

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

API 47 - 095 - 02190 County Tyler District McElroy
Quad Shirley 7.5' Pad Name Doc Field/Pool Name _____
Farm name Stanley H. Tustin & WA & Ida Gaston Well Number Doc 2
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 4,366,633.631 Easting 519,945.253
Landing Point of Curve Northing N/A Easting _____
Bottom Hole Northing 4,364,738.029 Easting 521,349.688

Elevation (ft) 1,036' 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 8/20/2014 ²⁰¹⁴ Date drilling commenced 9/18/2014 Date drilling ceased 1/12/15
Date completion activities began 10/6/2015 Date completion activities ceased 10/17/2015
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 60-90' Open mine(s) (Y/N) depths _____
Salt water depth(s) ft N/A Void(s) encountered (Y/N) depths _____
Coal depth(s) ft N/A Cavern(s) encountered (Y/N) depths _____

Is coal being mined in area (Y/N) N

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Reviewed by:
AX 06/07/2016
WS

APPROVED
NAME: Justin Snyder
DATE: 6/7/16

API 47-095 - 02190 Farm name Stanley H. Tustin & WA & Ida Gaston Well number Doc 2

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"	353'	New	20/23/24	50'	Y
Coal							
Intermediate 1	11"	8 5/8"	2,247'	New	20/17/24	1,500'	Y
Intermediate 2							
Intermediate 3							
Production	7 7/8"	5 1/2"	14,161'	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	200	15.2	1.26	168	CTS	8
Coal							
Intermediate 1	Class A	575	14.7	1.36	567	CTS	8
Intermediate 2							
Intermediate 3							
Production	Class A	1,740	14.4	1.30	2,262	1100' from surface	8
Tubing							

Drillers TD (ft) 14,161' Loggers TD (ft) 14,161'
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 5,957'

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 _____

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	10/7/2015	14147	14036	96	Marcellus
2	10/8/2015	14001	13849	72	Marcellus
3	10/9/2015	13814	13679	72	Marcellus
4	10/9/2015	13644	13415	72	Marcellus
5	10/9/2015	13380	13244	72	Marcellus
6	10/10/2015	13209	13053	72	Marcellus
7	10/10/2015	13018	12853	72	Marcellus
8	10/11/2015	12818	12663	72	Marcellus
9	10/11/2015	12628	12437	72	Marcellus
10	10/11/2015	12377	12245	72	Marcellus
11	10/11/2015	12182	12031	72	Marcellus
12	10/11/2015	11994	11842	72	Marcellus
13	10/12/2015	11802	11677	72	Marcellus
14	10/12/2015	11630	11465	72	Marcellus
15	10/12/2015	11404	11213	72	Marcellus
16	10/12/2015	11168	10981	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	10/7/15	42.3	7019	7471	5198	7050	7120	N/A
2	10/8/15	74.9	7645	6436	4461	181000	7996	N/A
3	10/9/15	73	6976	5900	4702	179500	7880	N/A
4	10/9/15	75.4	7109	6102	5031	179600	7389	N/A
5	10/9/15	74.7	7319	7237	5190	179750	7667	N/A
6	10/10/15	75.2	7093	6226	5106	179700	7352	N/A
7	10/10/15	74.7	7336	5760	5118	180300	7084	N/A
8	10/11/15	76.3	7255	5965	5080	180050	7108	N/A
9	10/11/15	75.4	7314	6767	5036	181000	7226	N/A
10	10/11/15	75.3	6880	6980	5220	180400	7934	N/A
11	10/11/15	77.1	7306	6588	5299	180150	6449	N/A
12	10/11/15	77.2	7099	7261	5160	181700	6890	N/A
13	10/12/15	76	7024	5890	4795	177900	6560	N/A
14	10/12/15	75.6	6735	5724	4733	180200	7443	N/A
15	10/12/15	74.7	6874	5798	4782	181400	7257	N/A
16	10/12/15	75.8	6811	5942	4909	181850	7174	N/A

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Please insert additional pages as applicable.

