

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

API 47-051-01582 County MARSHALL District WEBSTER
Quad MAJORSVILLE Pad Name MICHAEL DUNN-MSH-PAD1 Field/Pool Name NORTH VICTORY FIELD
Farm name MICHAEL A DUNN AND KANDY R DUNN Well Number MICHAEL DUNN MSH 6H
Operator (as registered with the OOG) SWN PRODUCTION COMPANY, LLC
Address PO BOX 12359 City SPRING State TX Zip 77391-2359

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,416,436.741 Easting 538,123.693
Landing Point of Curve Northing 4,416,196.677 Easting 537,893.489
Bottom Hole Northing 4,414,158.890 Easting 538,786.975

Elevation (ft) 1258' 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 9/30/2016 Date drilling commenced 12/14/2012 Date drilling ceased 02/06/2013
Date completion activities began 11/26/2016 Date completion activities ceased 02/05/2017
Verbal plugging (Y/N) N Date permission granted N/A Granted by _____

RECEIVED
Office of Oil and Gas
APR 13 2017

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

Freshwater depth(s) ft _____ Open mine(s) (Y/N) depths _____
Salt water depth(s) ft _____ Void(s) encountered (Y/N) depths _____
Coal depth(s) ft _____ Cavern(s) encountered (Y/N) depths _____
Is coal being mined in area (Y/N) _____

**WV Department of
Environmental Protection**

Reviewed by: _____
11/12/2021

API 47- 051 - 01582 Farm name MICHAEL A DUNN AND KANDY R DUNN Well number MICHAEL DUNN MSH 6H

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							
Surface							
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
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							
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
Tubing							

Drillers TD (ft) _____ Loggers TD (ft) _____

Deepest formation penetrated _____ Plug back to (ft) _____

Plug back procedure _____

Kick off depth (ft) _____

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 _____

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 _____

API 47- 051 - 01582 Farm name MICHAEL A DUNN AND KANDY R DUNN Well number MICHAEL DUNN MSH 6H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
	SEE	ATTACHMEN	1		

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)
		SEE	ATTACHMEN	2				

Please insert additional pages as applicable.

11/12/2021

API 47- 051 - 01582 Farm name MICHAEL A DUNN AND KANDY R DUNN Well number MICHAEL DUNN MSH 6H

PRODUCING FORMATION(S)	DEPTHS		
MARCELLUS	6799.72	TVD	7161.89 MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 1,760 psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas Oil NGL Water GAS MEASURED BY
 2,957 mcfpd 6.9 bpd _____ bpd 426.8 bpd 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		

Please insert additional pages as applicable.

Drilling Contractor _____
 Address _____ City _____ State _____ Zip _____

Logging Company _____
 Address _____ City _____ State _____ Zip _____

Cementing Company _____
 Address _____ City _____ State _____ Zip _____

Stimulating Company HALLIBURTON ENERGY SERVICES
 Address 14851 MILNER ROAD, GATE 5A City HOUSTON State TX Zip 77032

Please insert additional pages as applicable.

Completed by DENISE GRANTHAM Telephone 832-796-6139
 Signature Denise Grantham Title REGULATORY TECHNICIAN Date 4/12/2017

MICHAEL DUNN MSH 6H
PERF SUMMARY

STAGE NUM	Perf Date	Perf Top MD	Perf Bottom MD	# SHOTS PER STG
1	11/26/2016	14,257	14,454	42
2	11/26/2016	13,997	14,194	42
3	11/26/2016	13,737	13,934	42
4	11/27/2016	13,477	13,674	42
5	11/27/2016	13,217	13,414	42
6	11/28/2016	12,957	13,154	42
7	11/28/2016	12,697	12,894	42
8	11/28/2016	12,437	12,634	48
9	11/29/2016	12,177	12,374	48
10	11/29/2016	11,917	12,114	48
11	11/30/2016	11,657	11,854	48
12	11/30/2016	11,397	11,594	42
13	11/30/2016	11,137	11,334	42
14	12/1/2016	10,877	11,074	42
15	12/2/2016	10,617	10,814	42
16	12/2/2016	10,357	10,554	42
17	12/3/2016	10,097	10,294	42
18	12/3/2016	9,837	10,034	42
19	12/3/2016	9,577	9,774	42
20	12/3/2016	9,317	9,514	42
21	12/4/2016	9,057	9,254	42
22	12/4/2016	8,797	8,994	42
23	12/4/2016	8,537	8,734	42
24	12/4/2016	8,275	8,474	42
25	12/4/2016	8,017	8,214	42
26	12/5/2016	7,757	7,954	42
27	12/5/2016	7,497	7,694	42
28	12/5/2016	7,237	7,434	42

