

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

API 47-051-01831 County Marshall District Meade  
Quad Wileyville 7.5 Pad Name BONNETTE-MSH-PAD1 Field/Pool Name Victory Field  
Farm name BONNETTE, ROBERT & LINDA Well Number 206H  
Operator (as registered with the OOG) SWN PRODUCTION COMPANY LLC  
Address PO BOX 12359 City SPRING State TX Zip 77397-2359

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing 4396895.127 Easting 524691.069  
Landing Point of Curve Northing 4396430.812 Easting 524602.621  
Bottom Hole Northing 4395341.725 Easting 525774.969

Elevation (ft) 1428 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)  
SOBM

Date permit issued 6/11/2015 Date drilling commenced 6/16/2015 Date drilling ceased 8/21/2015  
Date completion activities began 11/11/15 Date completion activities ceased 12/9/15  
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 334 Open mine(s) (Y/N) depths \_\_\_\_\_  
Salt water depth(s) ft 1717 Void(s) encountered (Y/N) depths \_\_\_\_\_  
Coal depth(s) ft 1205 Cavern(s) encountered (Y/N) depths \_\_\_\_\_

Is coal being mined in the area (Y/N) \_\_\_\_\_

**APPROVED**

NAME: Jacquelin Jhonatan  
DATE: 6/30/2016

RECEIVED  
Office of Oil and Gas  
N  
JUN 28 2016  
WV Department of  
Environmental Protection  
Ax RD/24/2016  
10/21/16

API 47-051 - 01831 Farm name BONNETTE, ROBERT & LINDA Well number 206H

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	26	20	126	N	J-55/ 94#		Y
Surface	17.5	13.375	720	N	J-55/ 54.50#		Y
Coal	SEE SURFACE						
Intermediate 1	12.25	9.625	2804	N	J-55/ 40#		Y
Intermediate 2							
Intermediate 3							
Production	8.75 TO 8.50	5.5	13074	N	P-110/20#		Y
Tubing		2.375	7620	N	L-80/4.70#		N
Packer type and depth set		N/A					

Comment Details \_\_\_\_\_

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	A	GROUT	19.3	1.20		SURFACE	24
Surface	A	675	15.6	1.20	810	SURFACE	8
Coal	SEE SURFACE						
Intermediate 1	A	1104	15.7	1.14	1259	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	A	1150/1320	15.6	1.23/1.19	2986	SURFACE	24
Tubing							

Drillers TD (ft) 13074 Loggers TD (ft) 13074  
 Deepest formation penetrated MARCELLUS Plug back to (ft) NA  
 Plug back procedure NA

Kick off depth (ft) 6644

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 \_\_\_\_\_

ALL CASING STRINGS RAN WITH A CENTRALIZER AT A MINIMUM OF 1 PER EVERY 3RD JOINT OF CASING

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WAS WELL COMPLETED AS SHOT HOLE  Yes  No DETAILS JUN 28 2016

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

WERE TRACERS USED  Yes  No TYPE OF TRACER(S) USED \_\_\_\_\_



API 47- 051 - 01831 Farm name BONNETTE, ROBERT & LINDA Well number 206H

PRODUCING FORMATION(S)	DEPTHS	
MARCELLUS	7080.55	TVD 7543.20 MD

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface 1375 psi Bottom Hole \_\_\_\_\_ psi DURATION OF TEST \_\_\_\_\_ hrs

OPEN FLOW Gas 4123.963 mcfpd Oil 78.19 bpd NGL \_\_\_\_\_ bpd Water 78.86 bpd  
 GAS MEASURED BY  Estimated  Orifice  Pilot

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

Please insert additional pages as applicable.

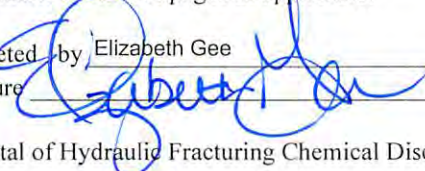
Drilling Contractor SWN Drilling Company  
 Address 10000 Energy Drive City Spring State TX Zip 77389

Logging Company NINE ENERGY SERVICES  
 Address 16945 NORTHCHASE DR, STE 1600 City HOUSTON State TX Zip 77060

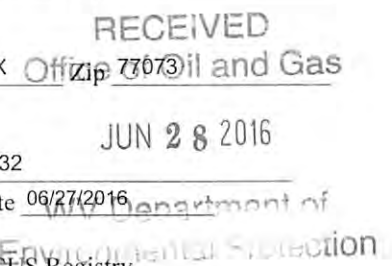
Cementing Company SCHLUMBERGER WELL SERVICES  
 Address 110 SCHLUMBERGER DRIVE City SUGAR LAND State TX Zip 77478

Stimulating Company BAKER HUGHES  
 Address 2301 Oil Center Ct City HOUSTON State TX Zip 77073

Please insert additional pages as applicable.

