

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

API 47-095-02148 County Tyler District McElroy
Quad Shirley Pad Name Happy Field/Pool Name _____
Farm name Bloom, Arthur & Lois Well Number Happy 6
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 4,368,947 Easting 521,432
Landing Point of Curve Northing _____ Easting _____
Bottom Hole Northing 4,370,967 Easting 520,600

Elevation (ft) 1253.5' 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)
ABS 40

Date permit issued 10/08/2104 Date drilling commenced 1/21/2015 Date drilling ceased 3/8/2015
Date completion activities began N/A Date completion activities ceased N/A
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

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3/8/2015
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Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug
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:
AW WS 03/31/16

API 47- 095 - 02148 Farm name Bloom, Arthur & Lois Well number Happy 6

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"	504'	New	20/23/24	50'	Y
Coal							
Intermediate 1	11"	8 5/8"	2,468'	New	20/17/24	1500'	Y
Intermediate 2							
Intermediate 3							
Production	7 7/8"	5 1/2"	14,055'	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	263	15.2	1.26	238	CTS	8
Coal							
Intermediate 1	Class A	620	14.7	1.36	623	CTS	8
Intermediate 2							
Intermediate 3							
Production	Class A	1,755	14.4	1.30	2,282.6	880' from surface	8
Tubing							

Drillers TD (ft) 14,055' Loggers TD (ft) 14,055'
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 6030'

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 even joint from MD to Start of 90 degree.
 _____ **RECEIVED** _____
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 _____ **MAR 08 2016** _____
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 _____

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PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	N/A				Marcellus
2					Marcellus
3					Marcellus
4					Marcellus
5					Marcellus
6					Marcellus
7					Marcellus
8					Marcellus
9					Marcellus
10					Marcellus
11					Marcellus
12					Marcellus
13					Marcellus
14					Marcellus
15					Marcellus
16					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 (bbbls)	Amount of Nitrogen/other (units)
1								N/A
2								N/A
3								N/A
4								N/A
5								N/A
6								N/A
7								N/A
8								N/A
9								N/A
10								N/A
11								N/A
12								N/A
13								N/A
14								N/A
15								N/A
16								N/A

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<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Marcellus</u>	<u>7,045'</u> TVD	<u>14,055'</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

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

OPEN FLOW Gas Oil NGL Water GAS MEASURED BY

 _____ mcfpd _____ bpd _____ bpd _____ bpd Estimated Orifice Pilot

<u>LITHOLOGY/ FORMATION</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H₂S, ETC)</u>
	<u>DEPTH IN FT NAME TVD</u>	<u>DEPTH IN FT TVD</u>	<u>DEPTH IN FT MD</u>	<u>DEPTH IN FT MD</u>	
<u>See Attached.</u>	<u>0</u>		<u>0</u>		

Please insert additional pages as applicable.

Drilling Contractor Horizontal Well Drillers
Address 2915 SH 74 South City Purcell State OK Zip 73080

Logging Company Precise Well Analysis
Address PO Box 542 City Belpre State OH Zip 45714

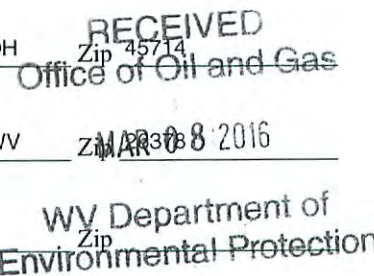
Cementing Company Nabors Completion & Production
Address 1650 Hackers Creek Rd. City Jane Lew State WV Zip 26038

Stimulating Company _____
Address _____ City _____ State _____ Zip _____

Please insert additional pages as applicable.

Completed by Shane Dowell Telephone 304-628-3111
Signature *[Signature]* Title Office Manager Date 3-3-2016

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



Lithology

Happy 6

47-095-02148

<u>FORMATION</u>	<u>TOP</u>	<u>BOTTOM</u>
MISC. RED ROCK & SHALES	0	2349
LIME	2349	2449
INJUN	2449	2566
SHALE	2566	2913
GORDON STRAY	2913	2933
SHALE	2933	3129
GORDON	3129	3159
SHALE	3159	3438
BAYARD	3438	3447
SHALE	3447	3776
WARREN	3776	3874
SHALE	3874	4110
BALLTOWN	4110	4273
SHALE	4273	4711
2ND RILEY	4711	4819
SHALE	4819	4970
3RD RILEY	4970	5011
SHALE	5011	5068
BENSON	5068	5071
SHALE	5071	5313
ALEXANDER	5313	5484
SHALE	5484	5729
ELK	5729	5777
SHALE	5777	6141
HAMILTON	6141	6315
SHALE	6315	6971
UPPER Marcellus	6971	6977
PARCELL LIME	6977	7012
SHALE	7012	7023
LOWER MARCELLUS	7023	

