4.09	256.57	1.75	1.57	21.18	1
Velocity	714	625	3.11	271.26	N 88.7 W	45	624.89	-0.32	-0.93	-6.18	6.25	261.47	1.39	1.38	3.22	1
Velocity	759	670	4.00	275.34	N 84.7 W	45	669.81	0.12	-0.75	-8.96	8.99	265.19	2.05	1.98	9.07	1
Velocity	847	758	4.85	276.50	N 83.5 W	88	757.54	1.48	-0.05	-15.71	15.71	269.83	0.97	0.97	1.32	1
Velocity	937	848	5.36	273.00	N 87.0 W	90	847.19	2.90	0.60	-23.69	23.70	271.46	0.66	0.57	-3.89	1
Velocity	1025	936	5.84	268.72	S 88.7 W	88	934.77	3.85	0.72	-32.27	32.28	271.28	0.72	0.55	-4.86	1
Velocity	1115	1026	4.40	264.65	S 84.7 W	90	1024.41	4.21	0.29	-40.29	40.29	270.42	1.65	-1.60	-4.52	1
Velocity	1204	1115	2.61	260.21	S 80.2 W	89	1113.24	4.08	-0.37	-45.68	45.69	269.54	2.03	-2.01	-4.99	1
Velocity	1292	1203	1.42	264.06	S 84.1 W	88	1201.18	3.92	-0.82	-48.74	48.75	269.03	1.36	-1.35	4.38	1
Velocity	1381	1292	0.90	277.39	N 82.6 W	89	1290.16	4.07	-0.85	-50.53	50.54	269.04	0.65	-0.58	14.98	1
Velocity	1470	1381	0.48	325.83	N 34.2 W	89	1379.16	4.56	-0.45	-51.44	51.44	269.50	0.77	-0.47	54.43	1
Velocity	1559	1470	0.54	323.81	N 36.2 W	89	1468.15	5.24	0.20	-51.89	51.89	270.22	0.07	0.07	-2.27	1
Velocity	1648	1559	0.75	322.25	N 37.8 W	89	1557.15	6.10	1.00	-52.50	52.51	271.09	0.24	0.24	-1.75	1
Velocity	1737	1648	0.88	311.76	N 48.2 W	89	1646.14	7.09	1.91	-53.36	53.40	272.05	0.22	0.15	-11.79	1
Velocity	1829	1740	1.55	306.70	N 53.3 W	92	1738.12	8.45	3.13	-54.89	54.98	273.26	0.74	0.73	-5.50	1
Velocity	1918	1829	2.25	285.92	N 74.1 W	89	1827.07	9.90	4.33	-57.53	57.70	274.30	1.09	0.79	-23.35	1
Velocity	2007	1918	1.11	295.35	N 64.7 W	89	1916.03	10.98	5.17	-59.99	60.22	274.93	1.31	-1.28	10.60	1
Velocity	2096	2007	1.71	80.43	N 80.4 E	89	2005.02	11.52	5.76	-59.46	59.74	275.54	3.03	0.67	163.01	1
Velocity	2185	2096	4.20	91.18	S 88.8 E	89	2093.89	11.23	5.92	-54.89	55.21	276.15	2.85	2.80	12.08	1
Velocity	2274	2185	6.01	94.42	S 85.6 E	89	2182.54	10.04	5.49	-46.99	47.31	276.67	2.06	2.03	3.64	1
Velocity	2363	2274	8.39	96.85	S 83.2 E	89	2270.83	7.83	4.36	-35.90	36.16	276.92	2.70	2.67	2.73	1
Velocity	2452	2363	10.60	95.70	S 84.3 E	89	2358.60	4.83	2.77	-21.30	21.48	277.41	2.49	2.48	-1.29	1
Velocity	2541	2452	12.99	94.92	S 85.1 E	89	2445.72	1.40	1.10	-3.19	3.37	289.03	2.69	2.69	-0.88	1
Velocity	2565	2476	13.62	95.88	S 84.1 E	24	2469.07	0.35	0.58	2.31	2.38	75.94	2.78	2.63	4.00	1
Velocity	2710	2630	15.33	100.90	S 79.1 E	154	2618.19	-9.03	-5.13	40.34	40.67	97.25	1.38	1.11	3.26	2
Velocity	2799	2719	16.70	101.88	S 78.1 E	89	2703.73	-16.20	-9.99	64.41	65.18	98.81	1.57	1.54	1.10	2
Velocity	2888	2808	16.56	100.11	S 79.9 E	89	2789.01	-23.47	-14.85	89.41	90.63	99.43	0.59	-0.16	-1.99	2
Velocity	2977	2897	16.02	100.58	S 79.4 E	89	2874.43	-30.32	-19.33	113.97	115.59	99.62	0.62	-0.61	0.53	2
Velocity	3066	2986	15.78	102.59	S 77.4 E	89	2960.03	-37.51	-24.22	137.85	139.96	99.96	0.67	-0.27	2.26	2
Velocity	3155	3075	16.14	106.17	S 73.8 E	89	3045.60	-45.87	-30.30	161.54	164.36	100.62	1.18	0.40	4.02	2
Velocity	3244	3164	17.26	106.69	S 73.3 E	89	3130.85	-55.45	-37.54	186.07	189.82	101.41	1.27	1.26	0.58	2
Velocity	3333	3253	16.24	105.52	S 74.5 E	89	3216.07	-64.94	-44.66	210.71	215.39	101.97	1.21	-1.15	-1.31	2
Velocity	3421	3341	16.17	104.24	S 75.8 E	88	3300.57	-73.52	-50.97	234.44	239.92	102.27	0.41	-0.08	-1.45	2
Velocity	3510	3430	16.12	105.47	S 74.5 E	89	3386.06	-82.16	-57.31	258.36	264.64	102.51	0.39	-0.06	1.38	2
Velocity	3600	3520	15.10	104.79	S 75.2 E	90	3472.74	-90.73	-63.64	281.74	288.84	102.73	1.15	-1.13	-0.76	2
Velocity	3688	3608	15.62	103.81	S 76.2 E	88	3557.60	-98.65	-69.39	304.33	312.14	102.84	0.66	0.59	-1.11	2