11/12/2021

MICHAEL DUNN MSH 6H
FRAC STAGE SUMMARY

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	11/26/2016	97	8,263	8,775	4,354	500,860	7,923	
2	11/26/2016	89	8,354	8,769	4,361	499,540	8,164	
3	11/26/2016	91	8,232	8,574	4,593	501,700	8,202	
4	11/27/2016	83	8,145	8,624	4,740	473,480	11,917	
5	11/27/2016	97	8,349	9,300	4,913	500,280	10,067	
6	11/28/2016	92	8,101	8,892	5,782	394,740	8,308	
7	11/28/2016	99	8,115	8,890	4,265	392,240	8,280	
8	11/28/2016	100	8,068	8,409	4,036	494,960	9,687	
9	11/29/2016	97	7,827	8,342	4,457	498,060	8,906	
10	11/29/2016	99	7,937	8,713	4,386	499,100	9,477	
11	11/30/2016	98	7,546	8,901	5,630	464,200	9,776	
12	11/30/2016	100	8,087	8,898	4,349	501,980	8,684	
13	11/30/2016	95	7,673	8,960	5,055	500,540	8,756	
14	12/1/2016	95	7,578	8,914	5,157	494,540	8,268	
15	12/2/2016	96	7,803	8,975	4,938	504,580	7,223	
16	12/2/2016	97	7,823	8,774	5,238	498,900	6,924	
17	12/3/2016	99	7,708	8,963	4,904	499,880	6,973	
18	12/3/2016	100	7,564	8,963	4,918	499,180	6,694	
19	12/3/2016	101	7,697	8,887	5,038	498,320	6,981	
20	12/3/2016	101	7,377	8,853	4,776	501,080	6,982	
21	12/4/2016	100	7,205	9,150	4,879	500,080	6,867	
22	12/4/2016	98	6,954	8,923	5,038	499,760	6,915	
23	12/4/2016	101	7,190	8,813	4,920	502,040	6,808	
24	12/4/2016	100	7,370	8,844	4,600	496,700	6,680	
25	12/4/2016	100	7,585	8,748	4,579	501,060	6,643	
26	12/5/2016	101	7,190	8,870	5,359	502,240	6,804	
27	12/5/2016	100	7,333	8,204	4,644	504,580	6,741	
28	12/5/2016	100	7,514	8,904	4,520	495,840	6,714	

11/12/2021

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	11/26/2016
Job End Date:	12/6/2016
State:	West Virginia
County:	Marshall
API Number:	47-051-01582-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	Michael Dunn MSH 6H
Latitude:	39.89642400
Longitude:	-80.55824500
Datum:	WGS84
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,875
Total Base Water Volume (gal):	9,226,417
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
Fresh Water	Operator	Base Fluid					
			Water	7732-18-5	100.00000	83.86869	Density = 8.350
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.02962	

SAND- PREMIUM WHITE-40/70, BULK	Halliburton	Proppant							
					Listed Below				
FDP-S1176-15	Halliburton	Friction Reducer							
					Listed Below				
Bactron K-219	Nalco	Biocide							
					Listed Below				
HAI-150E	Halliburton	Corrosion Inhibitor							
					Listed Below				
SAND-COMMON WHITE-100 MESH, SSA-2, BULK (100003676)	Halliburton	Proppant							
					Listed Below				
FR-78	Halliburton	Friction Reducer							
					Listed Below				
FR-A12	Halliburton	Additive							
					Listed Below				
EC6486A	Nalco	Scale Inhibitor							
					Listed Below				