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PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
17	10/12/2015	10944	10809	72	Marcellus
18	10/14/2015	10764	10565	72	Marcellus
19	10/14/2015	10504	10388	72	Marcellus
20	10/14/2015	10346	10188	72	Marcellus
21	10/15/2015	10145	10010	72	Marcellus
22	10/15/2015	9946	9785	72	Marcellus
23	10/15/2015	9733	9555	72	Marcellus
24	10/15/2015	9520	9346	72	Marcellus
25	10/16/2015	9311	9129	72	Marcellus
26	10/16/2015	9074	8960	72	Marcellus
27	10/16/2015	8909	8725	72	Marcellus
28	10/16/2015	8690	8530	72	Marcellus
29	10/16/2015	8492	8335	72	Marcellus
30	10/17/2015	8284	8124	72	Marcellus
31	10/17/2015	8080	7925	72	Marcellus
32	10/17/2015	7882	7721	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	10/12/15	75.4	6891	5742	4795	180050	7329	N/A
18	10/14/15	75.7	6645	5384	4758	180000	6415	N/A
19	10/14/15	76.1	6597	5368	4676	179950	6172	N/A
20	10/14/15	75	6558	5460	4721	180950	5776	N/A
21	10/15/15	76.5	6675	6567	4856	179800	6372	N/A
22	10/15/15	75.3	6505	5376	4819	180100	6913	N/A
23	10/15/15	75.9	6614	6073	4661	180800	6824	N/A
24	10/15/15	75.4	6463	5027	4824	179900	6604	N/A
25	10/16/15	76.3	6508	4880	4734	180200	5462	N/A
26	10/16/15	75	6229	5496	4400	179900	5604	N/A
27	10/16/15	77.5	7075	6659	4267	181400	5946	N/A
28	10/16/15	77	6353	4599	4541	181550	5478	N/A
29	10/16/15	76.6	6561	5381	4985	181500	5443	N/A
30	10/17/15	75	6443	5908	4762	180550	5414	N/A
31	10/17/15	75.5	6900	5035	4801	181400	6315	N/A
32	10/17/15	77	7091	6183	4108	184900	6002	N/A

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Please insert additional pages as applicable.

Lithology

Doc 2 47-095-02190

FORMATION	TOP	BOTTOM
MISC. RED ROCK & SHALES	0	2132
LIME	2132	2232
INJUN	2232	2349
SHALE	2349	2696
GORDON STRAY	2696	2716
SHALE	2716	2912
GORDON	2912	2942
SHALE	2942	3221
BAYARD	3221	3230
SHALE	3230	3559
WARREN	3559	3657
SHALE	3657	3893
BALLTOWN	3893	4056
SHALE	4056	4494
2ND RILEY	4494	4602
SHALE	4602	4753
3RD RILEY	4753	4794
SHALE	4794	4851
BENSON	4851	4854
SHALE	4854	5096
ALEXANDER	5096	5267
SHALE	5267	5512
ELK	5512	5560
SHALE	5560	5924
HAMILTON	5924	6098
SHALE	6098	6754
UPPER Marcellus	6754	6760
PARCELL LIME	6760	6795
SHALE	6795	6771
LOWER MARCELLUS	6771	

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State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Discharge Monitoring Report
Oil and Gas General Permit

Company Name: Jay-Bee Oil & Gas, Inc.
API No: 47-095-02190 County: Tyler
District: McElroy Well No: Doc 2
Farm Name: Stanley H. Tustin & WA & Ida Gaston
Discharge Date/s From:(MMDDYY) n/a To: (MMDDYY) n/a
Discharge Times. From: n/a To: n/a

Total Volume to be Disposed from this facility (gallons): NO DISCHARGE

Disposal Option(s) Utilized (write volumes in gallons):