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Company: Jay-Bee Oil & Gas

Well: Grumpy 5A

Location: Tyler Co., WV

Rig: Precision 823

API No: 47-095-02749-00-00

Start Date: 10/21/21

Start Depth: 320

Job Number: 68143

Magnetic Declination: -7.75

Grid Correction: 0.15

Total Correction: -7.9

North reference: Grid

End Date: 10/30/21

Calculation Method: Minimum Closure

Proposed Azimuth: 354.42

Depth Ref: RKB 1313 ft

Field: Marcellus

Location Lat/Long: 39.467799, -80.764259

End Depth: 12486

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JUL 07 2022
WV Department of Environmental Protection

Survey Tool Type	Bit Depth (ft)	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Direction	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates +N/-S (ft)	+E/-W (ft)	Closure Distance (ft)	Angle (deg)	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')	Run #
Velocity	3777	3697	15.05	103.39	S 76.6 E	89	3643.43	-106.39	-74.93	327.20	335.67	102.90	0.65	-0.64	-0.47	2
Velocity	3866	3786	15.31	102.49	S 77.5 E	89	3729.32	-113.79	-80.14	349.92	358.98	102.90	0.39	0.29	-1.01	2
Velocity	3955	3875	16.02	100.94	S 79.1 E	89	3815.02	-120.93	-85.02	373.45	383.00	102.83	0.93	0.80	-1.74	2
Velocity	4047	3967	15.99	100.18	S 79.8 E	92	3903.45	-127.98	-89.67	398.38	408.35	102.68	0.23	-0.03	-0.83	2
Velocity	4136	4056	15.00	98.40	S 81.6 E	89	3989.22	-134.09	-93.51	421.84	432.08	102.50	1.23	-1.11	-2.00	2
Velocity	4270	4190	15.56	100.08	S 79.9 E	134	4118.48	-143.13	-99.19	456.69	467.34	102.25	0.53	0.42	1.25	2
Velocity	4314	4234	14.51	99.78	S 80.2 E	44	4160.97	-146.18	-101.16	467.94	478.75	102.20	2.39	-2.39	-0.68	2
Velocity	4403	4323	14.63	103.35	S 76.7 E	89	4247.11	-152.78	-105.65	469.86	501.12	102.17	1.02	0.13	4.01	2
Velocity	4491	4411	14.98	103.62	S 76.4 E	88	4332.19	-160.13	-110.90	511.73	523.60	102.23	0.41	0.40	0.31	2
Velocity	4580	4500	14.57	106.51	S 73.5 E	89	4418.25	-168.12	-116.79	533.64	546.27	102.34	0.95	-0.46	3.25	2
Velocity	4669	4589	15.11	106.22	S 73.8 E	89	4504.28	-176.64	-123.21	555.51	569.01	102.51	0.61	0.61	-0.33	2
Velocity	4758	4678	16.72	103.09	S 76.9 E	89	4589.87	-185.05	-129.35	579.12	593.39	102.59	2.05	1.81	-3.52	2
Velocity	4847	4767	15.49	102.58	S 77.4 E	89	4675.37	-192.85	-134.84	603.19	618.08	102.60	1.39	-1.38	-0.57	2
Velocity	4936	4856	15.57	103.54	S 76.5 E	89	4761.12	-200.47	-140.22	626.40	641.90	102.62	0.30	0.09	1.08	2
Velocity	5025	4945	16.11	108.00	S 72.0 E	89	4846.75	-209.32	-146.83	649.76	666.14	102.73	1.50	0.61	5.01	2
Velocity	5114	5034	15.69	105.80	S 74.2 E	89	4932.34	-218.64	-153.93	673.08	690.46	102.88	0.83	-0.47	-2.47	2
Velocity	5203	5123	16.09	102.28	S 77.7 E	89	5017.94	-226.81	-159.83	696.71	714.81	102.92	1.17	0.45	-3.96	2