Completed by Elizabeth Gee Telephone 832-796-7632  
 Signature  Title Sr. Regulatory Analyst Date 06/27/2016

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



10/21/2016

## BONNETTE MSH 206H

LITHOLOGY/FORMATION	TOP DEPTH, TVD (FT)	BOTTOM DEPTH, TVD (FT)	TOP DEPTH, MD (FT)	BOTTOM DEPTH, MD (FT)	QUANTITY AND TYPE OF FLUID
Base of Fresh Water	N.A.	334.00	N.A.	334.00	
Top of Salt Water	584.00	N.A	584.00	N.A	
Pittsburgh Coal	1202.60	1209.55	1204.00	1211.00	
Big Injun (ss)	2316.12	2942.10	2319.00	2945.00	
Berea (siltstone)	2942.10	6478.23	2945.00	6679.19	
Rhinestreet (shale)	6478.23	6754.75	6679.19	6992.79	
Cashaqua (shale)	6754.75	6858.44	6992.79	7124.31	
Middlesex (shale)	6858.44	6933.01	7124.31	7233.77	
Burket (shale)	6933.01	6960.69	7233.77	7278.13	
Tully (ls)	6960.69	6993.89	7278.13	7337.40	
Mahantango (shale)	6993.89	7080.55	7337.40	7543.20	
Marcellus (shale)	7080.55	N.A.	7543.20	N.A.	

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**BONNETTE MSH 206 - PERFORATION RECORD**

STAGE NUM	Perf Date	Perf Top MD	Perf Bottom MD	# SHOTS PER STG
1	11/11/2015	12,773	12,967	42
2	11/11/2015	12,517	12,711	42
3	11/11/2015	12,261	12,455	42
4	11/11/2015	12,005	12,199	42
5	11/12/2015	11,749	11,943	42
6	11/12/2015	11,493	11,687	42
7	11/13/2015	11,237	11,431	42
8	11/13/2015	10,981	11,175	42
9	11/13/2015	10,725	10,919	42
10	11/14/2015	10,469	10,663	42
11	11/14/2015	10,213	10,407	42
12	11/14/2015	9,957	10,151	42
13	11/14/2015	9,701	9,895	42
14	11/15/2015	9,445	9,639	42
15	11/15/2015	9,189	9,383	42
16	11/15/2015	8,933	9,127	42
17	11/16/2015	8,677	8,871	42
18	11/16/2015	8,421	8,615	42
19	11/16/2015	8,165	8,359	42
20	11/17/2015	7,909	8,103	42
21	11/17/2015	7,653	7,847	42

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**BONNETTE MSH 206 - STIMULATION INFORMATION**

STAGE NUM	Stim 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
1	11/11/2015	2	8,285	8,886	4,245	502,122	8,357	
2	11/11/2015	2	8,152	8,564	4,536	501,389	7,634	
3	11/11/2015	2	8,211	8,851	4,869	500,552	7,455	
4	11/11/2015	2	8,479	8,772	4,766	502,066	7,448	
5	11/12/2015	2	8,091	8,546	4,806	503,461	7,308	
6	11/12/2015	2	8,122	8,640	4,950	503,252	7,431	
7	11/13/2015	2	8,190	8,415	4,881	503,128	9,388	
8	11/13/2015	2	8,163	8,767	5,147	503,773	7,155	
9	11/13/2015	2	8,020	8,861	4,719	500,136	7,619	
10	11/14/2015	2	8,186	8,513	4,453	499,902	7,985	
11	11/14/2015	2	8,108	8,781	4,849	503,401	7,464	
12	11/14/2015	2	8,045	9,046	4,740	421,076	6,416	
13	11/14/2015	2	7,912	8,283	5,351	502,066	6,979	
14	11/15/2015	2	7,993	9,148	4,643	481,166	7,411	
15	11/15/2015	2	7,904	8,472	4,953	501,223	7,766	
16	11/15/2015	2	7,645	7,934	5,292	502,524	7,152	
17	11/16/2015	2	8,039	8,491	5,021	498,938	8,194	
18	11/16/2015	2	7,984	8,986	4,807	503,899	8,825	
19	11/16/2015	2	7,759	8,337	5,415	500,507	7,930	
20	11/17/2015	2	7,996	8,484	4,871	502,064	9,370	
21	11/17/2015	2	7,818	8,616	4,898	500,728	7,334	
Grand total		2	8,052	9,148	4,867	10,437,373	162,621	

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# Hydraulic Fracturing Fluid Product Component Information Disclosure

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Job Start Date:	11/10/2015
Job End Date:	11/19/2015
State:	West Virginia
County:	Marshall
API Number:	47-051-01831-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	BONNETTE MSH 206H
Longitude:	-80.71190775
Latitude:	39.72157526
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	7,186
Total Base Water Volume (gal):	6,830,082
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	83.23367	
Sand, non-API, 40/70 mesh	Baker Hughes	Proppant					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		8.79612	
Sand, White, 100 mesh	Baker Hughes	Proppant					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		5.94836	
HCl, 10.1 - 15%	Baker Hughes	Acidizing					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		1.10110	SmartCare Product
DustPro Chemical Coating	Baker Hughes	Dust Suppression					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.70933	
MaxPerm 30	Baker Hughes	Friction Reducer					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.05830	
MaxPerm-20A, 265 gallon tote	Baker Hughes	Friction Reducer					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.03515	SmartCare Product
Alpha 1427	Baker Hughes	Biocide					