- (1) Land Application: _____ (Include a topographical map of the Area.)
- (2) UIC: _____ Permit No. _____
- (3) Offsite Disposal: _____ Site Location: _____
- (4) Reuse: _____ Alternate Permit Number: _____
- (5) Centralized Facility: _____ Permit No. _____
- (6) Other method: _____ (Include an explanation)

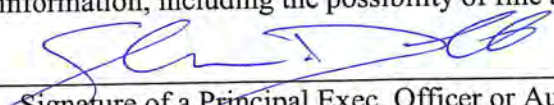
Follow Instructions below to determine your treatment category:

Optional Pretreatment test: n/a Cl- mg/l n/a DO mg/l

1. Do you have permission to use expedited treatment from the Director or his representative?
(Y/N) N If yes, who? n/a and place a four (4) on line 7.
If not go to line 2
2. Was Frac Fluid or flowback put into the pit? (Y/N) N If yes, go to line 5. If not, go to line 3.
3. Do you have a chloride value pretreatment (see above)? (Y/N) n/a If yes, go to line 4
If not, go to line 5.
4. Is the Chloride level less than 5000 mg/l? (Y/N) n/a If yes, then enter a one (1) on line 7.
5. Do you have a pretreatment value for DO? (See above) (Y/N) n/a If yes, go to line 6
If not, enter a three (3) in line 7.
6. Is the DO level greater than 2.5 mg/l?(Y/N) n/a If yes, enter a two (2) on line 7. If not, enter a three (3) on line 7.
7. n/a is the category of your pit. Use the Appropriate section.
8. Comments on Pit condition: n/a

Name of Principal Exec. Officer: Shane Dowell
Title of Officer: Office Manager
Date Completed: 4-1-2016

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.


Signature of a Principal Exec. Officer or Authorized agent. WV Department of Environmental Protection
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Hydraulic Fracturing Fluid Product Component Information Disclosure



Job Start Date:	10/7/2015
Job End Date:	10/17/2015
State:	West Virginia
County:	Tyler
API Number:	47-095-02190-00-00
Operator Name:	Jay-Bee Oil & Gas, Inc.
Well Name and Number:	Doc 2
Longitude:	-80.66672220
Latitude:	39.44894440
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	6,793
Total Base Water Volume (gal):	10,932,617
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	Customer & CWS	Base Fluid & Mix Water	Water	7732-18-5	100.00000	92.90305	
Sand (Proppant), DAP-103, DAP-903, DAP-925, DWP-111, DWP-602, DWP-621, DWP-901, DWP-938, DWP-844, Hydrochloric Acid	CWS	Propping Agent, Iron Control, Scale Inhibitor, Acid Corrosion Inhibitor, Gel Slurry, Friction Reducer, Friction Reducer, Breaker, Surfactant, Microbiocide, Clean Perforations	Crystalline silica (Quartz)	14808-60-7	100.00000	6.75462	
			Hydrochloric acid	7647-01-0	37.00000	0.14489	
			Paraffinic hydrocarbon solvent	64742-47-8	30.00000	0.04171	
			2-Propenoic acid, polymer with 2-propenamamide, sodium salt	25987-30-8	40.00000	0.03698	
			Guar gum	9000-30-0	60.00000	0.01954	
			Distillates (petroleum), hydrotreated middle	64742-46-7	60.00000	0.01954	
			Polyethylene glycol mixture	25322-68-3	54.50000	0.01506	
			Illite	12173-60-3	1.00000	0.00815	
			Calcite	471-34-1	1.00000	0.00793	