Velocity	5292	5212	16.40	102.26	S 77.7 E	89	5103.39	-234.45	-165.12	721.04	739.71	102.90	0.35	0.35	-0.02	2
Velocity	5381	5301	16.44	103.04	S 77.0 E	89	5188.76	-242.32	-170.63	745.59	764.86	102.89	0.25	0.04	0.88	2
Velocity	5470	5390	16.88	102.21	S 77.8 E	89	5274.02	-250.29	-176.20	770.49	790.38	102.88	0.56	0.49	-0.93	2
Velocity	5559	5479	16.08	102.21	S 77.8 E	89	5359.37	-258.00	-181.54	795.16	815.62	102.86	0.90	-0.90	0.00	2
Velocity	5648	5568	16.04	101.35	S 78.7 E	89	5444.89	-265.35	-186.57	819.27	840.24	102.83	0.27	-0.04	-0.97	2
Velocity	5736	5656	16.15	98.79	S 81.2 E	88	5529.45	-271.92	-190.83	843.28	864.60	102.75	0.82	0.12	-2.91	2
Velocity	5825	5745	16.51	99.19	S 80.8 E	89	5614.86	-278.22	-194.74	868.00	889.57	102.65	0.42	0.40	0.45	2
Velocity	5915	5835	15.60	99.78	S 80.2 E	90	5701.34	-284.68	-198.84	892.55	914.43	102.56	1.03	-1.01	0.66	2
Velocity	6004	5924	15.45	100.54	S 79.5 E	89	5787.10	-291.15	-203.04	916.00	938.23	102.50	0.28	-0.17	0.85	2
Velocity	6095	6015	16.19	101.24	S 78.8 E	91	5874.65	-298.18	-207.73	940.36	963.03	102.46	0.84	0.81	0.77	2
Velocity	6184	6104	14.76	103.02	S 77.0 E	89	5960.42	-305.39	-212.70	963.57	986.77	102.45	1.69	-1.61	2.00	2
Velocity	6274	6194	16.47	108.59	S 71.4 E	90	6047.10	-314.27	-219.36	986.84	1010.92	102.53	2.52	1.90	6.19	2
Velocity	6362	6282	16.13	107.05	S 73.0 E	88	6131.56	-324.08	-226.92	1010.35	1035.52	102.66	0.62	-0.39	-1.75	2
Velocity	6451	6371	16.92	102.54	S 77.5 E	89	6216.89	-332.87	-233.35	1034.81	1060.80	102.71	1.69	0.89	-5.07	2
Velocity	6557	6490	16.74	106.14	S 73.9 E	119	6330.80	-344.60	-241.88	1068.18	1095.22	102.76	0.89	-0.15	3.03	3
Velocity	6602	6535	15.91	81.08	N 81.1 E	45	6374.04	-346.64	-242.72	1080.51	1107.44	102.66	15.64	-1.84	-55.69	3
Velocity	6646	6579	17.17	59.61	N 59.6 E	44	6416.25	-343.56	-238.50	1092.08	1117.82	102.32	14.10	2.86	-48.80	3
Velocity	6691	6624	20.04	44.64	N 44.6 E	45	6458.92	-335.83	-229.65	1103.24	1126.89	101.76	12.33	6.38	-33.27	3
Velocity	6736	6669	21.94	35.05	N 35.1 E	45	6500.95	-324.51	-217.27	1113.49	1134.49	101.04	8.71	4.22	-21.31	3
Velocity	6780	6713	24.02	23.52	N 23.5 E	44	6541.47	-310.44	-202.32	1121.79	1139.89	100.22	11.25	4.73	-26.20	3
Velocity	6825	6758	26.04	14.05	N 14.1 E	45	6582.26	-293.13	-184.33	1127.84	1142.81	99.28	9.96	4.49	-21.04	3
Velocity	6869	6802	27.95	6.55	N 6.6 E	44	6621.48	-273.94	-164.71	1131.37	1143.29	98.28	8.86	4.34	-17.05	3
Velocity	6914	6847	29.60	0.00	N 0.0 E	45	6660.93	-252.56	-143.12	1132.57	1141.58	97.20	7.90	3.67	-14.56	3
Velocity	6959	6892	30.96	357.06	N 2.9 W	45	6699.79	-229.94	-120.44	1131.98	1138.37	96.07	4.47	3.02	-6.53	3
Velocity	7004	6937	31.92	354.84	N 5.2 W	45	6738.19	-206.48	-97.03	1130.31	1134.47	94.91	3.34	2.13	-4.93	3