			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.00994	SmartCare Product
Scaletrol 720	Baker Hughes	Scale Inhibitor					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.00914	SmartCare Product
Ferrotrol 300L	Baker Hughes	Iron Control					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.00775	SmartCare Product
CI-39	Baker Hughes	Corrosion Inhibitor					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.00122	
CI-14	Baker Hughes	Corrosion Inhibitor					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.00082	
GBW-5	Baker Hughes	Breaker					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.00042	SmartCare Product
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.							
Ingredients in Additive (s) (MSDS and non- MSDS)	Baker Hughes	See Trade Name(s) List					
			Crystalline Silica (Quartz)	14808-60-7	100.00000	14.72880	
			Water	7732-18-5	85.00000	1.00544	
			Non-hazardous acrylic polymer	NA	75.00000	0.53143	
			Propylene glycol	57-55-6	30.00000	0.21257	
			Hydrochloric Acid	7647-01-0	15.00000	0.16500	
			Acrylamide Modified Polymer	38193-60-1	60.00000	0.03494	
			1-Propanesulfonic acid, 2- methyl-2-[(1-oxo-2-propen-1-yl) amino]-, polymer with 2- propenamide, sodium salt	83446-68-8	60.00000	0.02106	
			Petroleum Distillates	64742-47-8	30.00000	0.01747	
			Hydrotreated Light Distillate	64742-47-8	30.00000	0.01053	
			Sodium Chloride	7647-14-5	5.00000	0.00476	
			Oxyalkylated alcohol	78330-21-9	5.00000	0.00467	
			Citric Acid	77-92-9	60.00000	0.00464	
			Ethylene Glycol	107-21-1	45.00000	0.00411	
			Glutaraldehyde	111-30-8	30.00000	0.00298	
			Sorbitan, mono-(9Z)- 9octadecenoate	1338-43-8	5.00000	0.00291	
			Sorbitan monooleate ethoxylate	9005-65-5	5.00000	0.00291	
			2-Propenoic, Polymer with Sodium Phosphinate, Sodium Salt	71050-62-9	20.00000	0.00183	
			Polyoxyethylene sorbitan monooleate	9005-65-6	5.00000	0.00176	
			Sorbitan, mono-(9Z)-9- octadecenoate	1338-43-8	5.00000	0.00176	
			Didecyl Dimethyl Ammonium Chloride	7173-51-5	10.00000	0.00099	
			Methanol	67-56-1	100.00000	0.00082	
			Acetic Acid, Potassium Salt	127-08-2	1.00000	0.00058	

		Quaternary Ammonium Compound	68424-85-1	5.00000	0.00056
		Ethanol	64-17-5	5.00000	0.00050
		Oxyalkylated Fatty Acid	61791-002	40.00000	0.00049
		Calcium Chloride	10043-52-4	5.00000	0.00046
		Ammonium Persulphate	7727-54-0	100.00000	0.00042
		Tar Bases, Quinoline Derivs., Benzyl Chloride-Quaternized	72480-70-7	30.00000	0.00037
		Formic Acid	64-18-6	30.00000	0.00037
		Aldehyde	104-55-2	30.00000	0.00037
		Polyoxyalkylenes	68951-67-7	30.00000	0.00025
		Potassium Chloride	7447-40-7	1.00000	0.00009
		Fatty Acids	61790-12-3	10.00000	0.00008
		Sulfurized polyolefin	68037-13-8	5.00000	0.00006
		Isopropanol	67-63-0	5.00000	0.00006
		Tetrasodium EDTA	64-02-8	0.10000	0.00006
		Acetic Acid	64-19-7	0.10000	0.00006
		Modified Thiourea Polymer	68527-49-1	7.00000	0.00006
		Propargyl Alcohol	107-19-7	5.00000	0.00004
		Olefin	64743-02-8	5.00000	0.00004
		Potassium Iodide	7681-11-0	2.00000	0.00002
		Polyaklylene	7756-94-7	1.00000	0.00001
		Formaldehyde	50-00-0	1.00000	0.00001
		Potassium Acetate	127-08-2	0.50000	0.00001

\* 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.