		2-Propenoic acid, polymer with sodium phosphonate	71050-62-9	60.00000	0.00695
		2,2-Dibromo-3-Nitrilopropionamide	10222-01-2	20.00000	0.00553
		Sorbitan monooleate, ethoxylated	9005-65-6	6.00000	0.00464
		Sorbitan monooleate	1338-43-8	5.00000	0.00463
		Goethite	1310-14-1	0.10000	0.00415
		Biotite	1302-27-8	0.10000	0.00339
		Apatite	64476-38-6	0.10000	0.00339
		Ilmenite	98072-94-7	0.10000	0.00302
		Isotridecyl alcohol, ethoxylated	78330-21-9	3.00000	0.00278
		Sodium acetate	126-96-5	2.00000	0.00185
		Quaternary ammonium compounds, bis(hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-58-2	5.00000	0.00163
		Methanol	67-56-1	60.00000	0.00157
		Ammonium Persulfate	7727-54-0	100.00000	0.00131
		Sodium bromide	7647-15-6	4.00000	0.00111
		Dibromoacetonitrile	3252-43-5	3.00000	0.00083
		Citric acid	77-92-9	60.00000	0.00058
		Oxirane, 2-methyl-, polymer with oxirane, monodecyl ether	37251-67-5	1.50000	0.00049
		Alcohols, C9-11, ethoxylated	68439-46-3	5.00000	0.00025
		Poly(Acrylamide and Adam methyl Chloride)	69418-26-4	35.00000	0.00013
		Acrylamide	79-06-1	0.10000	0.00009
		Alcohols, C12-13, ethoxylated	66455-14-9	1.00000	0.00005
		Alcohols, C14-15, ethoxylated	68951-67-7	30.00000	0.00005
		Modified thiourea polymer	68527-49-1	30.00000	0.00005
		Fatty acids, tall-oil	61790-12-3	30.00000	0.00005
		Propargyl Alcohol	107-19-7	10.00000	0.00002
		Ammonium chloride	12125-02-9	1.00000	0.00001
		Sodium chloride	7647-14-5	1.00000	0.00001
		Alkenes, C>10 a-	64743-02-8	5.00000	0.00001
		Formaldehyde	50-00-0	0.10000	0.00001

Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.

- Total Water Volume sources may include fresh water, produced water, and/or recycled water
- Information is based on the maximum potential for concentration and thus the total may be over 100%
- 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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Top Hole Latitude: 39°27'30"

5133'

Bottom Hole Latitude: 39°27'30" 543'

THRASHER

THE THRASHER GROUP, INC.
600 WHITE OAKS BLVD.
BRIDGEPORT, WV 26330
PHONE 304-624-4108

AS-DRILLED

NOTES ON SURVEY

- COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
- SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND FIELD LOCATIONS.
- THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
- NO DWELLINGS AND BUILDINGS WITHIN 625 FEET OF PROPOSED OF CENTER OF PAD.
- NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
- NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
- NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.

TRACT	SURFACE OWNER	TAX PARCEL	ACRES	LEASE NO.
A	FRANCIS W TENNANT SR & RANDY W TUSTIN	5-11-6	46.51	T-2142A
B	VICTORY CEMETERY ASSN	5-11-30.4	3.76	PRE-2
C	KATHERINE & CHRISTINA M HOLLIDAY	5-11-30	124.54	PRE-1
D	KATHERINE & CHRISTINA M HOLLIDAY	5-11-30.1	12.00	T-18C
E	ENCL R JR & GLENDA SUE HEADLEY	5-11-33	66.92	T-18A
F	HUNTER REAL ESTATE LLC	5-11-38	60.00	T-3017
G	SUSAN CLANCY	5-12-43	45.5	T-3016

