

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

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Office of Oil and Gas

MAY 22 2017

WV Department of
Environmental Protection

API 47-095-02239 County Tyler District McElroy
Quad Shirley 7.5' Pad Name Dopey Field/Pool Name _____
Farm name John & Patty Montgomery Well Number Dopey 3
Operator (as registered with the OOG) Jay-Bee Oil & Gas, Inc.
Address 3570 Shields Hill Rd. 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 519,584.76 Easting 4,365,432.05
Landing Point of Curve Northing 519,705.38 Easting 4,365,366.43
Bottom Hole Northing 520,683.65 Easting 4,364,172.37

Elevation (ft) 910.4' 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 OBM

Date permit issued 12-11-2015 Date drilling commenced 2-19-2016 Date drilling ceased 7-30-2016
Date completion activities began 11-16-2016 Date completion activities ceased 11-26-2016
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 N/A Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1,050' 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

APPROVED
NAME: Sen a H
DATE: 5-25-17

Reviewed by:
DMH

06/02/2017

API 47-095 - 02239 Farm name John & Patty Montgomery Well number Dopey 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	17"	16"	30'	New	20/32/24		Y
Surface	15"	11 3/4"	301'	New	20/23/24	50'	Y
Coal							
Intermediate 1	11"	8 5/8"	2,103'	New	20/17/24	1,500'	Y
Intermediate 2							
Intermediate 3							
Production	7 7/8"	5 1/2"	12,054'	New	20		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	193	15.6	1.2	231.6	CTS	8
Coal							
Intermediate 1	Class A	727	15.6	1.18	857.9	CTS	8
Intermediate 2							
Intermediate 3							
Production	Class A	1,839	14.5	1.17	2,151.63	1,715' from surface	8
Tubing							

Drillers TD (ft) 12,084' Loggers TD (ft) 12,084'
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 5,443'

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 Spiral centralizer every joint from TD back to start of 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 _____

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

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Rev. 8/23/13

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PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	11/16/16	12007	11931	96	Marcellus
2	11/16/16	11885	11718	72	Marcellus
3	11/16/16	11668	11512	72	Marcellus
4	11/16/16	11476	11336	72	Marcellus
5	11/16/16	11272	11056	72	Marcellus
6	11/22/16	10976	10884	72	Marcellus
7	11/23/16	10850	10752	72	Marcellus
8	11/23/16	10716	10568	72	Marcellus
9	11/23/16	10518	10389	72	Marcellus
10	11/23/16	10341	10144	72	Marcellus
11	11/23/16	10098	9957	72	Marcellus
12	11/24/16	9912	9768	72	Marcellus
13	11/24/16	9730	9576	72	Marcellus
14	11/24/16	9533	9336	72	Marcellus
15	11/24/16	9275	9162	72	Marcellus
16	11/24/16	9126	8961	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	11/16/16	69.6	7186	8368	4706	180,870	6744	N/A
2	11/16/16	71	7062	8460	4745	174,230	6667	N/A
3	11/16/16	70	7707	8713	5210	181,540	8796	N/A
4	11/17/16	69.4	7881	8366	4893	177,100	5647	N/A
5	11/22/16	69	6904	7253	4829	179,160	4745	N/A
6	11/22/16	69	6932	7289	4894	180,330	5110	N/A
7	11/23/16	69	7028	7325	5108	180,112	4982	N/A
8	11/23/16	69.3	7117	8052	4679	177,948	4967	N/A
9	11/23/16	68.3	6739	7044	4760	183,620	5250	N/A
10	11/23/16	68.6	6670	6942	4820	179,700	5292	N/A
11	11/23/16	69	6744	7231	4458	148,004	4141	N/A
12	11/24/16	69	6885	7358	4465	181,575	5179	N/A
13	11/24/16	70	6866	7203	4646	182,030	6991	N/A
14	11/24/16	70	6955	7486	4509	183,710	6623	N/A
15	11/24/16	70	6855	7271	4997	183,330	6581	N/A
16	11/24/16	69.3	6567	6810	4643	178,110	6186	N/A

Please insert additional pages as applicable.