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285'

2,998' TO BOTTOM HOLE

LATITUDE 39°30'00"

LONGITUDE 80°45'00"

4,379' TO BOTTOM HOLE

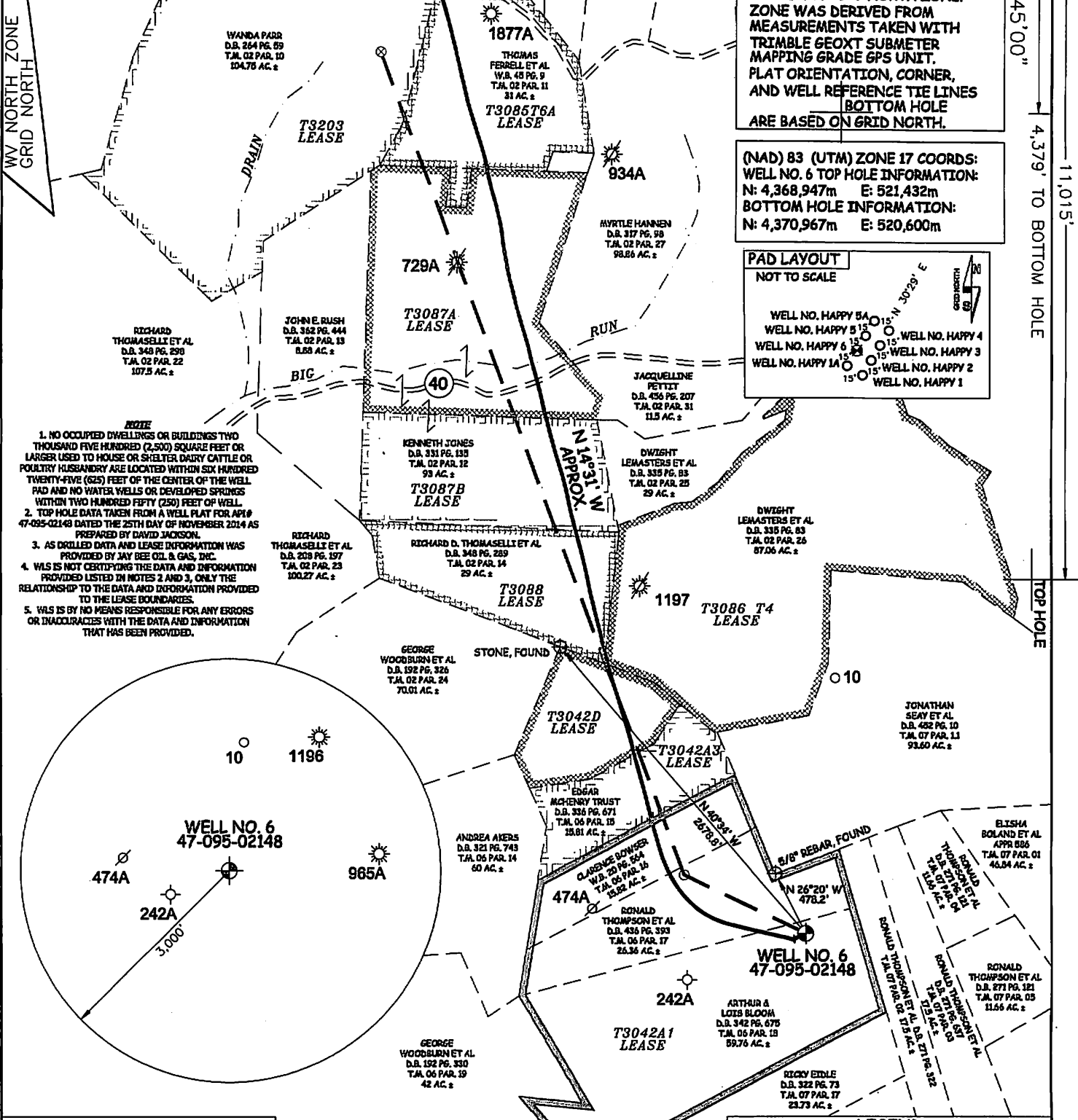
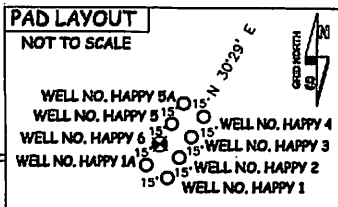
1,015'