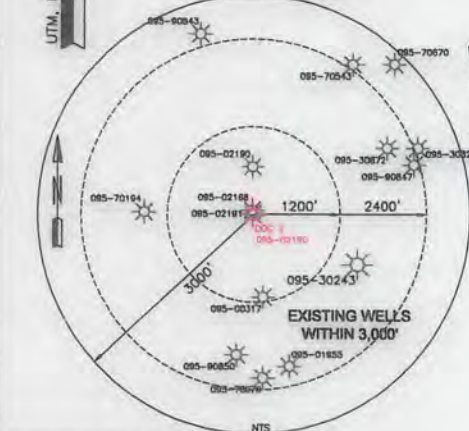
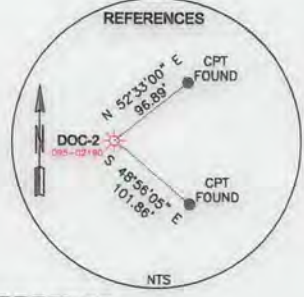
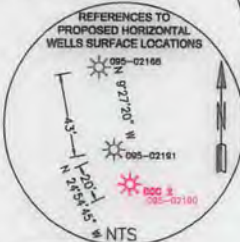
ADJOINER	SURFACE OWNER	TAX PARCEL
1	PATRICK WILSON & SHEILA BLACK	5-11-17.1
2	PATRICK WILSON & SHEILA BLACK	5-11-31
3	WALTER JR & LINDA EUREKA	5-11-32
4	MARK E HEADLEY	5-11-33.1
5	TERRY R HEADLEY	5-11-34
6	EDWARD & SHIRLEY LANCASTER	5-11-35
7	KATHERINE & CHRISTINA HOLLIDAY	5-11-30.2
8	WILLIAM WOODBURN	5-11-14.1
9	KATHERINE & CHRISTINA HOLLIDAY	5-11-30.3
10	JACKIELEE STRAIGHT	5-11-15
11	VICTORY CEMETERY ASSOCIATION	5-11-30.5

LINE	BEARING	DISTANCE
L1	S 23°23'08" E	743.09'
L2	S 11°23'51" W	1338.67'

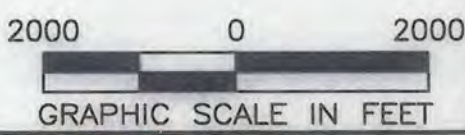
SHL

Bottom Hole Longitude: 80°45'00" 9659'
Top Hole Longitude: 80°45'00" 9427'

GRID NORTH
UTM, NAD83 DATUM, ZONE 17, US FT



SURFACE HOLE LOCATION (SHL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4,366,633.631 EASTING: 519,945.253 GEOGRAPHIC (NAD83): LATITUDE: 39.449031° LONGITUDE: -80.768191°
BOTTOM HOLE LOCATION (BHL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4,364,738.029 EASTING: 521,349.688 GEOGRAPHIC (NAD83): LATITUDE: 39.431917° LONGITUDE: -80.751929°



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 REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