23



Company: Jay-Bee Oil & Gas

Well: Grumpy 5A

Location: Tyler Co., WV

Rig: Precision 823

API No: 47-095-02749-00-00

Start Date: 10/21/21

Start Depth: 320

Job Number: 68143

Magnetic Declination: -7.75

Grid Correction: 0.15

Total Correction: -7.9

North reference: Grid

End Date: 10/30/21

Calculation Method: Minimum Curvature

Proposed Azimuth: 354.82

Depth Ref: RKB

Field: Marcellus

Location Lat/Long: 39.467799, -80.764259

End Depth: 12486

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JUL 2022
Plan # 3
WV Department of Environmental Protection

Survey Tool Type	Bit Depth (ft)	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Direction	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates +N/-S (ft)	+E/-W (ft)	Closure Distance (ft)	Angle (deg)	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')	Run #
Velocity	7048	6981	32.73	351.55	N 8.4 W	44	6775.37	-182.96	-73.68	1127.52	1129.92	93.74	4.40	1.84	-7.48	3
Velocity	7093	7026	36.49	349.25	N 10.8 W	45	6812.40	-157.48	-48.49	1123.23	1124.28	92.47	8.84	8.36	-5.11	3
Velocity	7138	7071	39.91	348.91	N 11.1 W	45	6847.76	-129.77	-21.17	1117.96	1118.16	91.08	7.61	7.60	-0.76	3
Velocity	7183	7116	43.49	348.87	N 11.1 W	45	6881.35	-99.98	8.20	1112.19	1112.22	89.58	7.96	7.96	-0.09	3
Velocity	7227	7160	48.55	349.27	N 10.7 W	44	6911.90	-68.47	39.28	1106.19	1106.89	87.97	11.52	11.50	0.91	3
Velocity	7272	7205	54.67	349.59	N 10.4 W	45	6939.83	-33.35	73.94	1099.73	1102.21	86.15	13.61	13.60	0.71	3
Velocity	7317	7250	58.67	349.46	N 10.5 W	45	6964.55	4.11	110.90	1092.90	1098.51	84.21	8.89	8.89	-0.29	3
Velocity	7361	7294	62.88	348.73	N 11.3 W	44	6986.03	42.33	148.60	1085.63	1095.75	82.21	9.68	9.57	-1.66	3
Velocity	7406	7339	67.98	347.08	N 12.9 W	45	7004.73	82.97	188.59	1077.04	1093.43	80.07	11.81	11.33	-3.67	3
Velocity	7451	7384	72.00	346.95	N 13.1 W	45	7020.13	124.90	229.79	1067.55	1092.00	77.85	8.94	8.93	-0.29	3
Velocity	7495	7428	75.51	346.85	N 13.2 W	44	7032.44	166.77	270.93	1057.97	1092.11	75.64	7.98	7.98	-0.23	3
Velocity	7539	7472	79.04	345.36	N 14.6 W	44	7042.13	209.23	312.58	1047.66	1093.30	73.39	8.68	8.02	-3.39	3
Velocity	7584	7517	82.21	344.82	N 15.2 W	45	7049.46	253.03	355.48	1036.24	1095.52	71.07	7.14	7.04	-1.20	3
Velocity	7629	7562	84.90	343.19	N 16.8 W	45	7054.51	297.01	398.46	1023.92	1098.72	68.74	6.98	5.98	-3.62	3
Velocity	7673	7606	85.01	343.39	N 16.6 W	44	7058.38	340.01	440.44	1011.32	1103.06	66.47	0.52	0.25	0.45	3
Velocity	7718	7651	87.16	341.98	N 18.0 W	45	7061.45	383.97	483.29	997.95	1108.82	64.16	5.71	4.78	-3.13	3
Velocity	7763	7696	88.68	340.05	N 20.0 W	45	7063.08	427.71	525.81	983.33	1115.08	61.87	5.46	3.38	-4.29	3