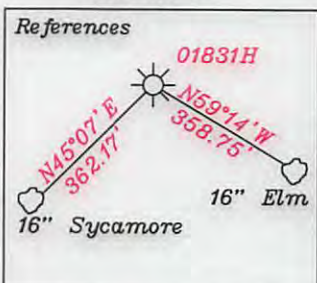
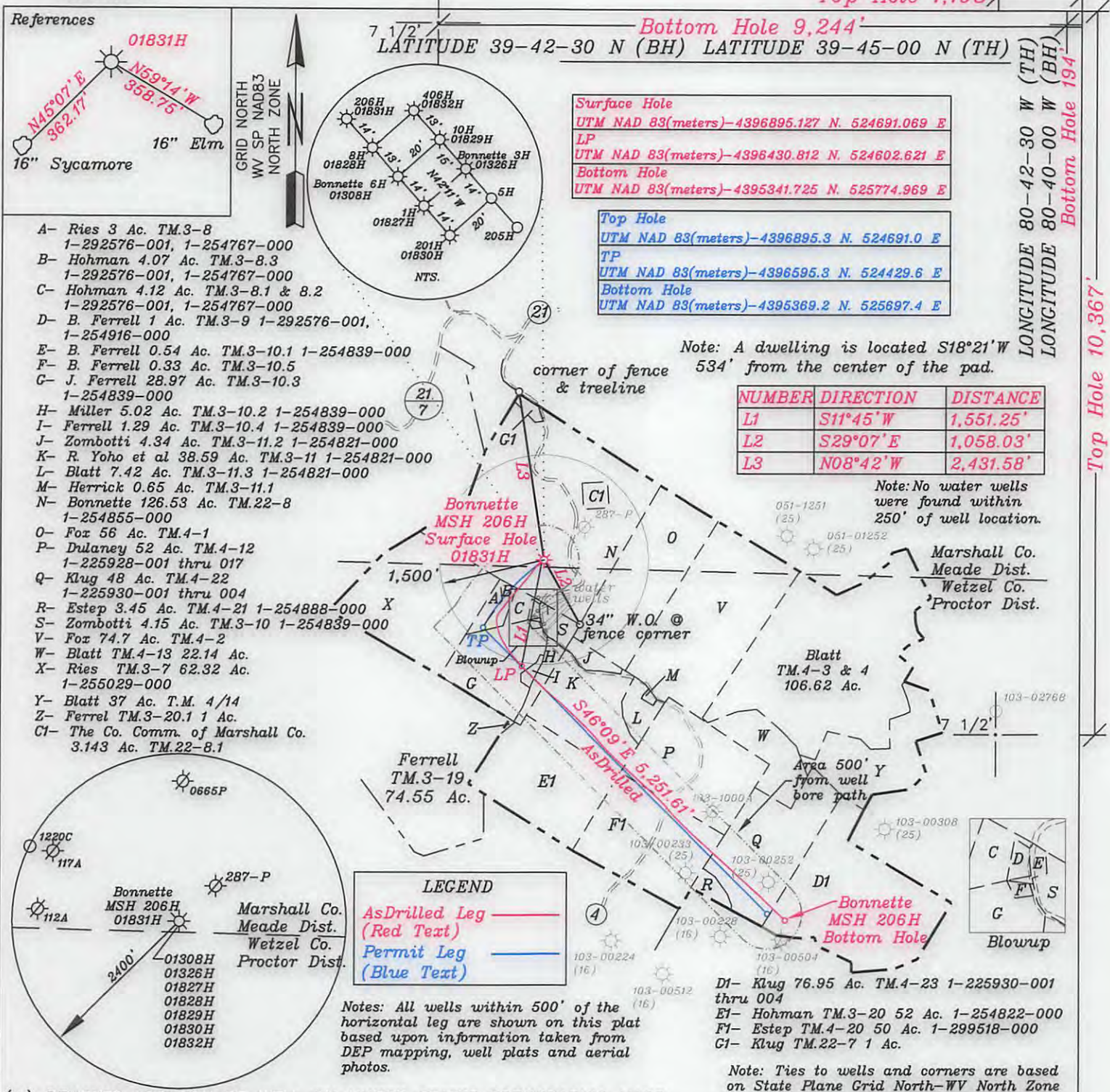
Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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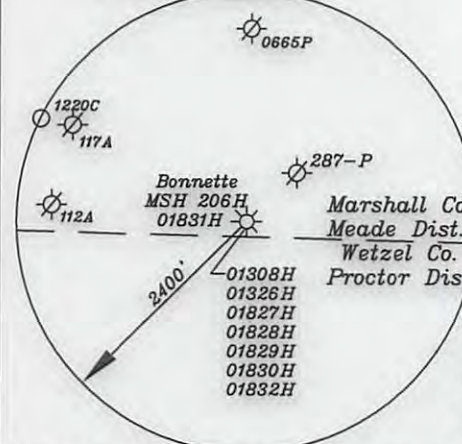
### BONNETTE MSH 206H

LITHOLOGY/FORMATION	TOP DEPTH, TVD (FT)	BOTTOM DEPTH, TVD (FT)	TOP DEPTH, MD (FT)	BOTTOM DEPTH, MD (FT)	QUANTITY AND TYPE OF FLUID
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Burket (shale)	6933.01	6960.69	7233.77	7278.13	
Tully (ls)	6960.69	6993.89	7278.13	7337.40	
Mahantango (shale)	6993.89	7080.55	7337.40	7543.20	
Marcellus (shale)	7080.55	N.A.	7543.20	N.A.	

Reviewed  
 Office of Oil & Gas  
 MAR 03 2016



- A- Ries 3 Ac. TM.3-8  
1-292576-001, 1-254767-000
- B- Hohman 4.07 Ac. TM.3-8.3  
1-292576-001, 1-254767-000
- C- Hohman 4.12 Ac. TM.3-8.1 & 8.2  
1-292576-001, 1-254767-000
- D- B. Ferrell 1 Ac. TM.3-9 1-292576-001,  
1-254916-000
- E- B. Ferrell 0.54 Ac. TM.3-10.1 1-254839-000
- F- B. Ferrell 0.33 Ac. TM.3-10.5
- G- J. Ferrell 28.97 Ac. TM.3-10.3  
1-254839-000
- H- Miller 5.02 Ac. TM.3-10.2 1-254839-000
- I- Ferrell 1.29 Ac. TM.3-10.4 1-254839-000
- J- Zombotti 4.34 Ac. TM.3-11.2 1-254821-000
- K- R. Yoho et al 38.59 Ac. TM.3-11 1-254821-000
- L- Blatt 7.42 Ac. TM.3-11.3 1-254821-000
- M- Herrick 0.65 Ac. TM.3-11.1
- N- Bonnette 126.53 Ac. TM.22-8  
1-254855-000
- O- Fox 56 Ac. TM.4-1
- P- Dulaney 52 Ac. TM.4-12  
1-225928-001 thru 017
- Q- Klug 48 Ac. TM.4-22  
1-225930-001 thru 004
- R- Estep 3.45 Ac. TM.4-21 1-254888-000 X
- S- Zombotti 4.15 Ac. TM.3-10 1-254839-000
- V- Fox 74.7 Ac. TM.4-2
- W- Blatt TM.4-13 22.14 Ac.
- X- Ries TM.3-7 62.32 Ac.  
1-255029-000
- Y- Blatt 37 Ac. T.M. 4/14
- Z- Ferrell TM.3-20.1 1 Ac.
- C1- The Co. Comm. of Marshall Co.  
3.143 Ac. TM.22-8.1



**LEGEND**

As Drilled Leg	(Red Text)
Permit Leg	(Blue Text)

Notes: All wells within 500' of the horizontal leg are shown on this plat based upon information taken from DEP mapping, well plats and aerial photos.