P.S. 2270

M.S. Wolf 3/31/16

<p>(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS</p> <p>WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034</p>	<p>MINIMUM DEGREE OF ACCURACY: 1/200</p> <p>PROVEN SURVEY SOURCE OF GRADE GPS ELEVATION: (NAVD 88, US FT)</p>	<p>OPERATOR'S WELL #: DOC-2</p> <p>API WELL #: 47 095 02190H6A STATE COUNTY PERMIT</p>
	<p>WELL TYPE: OIL <input type="checkbox"/> WASTE DISPOSAL <input type="checkbox"/> PRODUCTION <input type="checkbox"/> DEEP <input type="checkbox"/> GAS <input checked="" type="checkbox"/> LIQUID INJECTION <input type="checkbox"/> STORAGE <input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/></p> <p>WATERSHED: OUTLET MIDDLE ISLAND CREEK ELEVATION: 1036'</p> <p>DISTRICT: MCELROY COUNTY: TYLER QUADRANGLE: SHIRLEY</p> <p>SURFACE OWNER: FRANCIS W TENNANT SR & RANDY W TUSTIN ACREAGE: 46.51±</p> <p>OIL & GAS ROYALTY OWNER: JACOB FEIN, ETAL; WINDY FOUT, ETAL; JAMES T. GUSTON, ETAL; J&B EXPLORATION I LLC; WILLIAM F. WOODBURN, ETAL. VICTORY CEMETERY ASSOCIATION; JACOB W. FEIN. ACREAGE: 359.23±</p> <p>DRILL <input checked="" type="checkbox"/> DRILL DEEPER <input type="checkbox"/> REDRILL <input type="checkbox"/> FRACTURE OR STIMULATE <input checked="" type="checkbox"/> PLUG OFF OLD FORMATION <input type="checkbox"/> PERFORATE NEW FORMATION <input type="checkbox"/></p> <p>CONVERT <input type="checkbox"/> PLUG & ABANDON <input type="checkbox"/> CLEAN OUT & REPLUG <input type="checkbox"/> OTHER CHANGE <input type="checkbox"/> (SPECIFY)</p> <p>TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TMD 14,161' TVD 6,793'</p>	
<p>WELL OPERATOR: JAY BEE OIL & GAS, INC. ADDRESS: 1720 RT. 22, EAST CITY: UNION STATE: NJ ZIP CODE: 07083</p>	<p>DESIGNATED AGENT: RANDY BRODA ADDRESS: RT. 1 BOX 5 CITY: CAIRO STATE: WV ZIP CODE: 26337</p>	<p>LEGEND: ● PROPOSED SURFACE HOLE / BOTTOM HOLE * EXISTING / PRODUCING WELLHEAD ○ ABANDONED WELL ⊗ PLUGGED & ABANDONED WELL △ CUT CONDUCTOR</p> <p>----- LEASE BOUNDARY ----- 500' DHP BUFFER ----- AS-DRILLED DHP ----- PLANNED DHP</p>
<p>REVISIONS:</p>		<p>DATE: 03-28-2016</p> <p>DRAWN BY: E. LYTLE SCALE: 1" = 2000' DRAWING NO: 050-5823 ASDRILLED PLAT</p>

06/10/2016

Top Hole Latitude: 39°27'30" 5133'

Bottom Hole Latitude: 39°27'30" 543'

THRASHER

THE THRASHER GROUP, INC.
800 WHITE OAKS BLVD.
BRIDGEPORT, WV 26330
PHONE 304-624-4408

NOTES ON SURVEY

- COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17. U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
- SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND FIELD LOCATIONS.
- THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
- NO DWELLINGS AND BUILDINGS WITHIN 625 FEET OF PROPOSED CENTER OF PAD.
- NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
- NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
- NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.