Velocity	7852	7785	88.54	339.84	N 20.2 W	89	7065.24	513.86	609.39	952.81	1131.02	57.40	0.28	-0.16	-0.24	3
Velocity	7942	7875	88.47	339.82	N 20.2 W	90	7067.59	600.93	693.84	921.79	1153.74	53.03	0.08	-0.08	-0.02	3
Velocity	8031	7964	88.17	339.83	N 20.2 W	89	7070.20	687.02	777.35	891.11	1182.52	48.90	0.34	-0.34	0.01	3
Velocity	8120	8053	90.93	341.63	N 18.4 W	89	7070.90	773.47	861.35	861.74	1218.41	45.01	3.70	3.10	2.02	3
Velocity	8209	8142	90.69	341.04	N 19.0 W	89	7069.64	860.15	945.66	833.26	1260.40	41.38	0.72	-0.27	-0.66	3
Velocity	8298	8231	90.78	341.99	N 18.0 W	89	7068.50	946.90	1030.06	805.05	1307.33	38.01	1.07	0.10	1.07	3
Velocity	8388	8321	90.19	341.36	N 18.6 W	90	7067.74	1034.68	1115.49	776.75	1359.29	34.85	0.96	-0.66	-0.70	3
Velocity	8477	8410	90.15	340.75	N 19.3 W	89	7067.47	1121.26	1199.67	747.86	1413.68	31.94	0.69	-0.04	-0.69	3
Velocity	8566	8499	89.82	340.11	N 19.9 W	89	7067.50	1207.62	1283.53	718.05	1470.72	29.22	0.81	-0.37	-0.72	3
Velocity	8655	8588	89.85	340.90	N 19.1 W	89	7067.75	1294.01	1367.42	688.35	1530.90	26.72	0.89	0.03	0.89	3
Velocity	8744	8677	90.84	340.27	N 19.7 W	89	7067.22	1380.43	1451.36	658.76	1593.87	24.41	1.32	1.11	-0.71	3
Velocity	8833	8766	91.15	342.67	N 17.3 W	89	7065.67	1467.14	1535.73	630.49	1660.11	22.32	2.72	0.35	2.70	3
Velocity	8922	8855	91.07	342.55	N 17.5 W	89	7063.95	1554.24	1620.64	603.89	1729.50	20.44	0.16	-0.09	-0.13	3
Velocity	9011	8944	90.81	344.33	N 15.7 W	89	7062.49	1641.60	1705.93	578.53	1801.36	18.73	2.02	-0.29	2.00	3
Velocity	9100	9033	90.70	344.25	N 15.8 W	89	7061.31	1729.20	1791.60	554.43	1875.43	17.20	0.15	-0.12	-0.09	3
Velocity	9190	9123	90.50	344.39	N 15.6 W	90	7060.37	1817.80	1878.25	530.11	1951.62	15.76	0.27	-0.22	0.16	3
Velocity	9279	9212	90.49	344.37	N 15.6 W	89	7059.60	1905.44	1963.96	506.15	2028.13	14.45	0.03	-0.01	-0.02	3
Velocity	9368	9301	89.82	344.42	N 15.6 W	89	7059.36	1993.08	2049.68	482.21	2105.63	13.24	0.75	-0.75	0.06	3
Velocity	9457	9390	89.51	344.52	N 15.5 W	89	7059.88	2080.74	2135.43	458.38	2184.07	12.11	0.37	-0.35	0.11	3
Velocity	9546	9479	89.45	344.67	N 15.3 W	89	7060.69	2168.43	2221.22	434.74	2263.37	11.07	0.18	-0.07	0.17	3
Velocity	9635	9568	89.68	344.67	N 15.3 W	89	7061.37	2256.14	2307.06	411.21	2343.42	10.11	0.26	0.26	0.00	3
Velocity	9724	9657	89.62	343.06	N 16.9 W	89	7061.91	2343.63	2392.55	386.48	2423.56	9.18	1.81	-0.07	-1.81	3
Velocity	9813	9746	89.36	343.00	N 17.0 W	89	7062.70	2430.87	2477.67	360.50	2503.76	8.28	0.30	-0.29	-0.07	3
Velocity	9902	9835	90.30	342.73	N 17.3 W	89	7062.97	2518.07	2562.71	334.28	2584.42	7.43	1.10	1.06	-0.30	3
Velocity	9991	9924	90.19	342.95	N 17.1 W	89	7062.58	2605.25	2647.75	308.02	2665.61	6.64	0.28	-0.12	0.25	3