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Lithology

Dopey 3 47-095-02239

FORMATION	TOP	BOTTOM
MISC. RED ROCK & SHALES	0	1960
LIME	1960	2060
INJUN	2060	2177
SHALE	2177	2524
GORDON STRAY	2524	2544
SHALE	2544	2740
GORDON	2740	2770
SHALE	2770	3049
BAYARD	3049	3058
SHALE	3058	3387
WARREN	3387	3485
SHALE	3485	3721
BALLTOWN	3721	3884
SHALE	3884	4322
2ND RILEY	4322	4430
SHALE	4430	4581
3RD RILEY	4581	4622
SHALE	4622	4679
BENSON	4679	4682
SHALE	4682	4924
ALEXANDER	4924	5095
SHALE	5095	5340
ELK	5340	5388
SHALE	5388	5717
HAMILTON	5717	5891
SHALE	5891	6547
UPPER MARCELLUS	6547	6570
PARCELL LIME	6570	6605
SHALE	6605	6627
LOWER MARCELLUS	6627	0

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	11/16/2016
Job End Date:	11/26/2016
State:	West Virginia
County:	Tyler
API Number:	47-095-02239-00-00
Operator Name:	Jay-Bee Oil & Gas, Inc.
Well Name and Number:	Dopey 3
Latitude:	39.43814400
Longitude:	-80.77247700
Datum:	NAD27
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,660
Total Base Water Volume (gal):	7,081,914
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	Operator	Carrier					
			Water	7732-18-5	100.00000	92.47225	
Sand, White	Baker Hughes	Proppant					
				Listed Below			

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Other Chemical (s)	Baker Hughes	See Trade Name (s) List	Water					
			Water		7732-18-5	85.00000	0.36793	
HCl, 10.1 - 15%	Baker Hughes	Acidizing						
					Listed Below			
MaxPerm 30	Baker Hughes	Friction Reducer						
					Listed Below			
Alpha 1427	Baker Hughes	Biocide						
					Listed Below			
Scaletrol 720	Baker Hughes	Scale Inhibitor						
					Listed Below			
NE-530	Baker Hughes	Non-emulsifier						
					Listed Below			RECEIVED Office of Oil and Gas
Ferrotrol 300L	Baker Hughes	Iron Control						MAY 22 2017
					Listed Below			WV Department of Environmental Protection
CI-14	Baker Hughes	Corrosion Inhibitor						
					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	7.00467	
			Hydrochloric Acid		7647-01-0	15.00000	0.05264	

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				Acrylamide Modified Acrylic Polymer	38193-60-1	5.00000	0.03641
				Petroleum distillates	64742-47-8	30.00000	0.01820
				Ethylene Glycol	107-21-1	30.00000	0.00882
				Glutaraldehyde	111-30-8	30.00000	0.00717
				2-propenoic, polymer with sodium phosphinate, sodium salt	71050-62-9	1.00000	0.00588
				Sodium Chloride	7647-14-5	5.00000	0.00333
				Ethoxylated sorbitan monooleate	9005-65-6	100.00000	0.00303
				Oxyalkylated Alcohol	78330-21-9	5.00000	0.00303
				Sorbic acid, mono-(9Z)-octadecenoate	1338-43-8	100.00000	0.00303
				Didecyl Dimethyl Ammonium Chloride	7173-51-5	10.00000	0.00239
				Propylene Glycol	57-55-6	40.00000	0.00170
				Citric Acid	77-92-9	40.00000	0.00148
				Calcium Chloride	10043-52-4	60.00000	0.00147
				Ethanol	64-17-5	5.00000	0.00141
				Quaternary Ammonium Compound	68424-85-1	5.00000	0.00120
				Ammonium Persulfate	7727-54-0	75.00000	0.00071
				Acetic acid	127-08-2	20.00000	0.00061
				Methanol	67-56-1	100.00000	0.00057
				Polyamine Polyethers	68815-65-6	13.00000	0.00055
				Potassium Chloride	7447-40-7	1.00000	0.00029
				Modified Polymeric Alkoxyate	52501-07-2	5.00000	0.00021
				Polyethylene Glycol Trimethyl Nonyl Ether	84133-50-6	5.00000	0.00021
				Ethoxylated Alcohol	68131-39-5	5.00000	0.00021
				Polyoxyalkylenes	68951-67-7	30.00000	0.00017
				Acetic acid, Potassium Salt	64-19-7	5.00000	0.00006
				Fatty Acids	61790-12-3	10.00000	0.00006