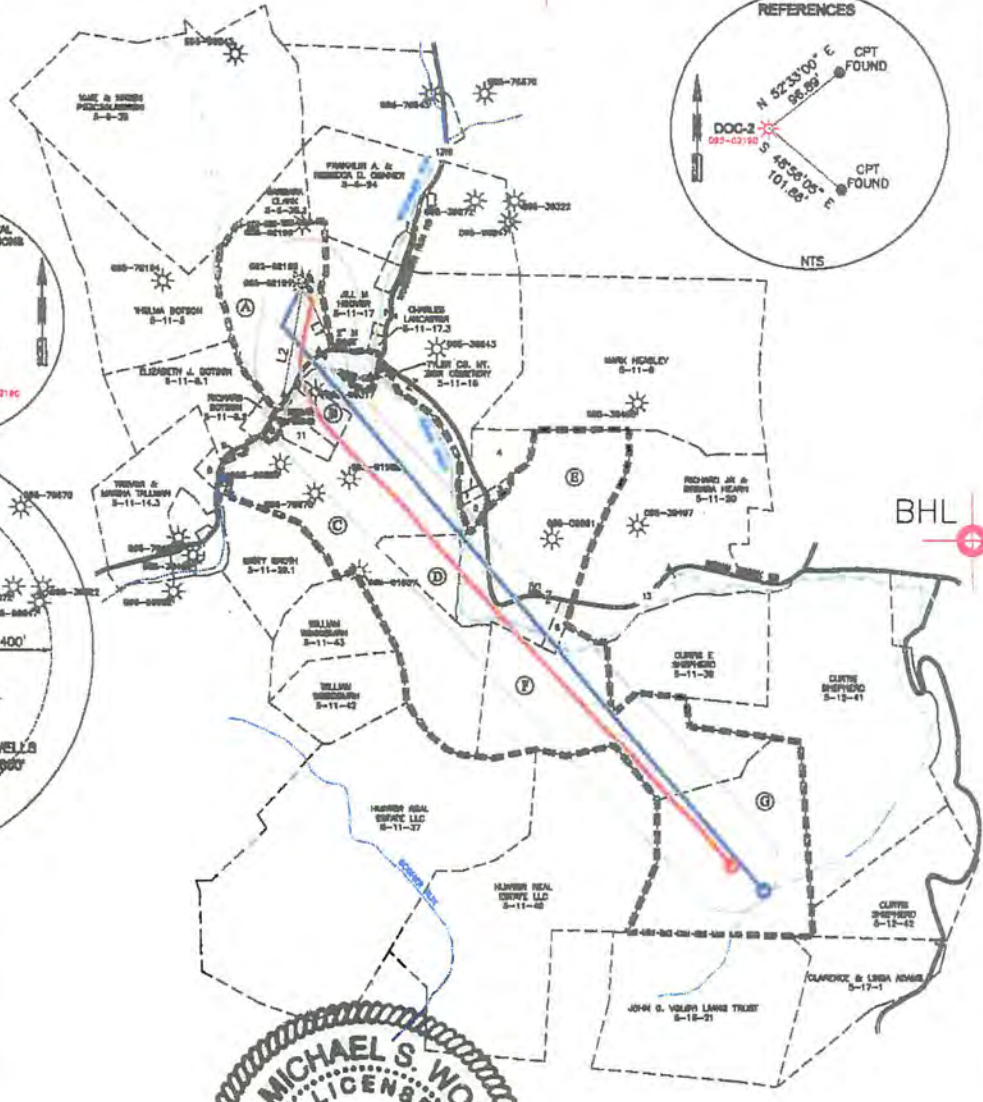
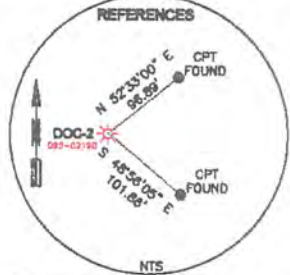
TRACT	SURFACE OWNER	TAX PARCEL	ACRES	LEASE NO.
A	FRANCIS W TENNANT SR & RANDY W TUSTIN	5-11-8	46.81	T-2142A
B	VICTORY CEMETERY ASSN	5-11-38.4	3.76	PRE-2
C	KATHERINE & CHRISTINA H HOLLERY	5-11-38	124.84	PRE-1
D	KATHERINE & CHRISTINA H HOLLERY	5-11-38.1	12.80	T-19C
E	DICK R JR & ALONDA BEE HADLEY	5-11-32	66.62	T-19A
F	HARTER REAL ESTATE LLC	5-11-38	66.62	T-2017
G	SUSAN CLAWCY	5-12-43	66.5	T-2818

LINE	BEARING	DISTANCE
L1	S 27°23'00" E	743.09'
L2	S 17°23'51" W	1336.67'

AS-DRILLED

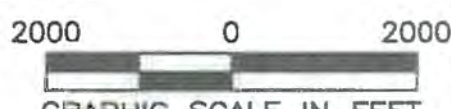
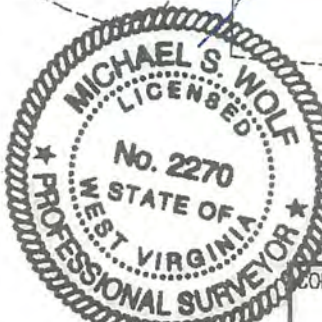
ADJACENT	SURFACE OWNER	TAX PARCEL
1	FRANCIS W TENNANT SR & RANDY W TUSTIN	5-11-17.1
2	FRANCIS W TENNANT SR & RANDY W TUSTIN	5-11-31
3	WALTER JR & LORNA ELMORA	5-11-32
4	MARY E HADLEY	5-11-33.1
5	TERRY R HADLEY	5-11-34
6	EDWARD & SHIRLEY LAWISTER	5-11-38
7	KATHERINE & CHRISTINA HOLLERY	5-11-38.5
8	WILLIAM WOODBURN	5-11-14.1
9	KATHERINE & CHRISTINA HOLLERY	5-11-38.3
10	JACQUELE STANFORD	5-11-19
11	VICTORY CEMETERY ASSOCIATION	5-11-38.6