NUMBER	DIRECTION	DISTANCE
L1	S11°45'W	1,551.25'
L2	S29°07'E	1,058.03'
L3	N08°42'W	2,431.58'

Note: A dwelling is located S18°21'W 534' from the center of the pad.

Note: No water wells were found within 250' of well location.

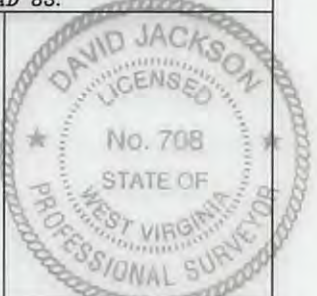
- D1- Klug 76.95 Ac. TM.4-23 1-225930-001 thru 004
- E1- Hohman TM.3-20 52 Ac. 1-254822-000
- F1- Estep TM.4-20 50 Ac. 1-299518-000
- G1- Klug TM.22-7 1 Ac.

Note: Ties to wells and corners are based on State Plane Grid North-WV North Zone NAD 83.

(+) 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. \_\_\_\_\_ L.L.S. 708



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

DATE March 1, 2016  
 OPERATOR'S WELL NO. Bonnette MSH 206H  
 API WELL NO. AsDrilled

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

LOCATION: ELEVATION 1,427.7' WATER SHED Whetstone Creek  
 DISTRICT Meade COUNTY Marshall  
 QUADRANGLE Wileyville 7 1/2'

SURFACE OWNER Robert and Linda Bonnette ACREAGE 126.53 ac.  
 OIL & GAS ROYALTY OWNER Robert and Linda Bonnette, Robert and Barbara Bias, & Larry and Glenda Kress LEASE ACREAGE 573.59 10/21/2016

LEASE NO. \_\_\_\_\_

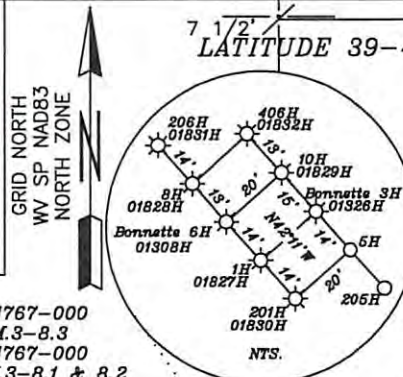
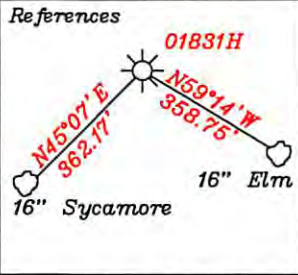
PROPOSED WORK: DRILL X CONVERT    DRILL DEEPER    REDRILL    FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION    PERFORATE NEW FORMATION X OTHER PHYSICAL CHANGE IN WELL (SPECIFY) AsDrilled

PLUG AND ABANDON    CLEAN OUT AND REPLUG     
 TARGET FORMATION Marcellus ESTIMATED DEPTH TVD=7,126':TMD=13,074'  
 WELL OPERATOR SWN Production Co. LLC DESIGNATED AGENT Dee Southall  
 ADDRESS P.O. Box 1300 Jane Lew, WV 26378 ADDRESS P.O. Box 1300 Jane Lew, WV 26378

Top Hole 1,198'

Bottom Hole 9,244'

LATITUDE 39-42-30 N (BH) LATITUDE 39-45-00 N (TH)



<b>Surface Hole</b>
UTM NAD 83(meters)-4396896.127 N. 524691.069 E
LP
UTM NAD 83(meters)-4396430.812 N. 524602.621 E
<b>Bottom Hole</b>
UTM NAD 83(meters)-4395341.725 N. 525774.969 E