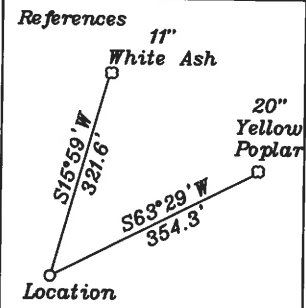
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Top Hole 6,482'
Bottom Hole 2,735'
LATITUDE 39-27-30 N



Top Hole
Geo NAD 83-39.438213 N, 80.772416 W
UTM NAD83(meter)-4365432.05 N, 519584.76 E
UTM NAD83(feet)-14322254.98 N, 1704670.99 E

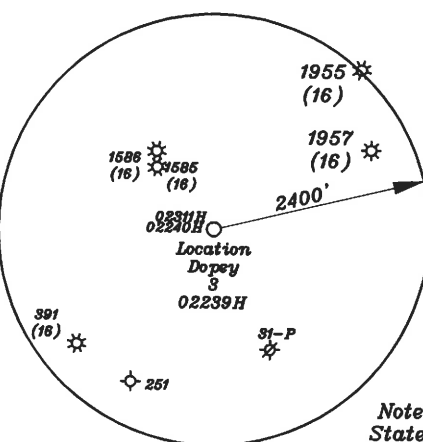
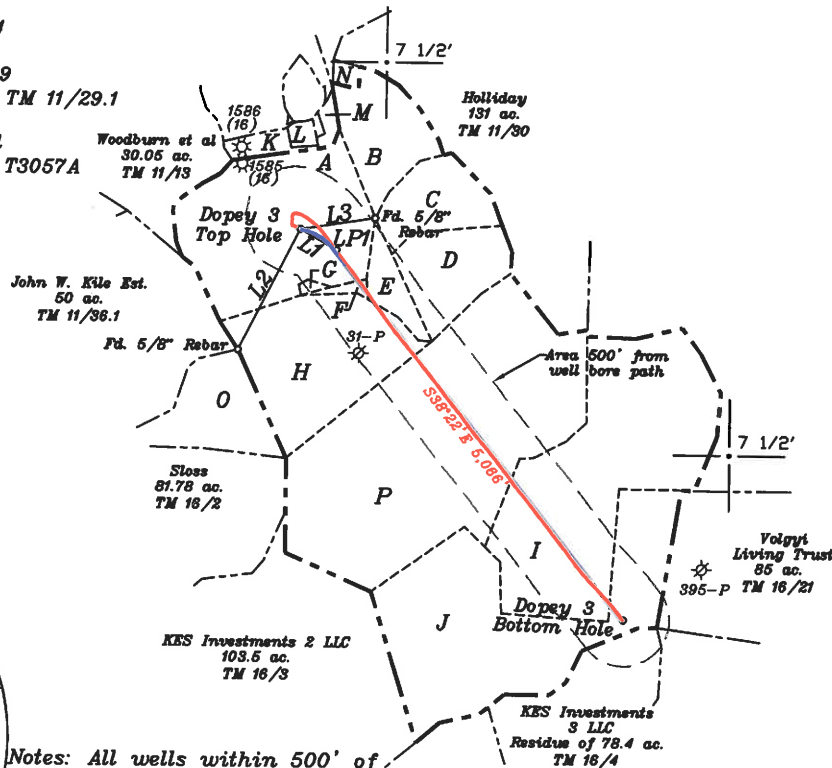
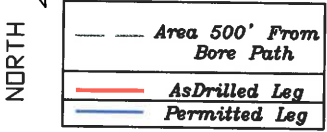
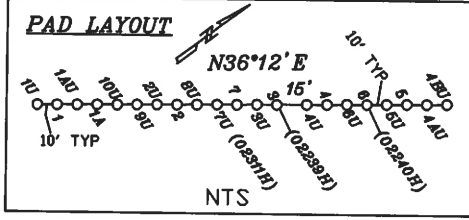
Landing Point 1
Geo NAD 83-39.437619 N, 80.771016 W
UTM NAD83(meter)-4365366.43 N, 519705.38 E
UTM NAD83(feet)-14322039.68 N, 1705066.73 E