GRID NORTH
UTM, NAD83 DATUM, ZONE 17, US FT



SURFACE HOLE LOCATION (SHL):	
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4,366,633.631
	EASTING: 519,945.253
GEOGRAPHIC (NAD83):	LATITUDE: 39.449031°
	LONGITUDE: -80.768191°
BOTTOM HOLE LOCATION (BHL):	
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4,364,738.029
	EASTING: 521,349.688
GEOGRAPHIC (NAD83):	LATITUDE: 39.431917°
	LONGITUDE: -80.751929°

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 REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



P.S. 2270 *M.S. Wolf* 3/31/16

<p>(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS</p> <p>WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034</p>	MINIMUM DEGREE OF ACCURACY: 1/200 PROVEN SOURCE OF ELEVATION: SURVEY GRADE GPS (NAVD 88, US FT)	OPERATOR'S WELL #: DOC-2 API WELL #: 47 095 02190H6A STATE COUNTY PERMIT
	WELL TYPE: OIL <input type="checkbox"/> WASTE DISPOSAL <input type="checkbox"/> PRODUCTION <input type="checkbox"/> DEEP <input type="checkbox"/> GAS <input checked="" type="checkbox"/> LIQUID INJECTION <input type="checkbox"/> STORAGE <input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/>	WATERSHED: OUTLET MIDDLE ISLAND CREEK DISTRICT: MCELROY COUNTY: TYLER SURFACE OWNER: FRANCIS W TENNANT SR & RANDY W TUSTIN OIL & GAS ROYALTY OWNER: HARTER REAL ESTATE LLC, ALONDA BEE HADLEY, KATHERINE & CHRISTINA HOLLERY, WALTER JR & LORNA ELMORA, MARY E HADLEY, TERRY R HADLEY, EDWARD & SHIRLEY LAWISTER, KATHERINE & CHRISTINA HOLLERY, WILLIAM WOODBURN, JACQUELE STANFORD, VICTORY CEMETERY ASSOCIATION
DRILL <input checked="" type="checkbox"/> DRILL DEEPER <input type="checkbox"/> REDRILL <input type="checkbox"/> FRACTURE OR STIMULATE <input checked="" type="checkbox"/> PLUG OFF OLD FORMATION <input type="checkbox"/> PERFORATE NEW FORMATION <input type="checkbox"/> CONVERT <input type="checkbox"/> PLUG & ABANDON <input type="checkbox"/> CLEAN OUT & REPLUG <input type="checkbox"/> OTHER CHANGE <input type="checkbox"/> (SPECIFY) _____	TARGET FORMATION: MARCELLUS	ESTIMATED DEPTH: TMD 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
WELL OPERATOR: JAY BEE OIL & GAS, INC. ADDRESS: 1720 RT. 22, EAST CITY: UNION STATE: NJ ZIP CODE: 07083	DESIGNATED AGENT: RANDY BRODIE ADDRESS: RT. 1 BOX 5 CITY: CAIRO STATE: WV ZIP CODE: 26337	REVISIONS: _____ DATE: 03-28-2016 DRAWN BY: E. LYLE SCALE: 1"=2000' DRAWING NO.: 050-5823-ASDRILLED PLAT

Top Hole Longitude: 80°45'00" 9659'
Bottom Hole Longitude: 80°45'00" 9659'

RECEIVED 06/10/2016
Office of Oil and Gas