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Company: Jay-Bee Oil & Gas

Job Number: 68143

Calculation Method: Minimum Curvature

Well: Grumpy 5A

Magnetic Declination: -7.75

Proposed Azimuth: 354.42

Location: Tyler Co., WV

Grid Correction: 0.15

Depth Ref: RKB

Rig: Precision 823

Total Correction: -7.9

Field: Marcellus

API No: 47-095-02749-00-00

North reference: Grid

Location Lat/Long: 39.467799, -80.764259

Start Date: 10/21/21

Start Depth: 320

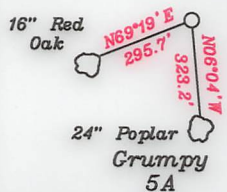
End Date: 10/30/21

End Depth: 12486

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WV Department of Environmental Protection

Survey Tool Type	Bit Depth (ft)	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Direction	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates +N/-S (ft)	+E/-W (ft)	Closure Distance (ft)	Angle (deg)	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')	Run #
Velocity	10080	10013	90.24	341.15	N 18.9 W	89	7062.25	2692.18	2732.42	280.59	2746.79	5.86	2.02	0.06	-2.02	3
Velocity	10169	10102	90.08	340.72	N 19.3 W	89	7062.00	2778.73	2816.53	251.52	2827.74	5.10	0.52	-0.18	-0.48	3
Velocity	10259	10192	89.61	340.46	N 19.5 W	90	7062.25	2866.12	2901.42	221.61	2909.87	4.37	0.60	-0.52	-0.29	3
Velocity	10347	10280	91.21	340.87	N 19.1 W	88	7061.62	2951.59	2984.45	192.48	2990.65	3.69	1.88	1.82	0.47	3
Velocity	10436	10369	90.92	340.60	N 19.4 W	89	7059.96	3038.05	3068.45	163.12	3072.78	3.04	0.45	-0.33	-0.30	3
Velocity	10526	10459	90.19	341.08	N 18.9 W	90	7059.09	3125.53	3153.46	133.58	3156.29	2.43	0.97	-0.81	0.53	3
Velocity	10614	10547	90.67	340.26	N 19.7 W	88	7058.43	3211.00	3236.50	104.46	3238.18	1.85	1.08	0.55	-0.93	3
Velocity	10703	10636	90.52	339.54	N 20.5 W	89	7057.51	3297.16	3320.07	73.87	3320.89	1.27	0.83	-0.17	-0.81	3
Velocity	10793	10726	90.39	338.93	N 21.1 W	90	7056.79	3384.01	3404.22	41.96	3404.48	0.71	0.69	-0.14	-0.68	3
Velocity	10881	10814	89.95	340.85	N 19.2 W	88	7056.53	3469.19	3486.85	11.71	3486.87	0.19	2.24	-0.50	2.18	3
Velocity	10971	10904	91.12	340.71	N 19.3 W	90	7055.69	3556.65	3571.83	-17.92	3571.88	359.71	1.31	1.30	-0.16	3
Velocity	11060	10993	90.10	341.12	N 18.9 W	89	7054.74	3643.18	3655.93	-47.01	3656.24	359.26	1.24	-1.15	0.46	3
Velocity	11149	11082	91.15	341.32	N 18.7 W	89	7053.77	3729.82	3740.19	-75.66	3740.95	358.84	1.20	1.18	0.22	3
Velocity	11238	11171	90.82	341.27	N 18.7 W	89	7052.24	3816.48	3824.47	-104.20	3825.89	358.44	0.38	-0.37	-0.06	3
Velocity	11328	11261	90.53	343.33	N 16.7 W	90	7051.18	3904.47	3910.20	-131.56	3912.42	358.07	2.31	-0.32	2.29	3
Velocity	11418	11351	89.93	342.82	N 17.2 W	90	7050.82	3992.71	3996.30	-157.76	3999.42	357.74	0.87	-0.67	-0.57	3
Velocity	11507	11440	91.01	343.01	N 17.0 W	89	7050.09	4079.91	4081.37	-183.91	4085.51	357.42	1.23	1.21	0.21	3
Velocity	11597	11530	90.76	343.13	N 16.9 W	90	7048.70	4168.14	4167.46	-210.11	4172.76	357.11	0.31	-0.28	0.13	3
Velocity	11687	11620	90.39	343.23	N 16.8 W	90	7047.80	4256.41	4253.61	-236.16	4260.16	356.82	0.43	-0.41	0.11	3
Velocity	11777	11710	91.19	340.41	N 19.6 W	90	7046.55	4344.23	4339.10	-264.23	4347.13	356.52	3.26	0.89	-3.13	3
Velocity	11867	11800	90.98	340.42	N 19.6 W	90	7044.85	4431.54	4423.87	-294.39	4433.66	356.19	0.23	-0.23	0.01	3
Velocity	11957	11890	90.85	340.11	N 19.9 W	90	7043.41	4518.79	4508.58	-324.78	4520.26	355.88	0.37	-0.14	-0.34	3
Velocity	12047	11980	90.95	340.98	N 19.0 W	90	7042.00	4606.16	4593.43	-354.75	4607.11	355.58	0.97	0.11	0.97	3
Velocity	12137	12070	90.53	340.76	N 19.2 W	90	7040.84	4693.64	4678.45	-384.24	4694.20	355.30	0.53	-0.47	-0.24	3
Velocity	12227	12160	90.16	340.57	N 19.4 W	90	7040.30	4781.06	4763.37	-414.04	4781.33	355.03	0.46	-0.41	-0.21	3
Velocity	12317	12250	89.98	340.41	N 19.6 W	90	7040.19	4868.41	4848.20	-444.10	4868.50	354.77	0.27	-0.20	-0.18	3
Velocity	12407	12340	89.38	341.14	N 18.9 W	90	7040.69	4955.87	4933.18	-473.73	4955.88	354.51	1.05	-0.67	0.81	3
Last Svy	12486	12419	89.19	341.05	N 19.0 W	79	7041.67	5032.74	5007.92	-499.33	5032.75	354.31	0.27	-0.24	-0.11	3
TD Proj	12486	12486	89.19	341.05	N 19.0 W	67	7042.62	5097.91	5071.28	-521.08	5097.98	354.13	0.00	0.00	0.00	3