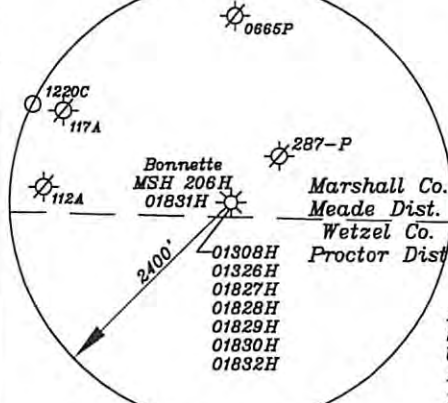
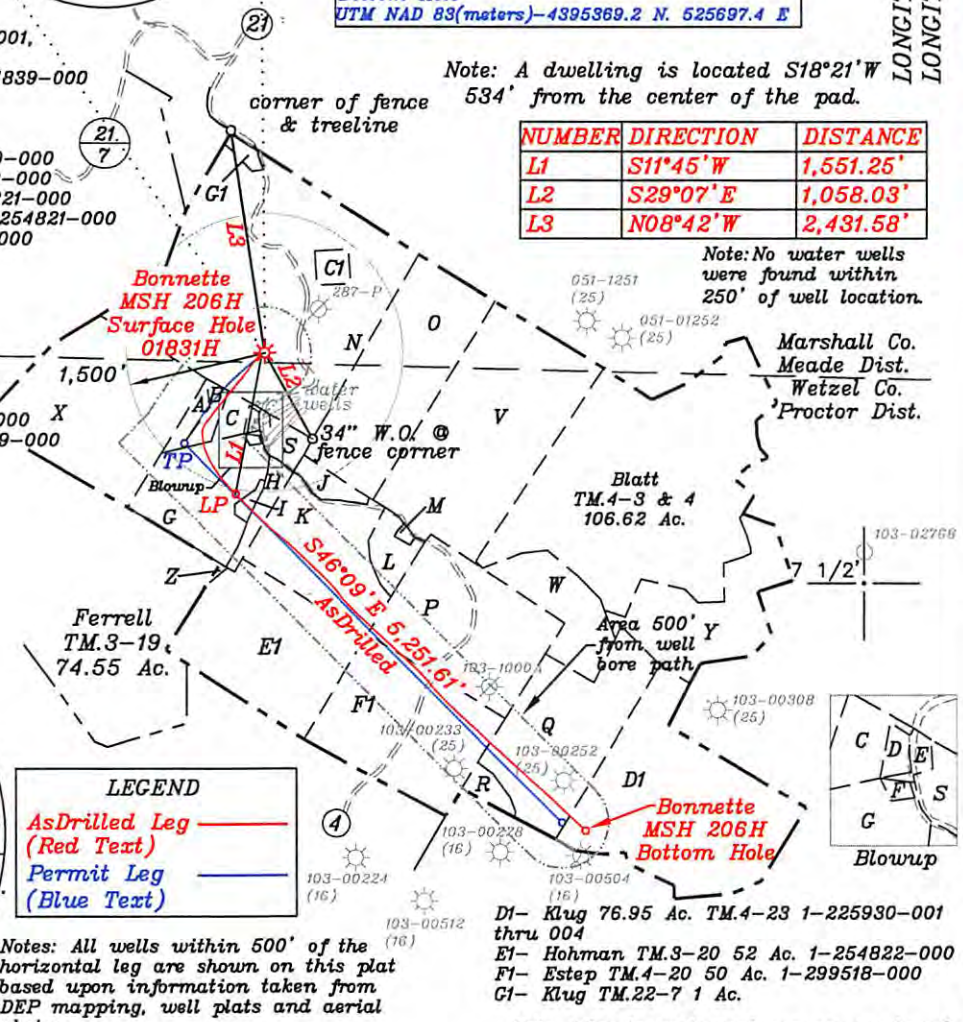
<b>Top Hole</b>
UTM NAD 83(meters)-4396895.3 N. 524691.0 E
TP
UTM NAD 83(meters)-4396595.3 N. 524429.6 E
<b>Bottom Hole</b>
UTM NAD 83(meters)-4395369.2 N. 525697.4 E

- A- Ries 3 Ac. TM.3-8  
1-292576-001, 1-254767-000
- B- Hohman 4.07 Ac. TM.3-8.3  
1-292576-001, 1-254767-000
- C- Hohman 4.12 Ac. TM.3-8.1 & 8.2  
1-292576-001, 1-254767-000
- D- B. Ferrell 1 Ac. TM.3-9 1-292576-001,  
1-254916-000
- E- B. Ferrell 0.54 Ac. TM.3-10.1 1-254839-000
- F- B. Ferrell 0.33 Ac. TM.3-10.5
- G- J. Ferrell 28.97 Ac. TM.3-10.3  
1-254839-000
- H- Miller 5.02 Ac. TM.3-10.2 1-254839-000
- I- Ferrell 1.29 Ac. TM.3-10.4 1-254839-000
- J- Zombotti 4.34 Ac. TM.3-11.2 1-254821-000
- K- R. Yoho et al 38.59 Ac. TM.3-11 1-254821-000
- L- Blatt 7.42 Ac. TM.3-11.3 1-254821-000
- M- Herrick 0.65 Ac. TM.3-11.1
- N- Bonnette 126.53 Ac. TM.22-8  
1-254855-000
- O- Fox 56 Ac. TM.4-1
- P- Dulaney 52 Ac. TM.4-12  
1-225928-001 thru 017
- Q- Klug 48 Ac. TM.4-22  
1-225930-001 thru 004
- R- Estep 3.45 Ac. TM.4-21 1-254888-000 X
- S- Zombotti 4.15 Ac. TM.3-10 1-254839-000
- V- Fox 74.7 Ac. TM.4-2
- W- Blatt TM.4-13 22.14 Ac.
- X- Ries TM.3-7 62.32 Ac.  
1-255029-000
- Y- Blatt 37 Ac. T.M. 4/14
- Z- Ferrel TM.3-20.1 1 Ac.
- C1- The Co. Comm. of Marshall Co.  
3.143 Ac. TM.22-8.1

Note: A dwelling is located S18°21'W 534' from the center of the pad.

NUMBER	DIRECTION	DISTANCE
L1	S11°45'W	1,551.25'
L2	S29°07'E	1,058.03'
L3	N08°42'W	2,431.58'

Note: No water wells were found within 250' of well location.



**LEGEND**

As Drilled Leg (Red Text)	—
Permit Leg (Blue Text)	—

Notes: All wells within 500' of the horizontal leg are shown on this plat based upon information taken from DEP mapping, well plats and aerial photos.

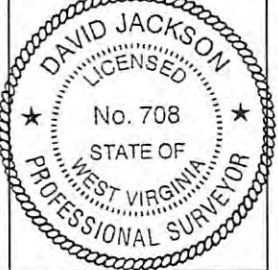
Note: Ties to wells and corners are based on State Plane Grid North-WV North Zone NAD 83.