11/12/2021

15% Hydrochloric Acid	AMROX Chem	Acid				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		14.92567			
			Hydrochloric acid	7647-01-0	15.00000		0.16387			
			Hydrotreated light petroleum distillate	64742-47-8	30.00000		0.02277			
			Polyacrylate	Proprietary	30.00000		0.02277			
			Methanol	67-56-1	60.00000		0.01390			
			Benzyl-(C12-C16 Alkyl)-Dimethyl-Ammonium Chloride	68424-85-1	30.00000		0.00695			
			Proprietary Component	Proprietary	60.00000		0.00531			
			Glutaraldehyde	111-30-8	10.00000		0.00232			
			Inorganic salt	Proprietary	5.00000		0.00173			
			Alcohols, C12-16, ethoxylated	68551-12-2	5.00000		0.00173			
			Amide	Proprietary	5.00000		0.00173		Denise Tuck, Halliburton, 3000 N. Sam Houston Pkwy E., Houston, TX 77032, 281-871-6226	
			Amine Triphosphate	Proprietary	30.00000		0.00155			
			Ethylene	107-21-1	30.00000		0.00155			
			Sodium chloride	7647-14-5	10.00000		0.00089			
			Glycerine	56-81-5	5.00000		0.00044			
			Ammonium chloride	12125-02-9	1.00000		0.00035			
			Fatty acid ester	Proprietary	1.00000		0.00035			
			Non-hazardous food substance	Proprietary	100.00000		0.00012			

* 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)

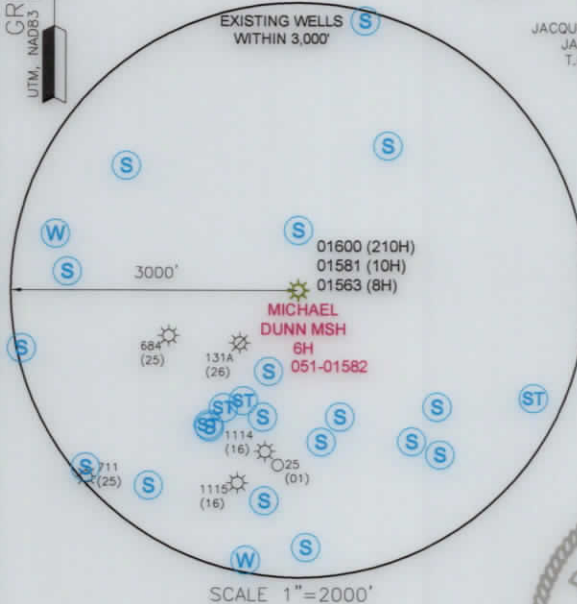
JACKSON SURVEYING INC.
 P.O. Box 1460
 677 W. Main St.
 Clarksburg, WV 26302
 304-623-5851

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 F-CNX LAND LLC 9.288 AC. 3-6-02.2
 G-CNX LAND LLC 15 AC. 3-6-03

SURFACE HOLE LOCATION
 UTM NAD 83 (METERS)-4416436.6 N, 538123.8 E
BOTTOM HOLE LOCATION
 UTM NAD 83 (METERS)-4414160.4 N, 538788.9 E

LEGEND	
ASDRILLED LEG (RED TEXT)	
PERMIT LEG (BLUE LEG)	
WATERWELL	
SPRING	
STREAM	
SURFACE & ROYALTY OWNER	(S/R)
DIVISION LINES BETWEEN LEASE TRACTS	
ADJOINERS LINES	
SURFACE OWNER	(S)

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



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. 708

David L. Jackson



NOTES ON SURVEY

1. NO DWELLINGS OR AGRICULTURAL BUILDINGS GREATER THAN 2,500 SQUARE FEET WITHIN 625 FEET OF PROPOSED CENTER OF PAD.
2. NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
3. 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.
4. COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.

PLAT SCALE 1"=2000'

COMPANY:
SWN **SWN**
 Production Company, LLC Production Company™

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034	MINIMUM DEGREE OF ACCURACY: 1/200 PROVEN SURVEY SOURCE OF ELEVATION: SURVEY GRADE GPS (NAVD 88, US FT)	COMPANY: SWN OPERATOR'S WELL #: 6H API WELL #: 47 051 01582 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: WILLIAMS RUN OF UPPER OHIO SOUTH DISTRICT: WEBSTER COUNTY: MARSHALL SURFACE OWNER: MICHAEL A. DUNN AND KANDY R. DUNN OIL & GAS ROYALTY OWNER: MICHAEL A. DUNN AND KANDY R. DUNN DRILL <input 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 checked="" type="checkbox"/> (SPECIFY) ASDRILLED TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 6,809' TVD 14,582' TMD	MICHAEL DUNN MSH ELEVATION: 1,258' QUADRANGLE: MAJORSVILLE ACREAGE: 108.98 DATE: 08-11-2016
WELL OPERATOR: SWN PRODUCTION COMPANY, LLC ADDRESS: P.O. BOX 1300 CITY: JANE LEW STATE: WV ZIP CODE: 26378	DESIGNATED AGENT: DEE SOUTHALL ADDRESS: P.O. BOX 1300 CITY: JANE LEW STATE: WV ZIP CODE: 26378	REVISIONS: DATE: 08-11-2016 DRAWN BY: N. MANO SCALE: 1" = 2000' DRAWING NO: WELL LOCATION PLAT