TOP HOLE

Jay Bee Oil & Gas, Inc.
Well No. Happy 6
47-095-02148 (AS DRILLED)

AS DRILLED DATA:
WELL NO. 6 TOP HOLE INFORMATION:
N: 365,664ft E: 1,646,839ft
LAT: 39°28'11.12" LON: 80°45'03.64"
BOTTOM HOLE INFORMATION:
N: 362,339ft E: 1,644,220ft
LAT: 39°29'16.73" LON: 80°45'38.23"
WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE. ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIMBLE GEOXT SUBMETER MAPPING GRADE GPS UNIT. PLAT ORIENTATION, CORNER, AND WELL REFERENCE TIE LINES BOTTOM HOLE ARE BASED ON GRID NORTH.

(NAD) 83 (UTM) ZONE 17 COORDS:
WELL NO. 6 TOP HOLE INFORMATION:
N: 4,368,947m E: 521,432m
BOTTOM HOLE INFORMATION:
N: 4,370,967m E: 520,600m



- NOTE**
1. NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED (2,500) SQUARE FEET OR LARGER USED TO HOUSE OR SHELTER DAIRY CATTLE OR POULTRY HUSBANDRY ARE LOCATED WITHIN SIX HUNDRED TWENTY-FIVE (625) FEET OF THE CENTER OF THE WELL PAD AND NO WATER WELLS OR DEVELOPED SPRINGS WITHIN TWO HUNDRED FIFTY (250) FEET OF WELL.
 2. TOP HOLE DATA TAKEN FROM A WELL PLAT FOR API# 47-095-02148 DATED THE 25TH DAY OF NOVEMBER 2014 AS PREPARED BY DAVID JACKSON.
 3. AS DRILLED DATA AND LEASE INFORMATION WAS PROVIDED BY JAY BEE OIL & GAS, INC.
 4. WLS IS NOT CERTIFYING THE DATA AND INFORMATION PROVIDED LISTED IN NOTES 2 AND 3, ONLY THE RELATIONSHIP TO THE DATA AND INFORMATION PROVIDED TO THE LEASE BOUNDARIES.
 5. WLS IS BY NO MEANS RESPONSIBLE FOR ANY ERRORS OR INACCURACIES WITH THE DATA AND INFORMATION THAT HAS BEEN PROVIDED.

JOB # JAYBEEHAPPY6
DRAWING # HAPPY6AD
SCALE 1" = 1000'

MINIMUM DEGREE OF ACCURACY SUBMETER
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS



STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

WILLOW LAND SURVEYING PLLC
220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415

LEGEND
- - - Surface Owner Boundary Lines +/-
- - - Interior Surface Tracts +/-
⊕ Found monument, as noted
○ Proposed Well Path
⊗ As Drilled Well Path

DATE 02/11/16
OPERATOR'S WELL # HAPPY 6

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL 47 - 095 - 02148
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW STATE Office of Oil and Gas PERMIT COUNTY NAME
 LOCATION: ELEVATION 1,253.5' WATERSHED OUTLET MIDDLE ISLAND CREEK
 QUADRANGLE SHIRLEY 7.5 DISTRICT MCELROY COUNTY MAHON
 SURFACE OWNER ARTHUR & LOIS BLOOM ACREAGE 59.76 ACRES +/-
 OIL & GAS ROYALTY OWNER T3042A1; T3042A3; T3042D; T3086 T4; T3088; T3087B; T3087A; T3085T6A; T3203 LEASE ACREAGE 66.22 ACRES +/-; 15.81 ACRES +/-; 18.83 ACRES +/-; 97.06 ACRES +/-; 29 ACRES +/-; 31 ACRES +/-; 61 ACRES +/-; 31 ACRES +/-; 104.75 ACRES +/-
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) (X) AS DRILLED PLUG & ABANDON CLEAN OUT & REPLUG
 TARGET FORMATION MARCELLUS ESTIMATED DEPTH 7,037' TVD 14,055' MD
 WELL OPERATOR JAY BEE OIL & GAS, INC. DESIGNATED AGENT RANDY BRODA
 ADDRESS 1720 ROUTE 22 EAST UNION, NJ 07083 ADDRESS ROUTE 1, BOX 5 CAIRO, WV 26337

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