(+) 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. \_\_\_\_\_ L.L.S. 708



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

DATE March 1, 2016  
 OPERATOR'S WELL NO. Bonnette MSH 206H  
 API WELL NO. As Drilled

WELL TYPE: OIL GAS LIQUID INJECTION X WASTE DISPOSAL    STATE 47 COUNTY 051 PERMIT 01831H  
 (IF "GAS") PRODUCTION X STORAGE    DEEP    SHALLOW X

LOCATION: ELEVATION 1,427.7' WATER SHED Whetstone Creek  
 DISTRICT Meade COUNTY Marshall  
 QUADRANGLE Wileyville 7 1/2'

SURFACE OWNER Robert and Linda Bonnette ACREAGE 126.53 ac.  
 OIL & GAS ROYALTY OWNER Robert and Linda Bonnette, Robert and Barbara Bias, & Larry and Glenda Kress LEASE ACREAGE 573.59 ac.

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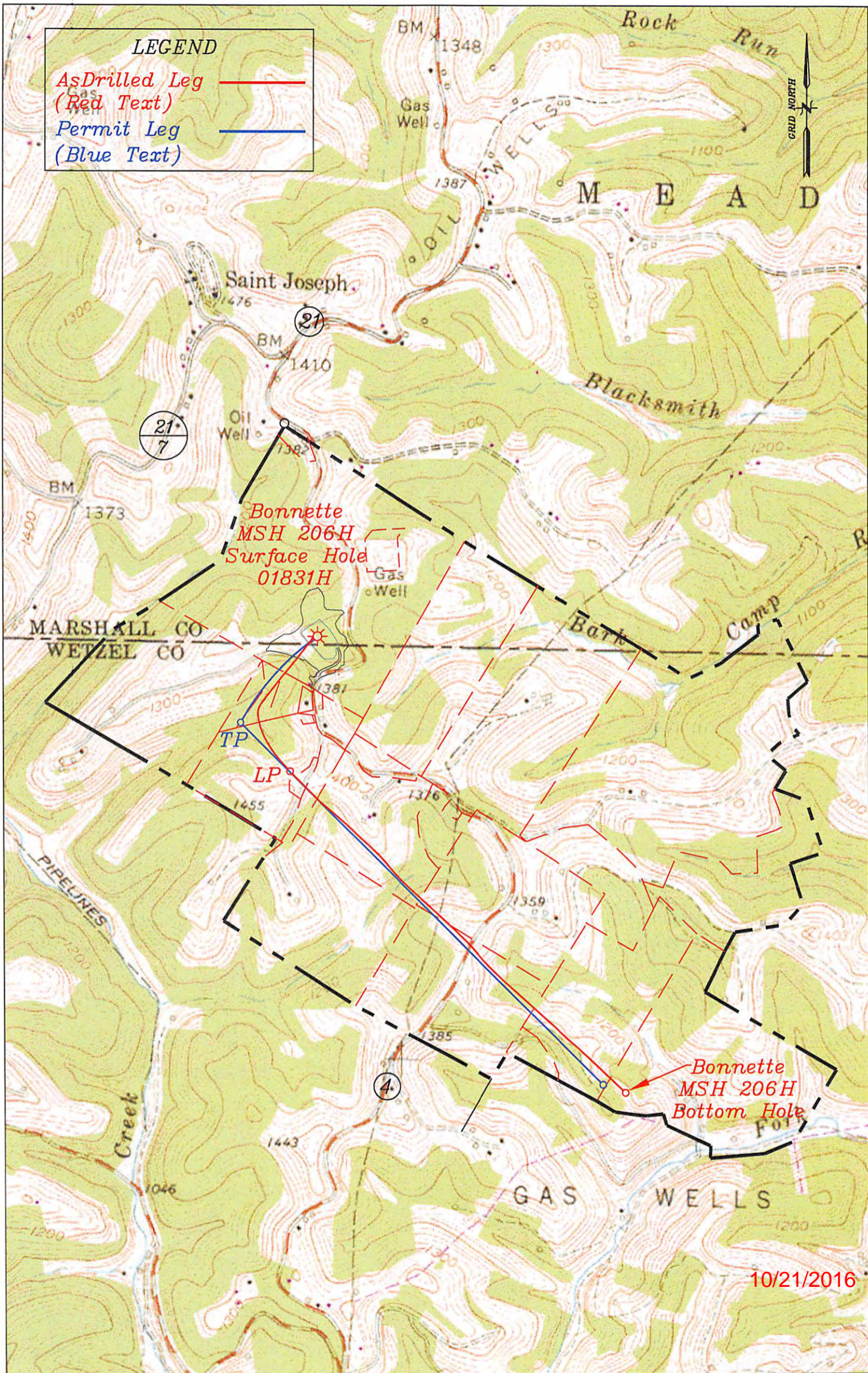
PROPOSED WORK: DRILL X CONVERT    DRILL DEEPER    REDRILL    FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION    PERFORATE NEW FORMATION X OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As Drilled

PLUG AND ABANDON    CLEAN OUT AND REPLUG   

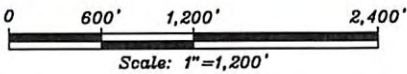
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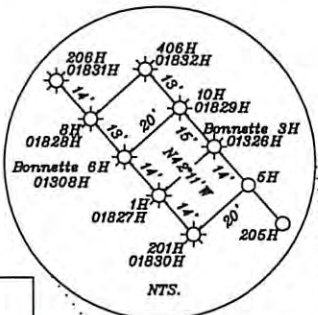
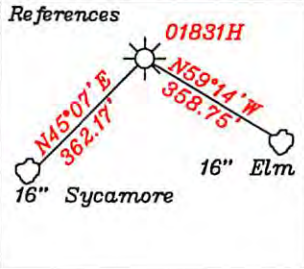
10/21/2016



Well: Bonnette MSH 206H  
 Quad: Wileyville 7 1/2'  
 District: Meade  
 County: Marshall