References:



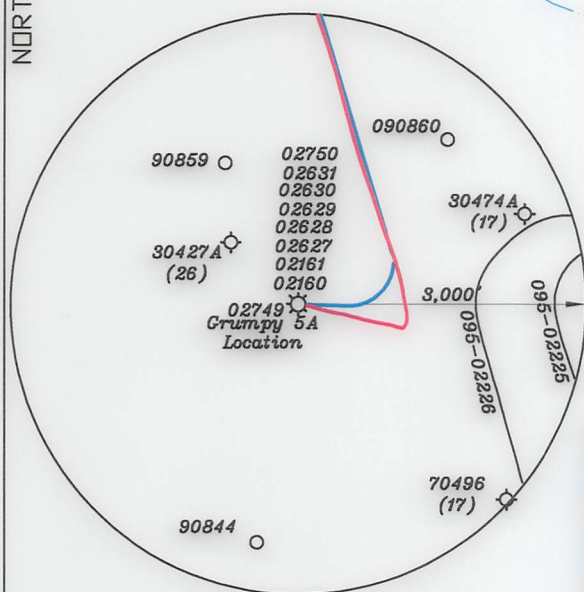
As Drilled
Permitted

NUMBER	DIRECTION	DISTANCE
L1	N51°33'W	3,542.1'
L2	N77°51'W	1,944.5'
L3	N62°49'E	1,115.8'

— LEGEND —
--- 500' from well bore path
--- Surface Tracts Within Lease
--- Lease Line
--- Adjoiner Line
--- Marcellus Legs

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.

NORTH



Top Hole-TH
Geo NAD 83- 39.467799 N, 80.764258 W
UTM NAD 83(Meters)-4368717.37 N, 520278.18 E
UTM NAD 83(Feet)-14333033.58 N, 1706946.00 E
Landing Point-LP
Geo NAD 83- 39.469144 N, 80.760774 W
UTM NAD 83(Meters)-4368867.40 N, 520577.53 E
UTM NAD 83(Feet)-14333525.79 N, 1707928.10 E
Bottom Hole-BH
Geo NAD 83- 39.481736 N, 80.765968 W
UTM NAD 83(Meters)-4370263.65 N, 520127.14 E
UTM NAD 83(Feet)-14338106.66 N, 1706450.47 E