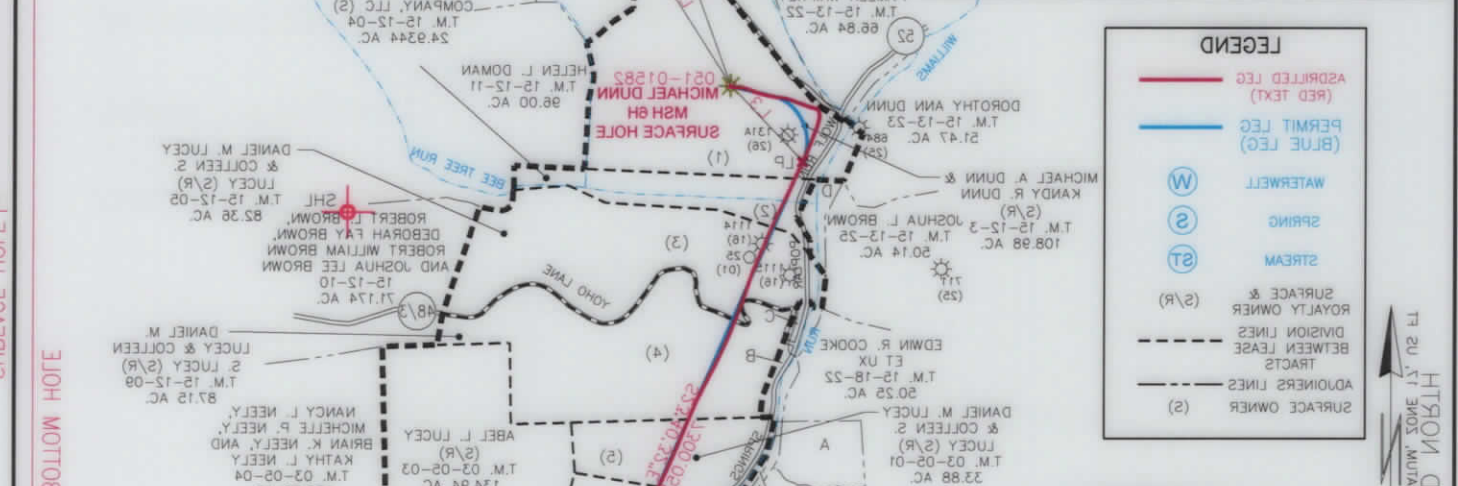
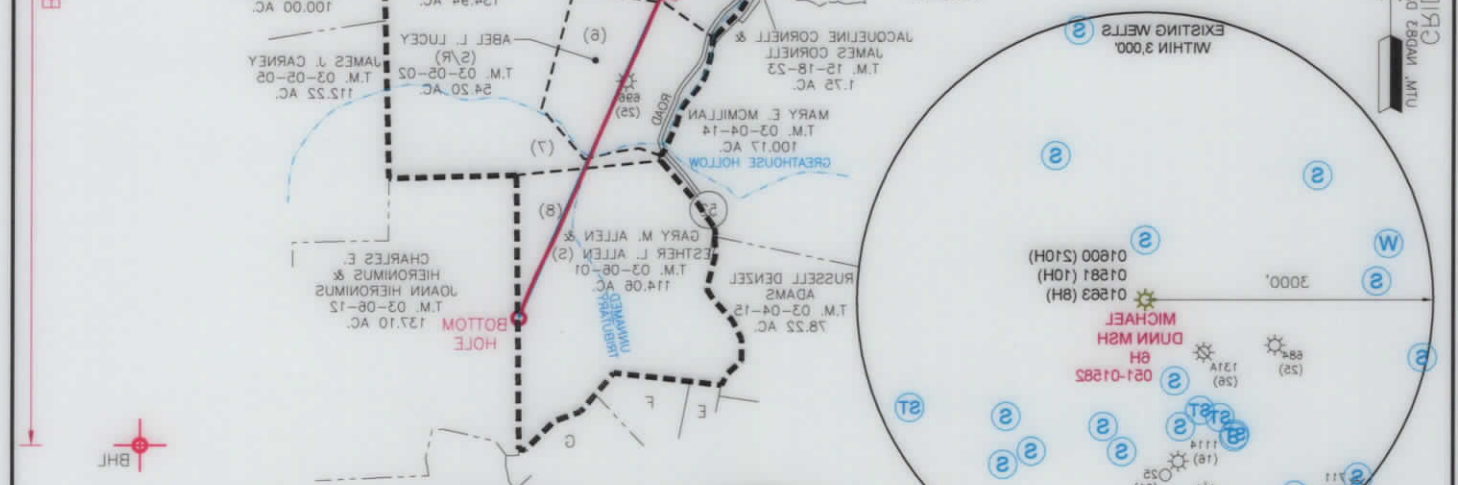
WELL LOCATION PLAT	DRAWING NO:	SCALE: 1" = 2000'	DRAWN BY: N. MAND
REVISIONS:	DATE: 08-11-2016	CITY: JANE LEW	STATE: WV
ADDRESS: P.O. BOX 1300	CITY: JANE LEW	STATE: WV	ZIP CODE: 26378
DESIGNATED AGENT: DEE SOUTHAHLL	WELL OPERATOR: SWN PRODUCTION COMPANY, LLC	ADDRESS: P.O. BOX 1300	CITY: JANE LEW
ESTIMATED DEPTH: 680', VTD 14'282', TMD	TARGET FORMATION: MARCELLUS	CONVERT: <input type="checkbox"/>	PLUG & ABANDON: <input 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"/>	OTHER CHANGE (SPECIFY) ADSRILLED: <input checked="" type="checkbox"/>	LIQUID INJECTION: <input type="checkbox"/>	STORAGE: <input type="checkbox"/>
SHALLOW: <input checked="" type="checkbox"/>	WELL TYPE: OIL: <input type="checkbox"/>	WASTE DISPOSAL: <input type="checkbox"/>	PRODUCTION: <input type="checkbox"/>
DEEP: <input type="checkbox"/>	GAS: <input checked="" type="checkbox"/>	DEEP: <input type="checkbox"/>	LIQUID INJECTION: <input type="checkbox"/>

WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034	UNITED STATES TOPOGRAPHIC MAPS ACCURACY: 1/500 PROVEN SURVEY	API WELL #: 47 STATE: WV COUNTY: PERMIT	MICHAEL DUNN MSH OPERATOR'S WELL #:
WVDEP	ELEVATION: (NAD 88, US FT)	SOURCE OF GRADE GPS	MINIMUM DEGREE OF ACCURACY: 1/500
WVDEP	WELL TYPE: OIL: <input type="checkbox"/>	WASTE DISPOSAL: <input type="checkbox"/>	PRODUCTION: <input type="checkbox"/>
WVDEP	DEEP: <input type="checkbox"/>	GAS: <input checked="" type="checkbox"/>	LIQUID INJECTION: <input type="checkbox"/>
WVDEP	SHALLOW: <input checked="" type="checkbox"/>	STORAGE: <input type="checkbox"/>	LIQUID INJECTION: <input type="checkbox"/>

COMPANY: SWN Production Company, LLC
 SWN
 PLAT SCALE 1" = 2000'

P.2. 708
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 REGULATIONS ISSUED AND PRESCRIBED BY THE
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UTM NAD 83 (METERS) - 441160 N, 538788 E	BOTTOM HOLE LOCATION
UTM NAD 83 (METERS) - 441436 E, N 538138 E	SURFACE HOLE LOCATION

UTM (NAD83, ZONE 17, METERS): EASTING: 538,138.89 NORTHING: 4,414,362.74	LANDING POINT LOCATION (L.P.):
UTM (NAD83, ZONE 17, METERS): EASTING: 537,893.488 NORTHING: 4,416,186.877	BOTTOM HOLE LOCATION (B.H.L.):
UTM (NAD83, ZONE 17, METERS): EASTING: 538,788.925 NORTHING: 4,414,158.890	UTM (NAD83, ZONE 17, METERS): EASTING: 538,788.925 NORTHING: 4,414,158.890