Bottom Hole
Geo NAD 83-39.426836 N, 80.759686 W
UTM NAD83(meter)-4364172.37 N, 520683.65 E
UTM NAD83(feet)-14318122.20 N, 1708276.28 E

NUMBER	DIRECTION	DISTANCE
L1	S60°30'E	451'
L2	N26°51'E	1,466'
L3	S81°17'W	818'

Notes: No water wells were found within 250' of the well location. A house was found N55°54'W 614.3 from the center of the well pad.

- A- Montgomery 65 ac. TM 11/27 T3055A
- B- Jefferson Minerals, LLC 25.31 ac. TM 11/29.1
- C- Woodburn et al 35 ac. TM 11/43
- D- Woodburn et al 25.5 ac. TM 11/42
- E- Woodburn et al 6.75 ac. TM 11/44 T6300
- F- Woodburn et al 1.5 ac. TM 11/44 T6300
- G- Woodburn et al 0.756 ac. TM 11/45
- H- John W. Kile Estate 57 ac. TM 11/36 T3055B
- I- Hunter Real Estate LLC Triad Hunter LLC 106.87 ac. TM 11/40 T3018
- J- KES Investments 2 LLC 2nd Tract 200 ac. TM 16/4 T3068A
- K- Montgomery 2.18 ac. TM 11/14
- L- Vincent TM 1.82 ac. 11/14.4
- M- Ritter (Life) 1.63 ac. TM 11/29
- N- Jefferson Minerals, LLC 2 ac TM 11/29.1
- O- Davis 18.82 ac. TM 11/36
- P- Hunter Real Estate LLC Triad Hunter LLC 147 ac. TM 11/37 T3057A



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.

Notes: Ties to wells and corners are based on State Plane Grid North-WV North Zone NAD 27.

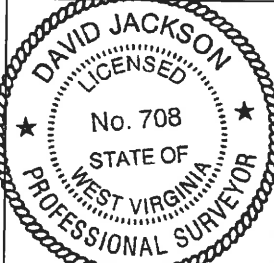
NOTES:
1. Well head was field located by Jackson Surveying using RTK GPS and is based upon an OPUS solution.
2. Leg and BH Locations are based upon a Drilling Report by Cyrodatta with Job Number AP0716DPM2001.

(+) 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 December 27, 2016
OPERATOR'S WELL NO. Dopey 3
API WELL NO. 47-095-02239H
STATE COUNTY PERMIT

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL _____
(IF 'GAS') PRODUCTION X STORAGE DEEP SHALLOW X

LOCATION: ELEVATION 910.4' WATER SHED Indian Creek
DISTRICT McElroy COUNTY Tyler
QUADRANGLE Shirley 7 1/2'

SURFACE OWNER John & Patty Montgomery ACREAGE 65 ac.
OIL & GAS ROYALTY OWNER & LEASE NO. See ownership list above for Lease Numbers.

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

PLUG AND ABANDON CLEAN OUT AND REPLUG _____
TARGET FORMATION Marcellus ESTIMATED DEPTH TVD = 6,656'; TMD = 12,084'
WELL OPERATOR Jay Bee Oil & Gas, Inc. DESIGNATED AGENT Randy Broda
ADDRESS 1720 Rt. 22, East Union, NJ 07083 ADDRESS 3570 Shields Hill Rd., Cairo, WV 26337

LONGITUDE 80-45-00 W
Bottom Hole 11,473'
Top Hole 7,269'

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