Top Hole-TH
Geo NAD 83- 39.467801 N, 80.764259 W
UTM NAD 83(Meters)-4368717.60 N, 520278.13 E
UTM NAD 83(Feet)-14333034.34 N, 1706945.83 E
Landing Point-LP
Geo NAD 83- 39.469239 N, 80.760769 W
UTM NAD 83(Meters)-4368877.98 N, 520577.91 E
UTM NAD 83(Feet)-14333560.50 N, 1707929.37 E
Bottom Hole-BH
Geo NAD 83- 39.481734 N, 80.766058 W
UTM NAD 83(Meters)-4370263.44 N, 520119.37 E
UTM NAD 83(Feet)-14338105.97 N, 1706424.96 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

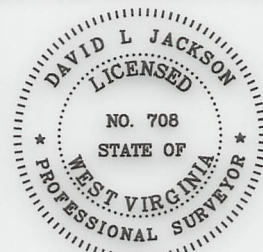
I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE RULES ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

(SIGNED)

David L Jackson

R.P.E.

P.S. 708



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

DATE June 15, 2022
OPERATOR'S WELL NO. Crumphy 5A
API WELL NO. _____

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL STATE COUNTY PERMIT
(IF "GAS") PRODUCTION X STORAGE DEEP SHALLOW X
LOCATION: ELEVATION 1,298.6' WATER SHED Woodburn Run of Outlet Middle Island Creek (HUC-10)
DISTRICT McElroy COUNTY Tyler
QUADRANGLE Shirley 7 1/2'
SURFACE OWNER Diana Woodburn Samson ACREAGE 42.0 Ac.
OIL & GAS ROYALTY OWNER Diana Woodburn Samson LEASE ACREAGE 42.0 Ac.
LEASE NO. See above
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

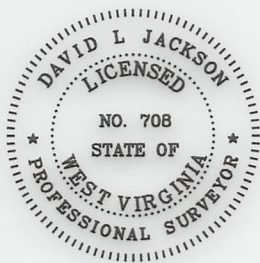
PLUG AND ABANDON CLEAN OUT AND REPLUG
TARGET FORMATION Marcellus ESTIMATED DEPTH TVD = 7,071'; TMD = 12,486'
WELL OPERATOR Jay-Bee Oil & Gas, Inc. DESIGNATED AGENT Deborah Broda-Morgan
ADDRESS 16 South Avenue W, Ste 118, Cranford NJ 07016 ADDRESS 429 Simonton Road, Ellenboro WV 26346

LONGITUDE 80-45-00 W
Top Hole 11,730'
Bottom Hole 6,654'

form wwg

JACKSON SURVEYING
INC.
2413 East Pike Street
#112
Clarksburg, WV 26301
304-623-5851

ADJOINING OWNERS TABLE			
TRACT	SURFACE OWNER	TAX PARCEL	Acres
S1 A	DIANA WOODBURN SAMSON	05-06-19	42
S2 B	ANDREA S AKERS	05-06-14	60
S3 C	DIANA WOODBURN SAMSON	05-02-24	70.01
S4 D	RICHARD D THOMASELLI & BARBARA THOMASELLI	05-02-23	100.27
S5 E	RICHARD D THOMASELLI & BARBARA THOMASELLI	05-02-22	107.5
S6	RICHARD D THOMASELLI & BARBARA THOMASELLI	05-02-22.1	0.5
S7	JOHN E RUSH	05-02-13.1	23.56
S8	JOHN E RUSH	05-02-13	8.88
S9	KENNETH JONES	05-02-12	93
S10	RICHARD D THOMASELLI & BARBARA THOMASELLI	05-02-14	29
S11	DWIGHT LEMASTERS ET AL	05-02-26	87.06
S12	EDGAR RONALD MCHENRY TRUST	05-06-15	15.81
S13	EDDIE RAYBURN	05-06-16	15.82
S14	RONALD E THOMPSON & JANET R THOMPSON	05-06-17	26.36
S15	ARTHUR THOMAS BLOOM & LOIS JEAN BLOOM	05-06-18	59.76
S16	DIANA WOODBURN SAMSON	05-06-20	85
S17	CURTIS TYRONE TALLMAN & SARAH MICHELLE TALLMAN	05-06-13	76.85
S18	GARY L ROBERTS & BEVERLY C PYLES	05-06-12	74.75
S19	CHARLES RAY HAGAN	05-02-21	91.587
S20	LYLE BLANKENSHIP & LACY LEE BLANKENSHIP	05-02-9.2	63.08
S21	WANDA PARR	05-02-10	104.75



P.S. 708 David L Jackson

11/14/2025



Jay Bee
Oil & Gas
DRILLING
into the future

OPERATOR'S	WELL PLAT
WELL #: GRUMPY 5A	PAGE 2 OF 2
DISTRICT: MCELROY	DATE: 06/15/2022
COUNTY: TYLER	
STATE: WV	