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 304-823-8881
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677 W. Main St.
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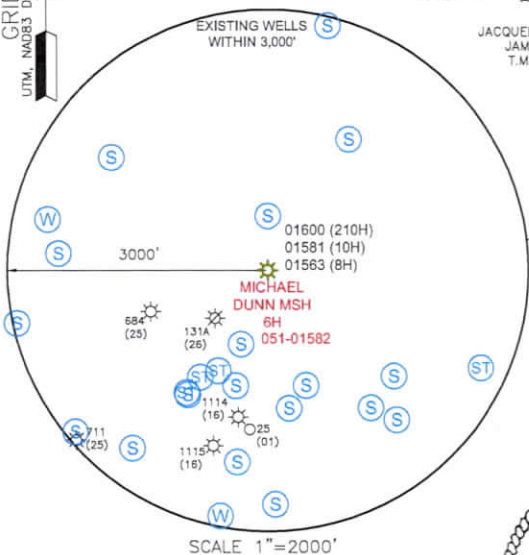
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LEGEND

ASDRILLED LEG (RED TEXT)	---
PERMIT LEG (BLUE LEG)	---
WATERWELL	(W)
SPRING	(S)
STREAM	(ST)
SURFACE & ROYALTY OWNER DIVISION LINES BETWEEN LEASE TRACTS	(S/R)
ADJOINERS LINES	---
SURFACE OWNER	(S)

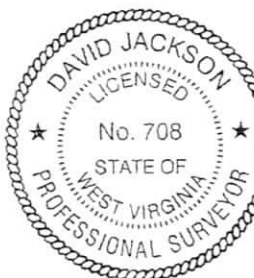
GRID NORTH
UTM, NAD83 DATUM, ZONE 17, US FT



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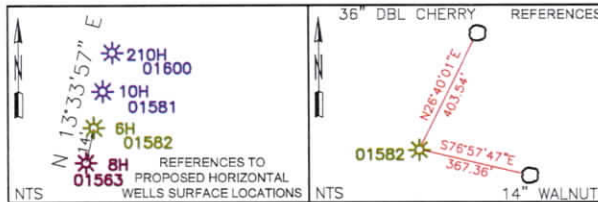
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David L Jackson