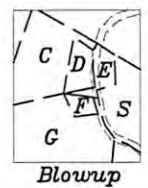
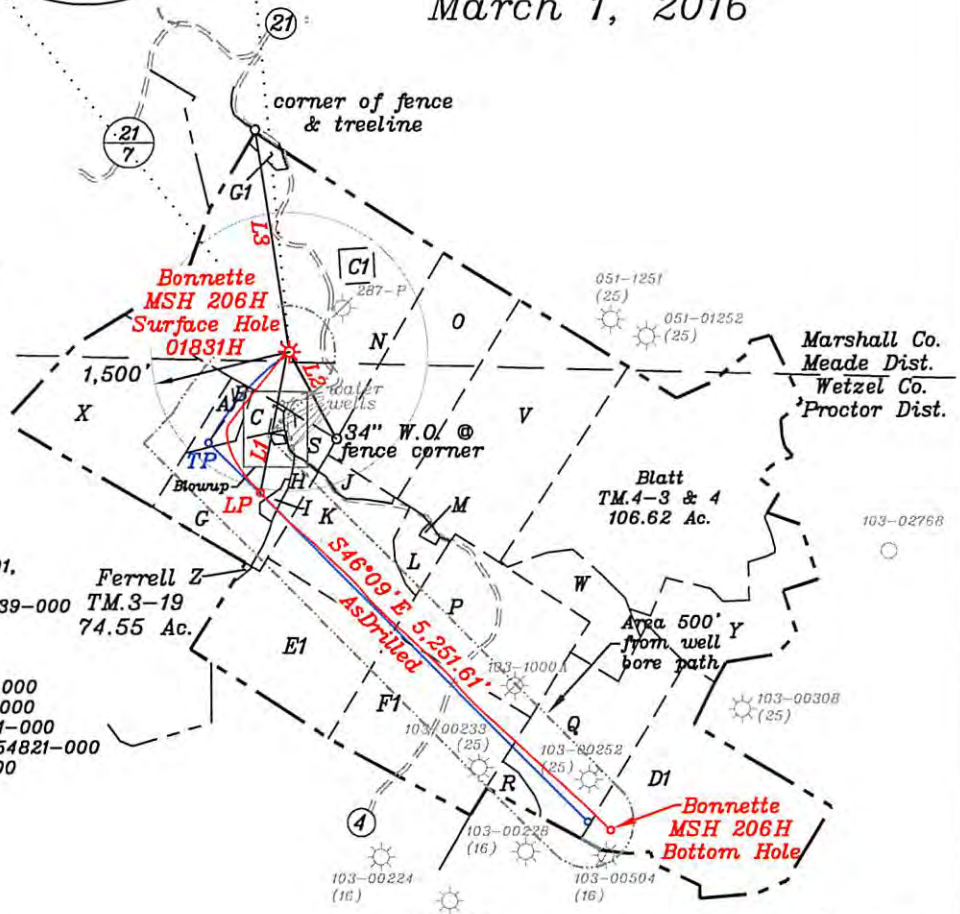
SWN Production  
Co. LLC  
AsDrilled  
Bonnette MSH 206H  
Meade District  
Marshall County, W.V.  
March 1, 2016



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thru 004
- E1- Hohman TM.3-20 52 Ac. 1-254822-000
- F1- Estep TM.4-20 50 Ac. 1-299518-000
- G1- Klug TM.22-7 1 Ac.

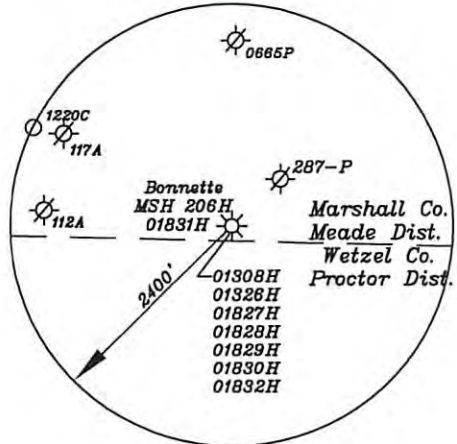


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NAD 83	
Surface Hole	UTM NAD 83(meters)-4396895.127 N. 524691.069 E Geo. NAD 83-39.721575 N, 80.711908 W UTM NAD 83(feet)-14425480.096 N, 1721423.947 E
LP	UTM NAD 83(meters)-4396430.812 N. 524602.621 E Geo. NAD 83-39.717394 N, 80.712957 W UTM NAD 83(feet)-14423956.755 N, 1721133.766 E
Bottom Hole	UTM NAD 83(meters)-4395341.725 N. 525774.969 E Geo. NAD 83-39.707546 N, 80.699322 W UTM NAD 83(feet)-14420383.643 N, 1724980.046 E
NAD 83	
Top Hole	UTM NAD 83(meters)-4396895.3 N. 524691.0 E Geo. NAD 83-39.721576 N, 80.711909 W UTM NAD 83(feet)-14425480.7 N, 1721423.7 E
TP	UTM NAD 83(meters)-4396595.3 N. 524429.6 E Geo. NAD 83-39.718880 N, 80.714969 W UTM NAD 83(feet)-14424496.4 N, 1720566.2 E
Bottom Hole	UTM NAD 83(meters)-4395369.2 N. 525697.4 E Geo. NAD 83-39.707796 N, 80.700226 W UTM NAD 83(feet)-14420473.9 N, 1724725.6 E



10/21/2016

Jackson Surveying, Inc.  
677 West Main Street  
Clarksburg, WV 26301