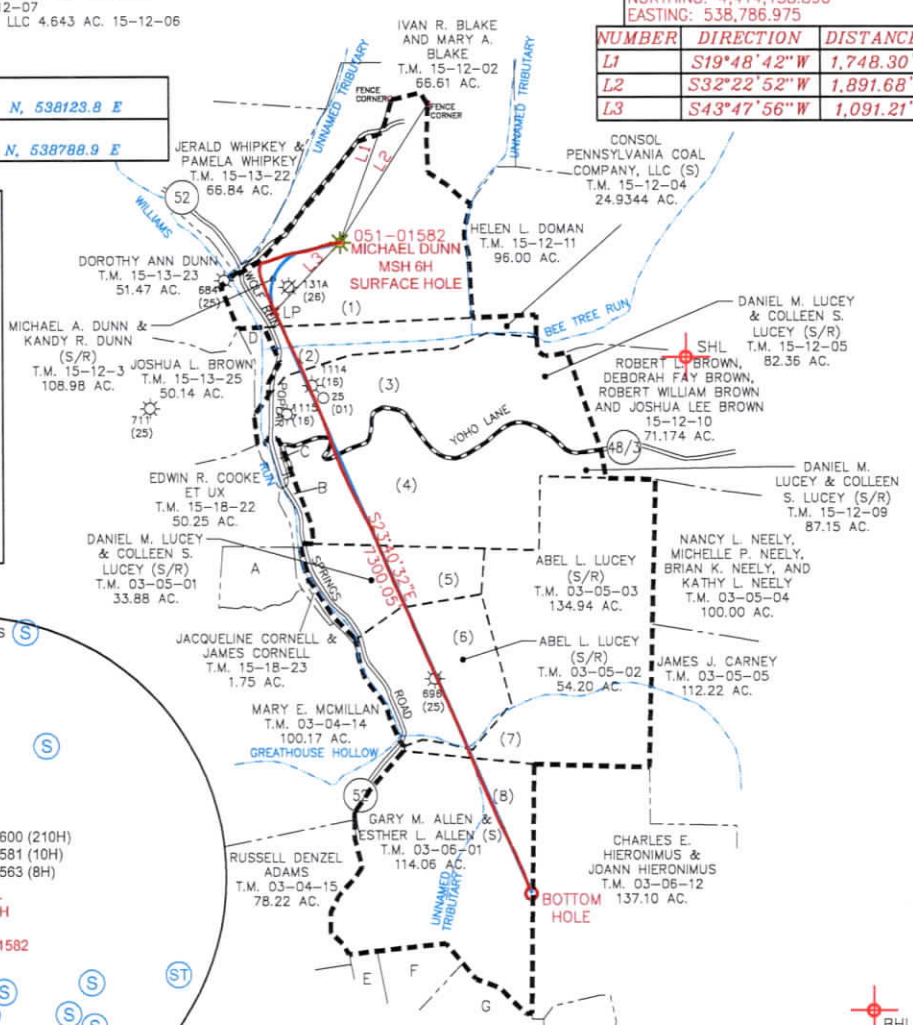


SURFACE HOLE 3,472'
Latitude: 39°55'00" BOTTOM HOLE 1,334'

Longitude: 80°32'30"
14,598'
7,111'



SURFACE HOLE LOCATION (SHL):		
UTM (NAD83, ZONE 17, METERS):		
NORTHING: 4,416,436.741		
EASTING: 538,123.693		
"LANDING POINT" LOCATION (LPL):		
UTM (NAD83, ZONE 17, METERS):		
NORTHING: 4,416,196.677		
EASTING: 537,893.489		
BOTTOM HOLE LOCATION (BHL):		
UTM (NAD83, ZONE 17, METERS):		
NORTHING: 4,414,158.890		
EASTING: 538,786.975		
NUMBER	DIRECTION	DISTANCE
L1	S19°48'42"W	1,748.30'
L2	S32°22'52"W	1,891.68'
L3	S43°47'56"W	1,091.21'



- NOTES ON SURVEY**
- NO DWELLINGS OR AGRICULTURAL BUILDINGS GREATER THAN 2,500 SQUARE FEET WITHIN 625 FEET OF PROPOSED CENTER OF PAD.
 - NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
 - 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.
 - COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.

PLAT SCALE 1"=2000'

COMPANY: **SWN** Production Company, LLC

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
WVDEP
OFFICE OF OIL & GAS
601 57TH STREET
CHARLESTON, WV 25034

MINIMUM DEGREE OF ACCURACY: 1/200
PROVEN SURVEY SOURCE OF GRADE GPS ELEVATION: (NAVD 88, US FT)

MICHAEL DUNN MSH
OPERATOR'S WELL #: 6H
API WELL #: 47 051 01582
STATE COUNTY PERMIT

WELL TYPE: OIL WASTE DISPOSAL PRODUCTION DEEP GAS LIQUID INJECTION STORAGE SHALLOW

WATERSHED: WILLIAMS RUN OF UPPER OHIO SOUTH ELEVATION: 1,258'

DISTRICT: WEBSTER COUNTY: MARSHALL QUADRANGLE: MAJORSVILLE

SURFACE OWNER: MICHAEL A. DUNN AND KANDY R. DUNN ACREAGE: 108.98

OIL & GAS ROYALTY OWNER: MICHAEL A. DUNN AND KANDY R. DUNN ACREAGE: 108.98

DRILL DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION

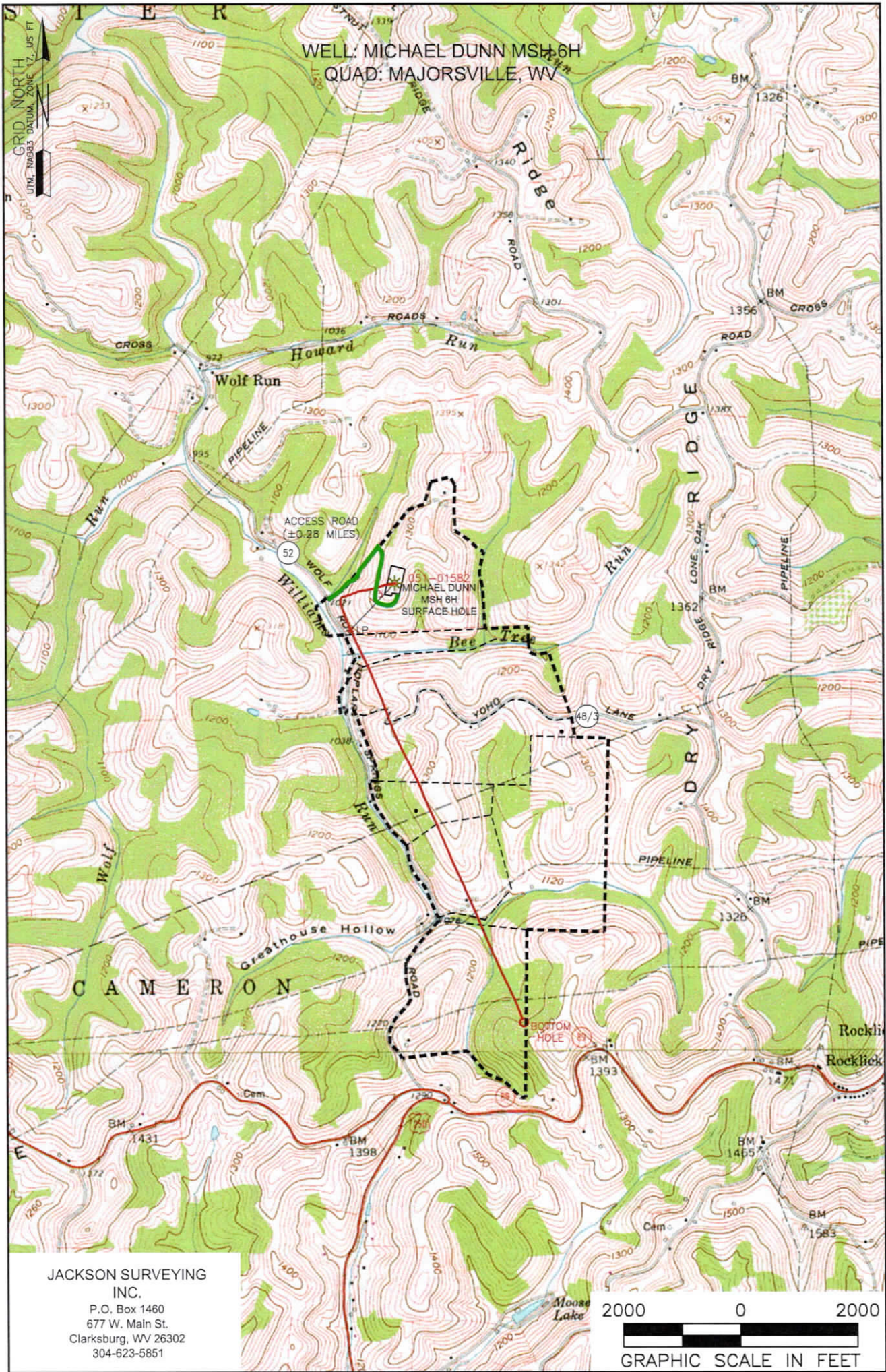
CONVERT PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY) ASDRILLED

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 6,809' TVD 14,582' TMD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: DEE SOUTHALL
ADDRESS: P.O. BOX 1300 ADDRESS: P.O. BOX 1300
CITY: JANE LEW STATE: WV ZIP CODE: 26378 CITY: JANE LEW STATE: WV ZIP CODE: 26378

LEGEND:	REVISIONS:	DATE: 08-11-2016
○ PROPOSED SURFACE HOLE / BOTTOM HOLE	---	---
⊙ EXISTING / PRODUCING WELLHEAD	---	---
⊙ ABANDONED WELL	---	---
⊙ PLUGGED & ABANDONED WELL	---	---
△ CUT CONDUCTOR	---	---
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WELL: MICHAEL DUNN MSH 6H
 QUAD: MAJORSVILLE, WV



JACKSON SURVEYING
 INC.
 P.O. Box 1460
 677 W. Main St.
 Clarksburg, WV 26302
 304-623-5851

NOTE:
 THE PURPOSE OF THIS PLAT IS FOR THE LOCATION OF PROPOSED GAS WELLS AND DOES NOT REPRESENT A CLOSED BOUNDARY SURVEY. PROPERTY LINES AND OWNERS WERE OBTAINED FROM VARIOUS FIELD EVIDENCE, TAX RECORDS, AND AERIAL MAPPING.

LEGEND:
 - - - - - LEASE BOUNDARY

Applicant/Well Operator Name SWN PRODUCTION COMPANY, LLC	Well (Farm) Name MICHAEL DUNN MSH 6H	Well# 6H
Address PO BOX 1300 JANE LEW, WV 26378	County MARSHALL	District WEBSTER
Surface Landowner/ Lessor MICHAEL A. DUNN ET UX	USGS 7 1/2 Quadrangle Map Name MAJORSVILLE	

11/12/2021