

Via Federal Express

February 11, 2016

Ms. Laura Cooper
Office of Oil & Gas
601 57th Street
Charleston WV 25304

RECEIVED
Office of Oil and Gas
FEB 12 2016
WV Department of
Environmental Protection

RE: Form WR-35 and WR-36 Filing

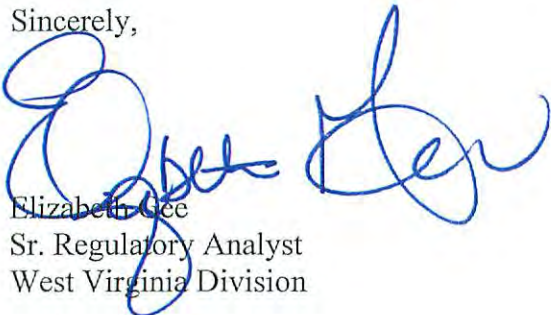
Well: Glenn Didriksen OHI 6 API: 47-069-00188
Well: Glenn Didriksen OHI 10 API: 47-069-00191
Well: Glenn Didriksen OHI 205 API: 47-069-00189
Well: Glenn Didriksen OHI 6210 API: 47-069-00190

Dear Ms. Cooper:

Please find enclosed form WR-35 Well Operator's Report of Well Work and WR-36 Well Operator's Report of Initial Gas-Oil Ratio, with supporting documentation for the subject wells referenced above.

If you have any questions or require additional information, please contact me via email at liz_gee@swn.com or telephone at (832) 796-7632.

Sincerely,



Elizabeth Gee
Sr. Regulatory Analyst
West Virginia Division

/lg
Encl.

E. Gee
2-27-16

WS Ak 02/29/16
 $\frac{R^+}{A} \rightarrow V^+$

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

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API 47-069-00191 County OHIO District LIBERTY
Quad VALLEY GROVE Pad Name GLENN DIDRIKSEN-OHI-PAD1 Field/Pool Name PANHANDLE
Farm name GLENN DIDRIKSEN Well Number GLENN DIDRIKSEN OHI 10
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 4440493.498 Easting 534516.939
Landing Point of Curve Northing 440582.134 Easting 534691.583
Bottom Hole Northing 4438915.573 Easting 535729.981

Elevation (ft) 1382.2 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 06/04/2015 Date drilling commenced 06/14/2015 Date drilling ceased 08/03/2015
Date completion activities began 10/10/2015 Date completion activities ceased 11/30/2015
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 194' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1055' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 663' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:
gf 2-22-16
03/04/2016

API 47-069 - 00191 Farm name GLENN DIDRIKSEN Well number GLENN DIDRIKSEN OHI 10

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	24	20	126'	N	J-55/ 94#		Y
Surface	17.5	13.375	731'	N	J-55/61#		Y
Coal	SEE SURFACE						
Intermediate 1	12.25	9.625	2317'	N	J-55/ 40#		Y
Intermediate 2							
Intermediate 3							
Production	8.75 TO 8.50	5.5	13437'	N	HCP-110/20#		Y
Tubing		2.375	6785'	N	P-110/4.70#		N
Packer type and depth set		N/A					

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	A	120	15.6	1.18	141.6	GROUT TO SURFACE	24
Surface	A	900	15.6	1.19	1071	SURFACE	8
Coal	SEE SURFACE						
Intermediate 1	A	868	15.6	1.19	1032.92	40 BBLS TO SURFACE	8
Intermediate 2							
Intermediate 3							
Production	A	650/2020	15.6	1.23	3284.1	SURFACE	24
Tubing							

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Drillers TD (ft) 13437' Loggers TD (ft) 13437' Office of Oil and Gas
 Deepest formation penetrated MARCELLUS Plug back to (ft) NA
 Plug back procedure NA FEB 12 2016

Kick off depth (ft) 5815'

WV Department of Environmental Protection

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

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- 069 - 00191 Farm name GLENN DIDRIKSEN Well number GLENN DIDRIKSEN OHI 10

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
<u>MARCELLUS</u>	<u>6395'</u>	<u>TVD</u>	<u>6704'</u> <u>MD</u>
_____	_____	_____	_____
_____	_____	_____	_____

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 NO TEST PERFORM _____ hrs

OPEN FLOW Gas 2450 mcfpd Oil 222 bpd NGL _____ bpd Water 144 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 ₂ S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	<u>0</u>		<u>0</u>		
		SEE ATTACHED			

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Please insert additional pages as applicable.

Drilling Contractor SWN DRILLING COMPANY
Address PO BOX 12359 City SPRING State TX Zip 77391-2359

Logging Company JW WIRELINE COMPANY
Address 515 N SAM HOUSTON PKWY EAST STE 640 City HOUSTON State TX Zip 77060

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

Stimulating Company DOWELL SCHLUMBERGER
Address 1121 BUSCHONG ST City HOUSTON State TX Zip 77039

Please insert additional pages as applicable.

Completed by ELIZABETH GEE Telephone 832-796-7632
Signature  Title SR. REGULATORY ANALYST Date 02/11/2016

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

03/04/2016

GLENN DIDRIKSEN OHI 10 - PERFORATION RECORD

STAGE NUM	Perf Date	Perf Top MD	Perf Bottom MD	# SHOTS PER STG
1	10/10/2015	13,160	13,312	42
2	10/11/2015	12,851	13,054	42
3	10/11/2015	12,593	12,792	42
4	10/11/2015	12,327	12,530	42
5	10/11/2015	12,066	12,269	42
6	10/12/2015	11,804	12,007	42
7	10/12/2015	11,542	11,745	42
8	10/12/2015	11,280	11,483	42
9	10/12/2015	11,018	11,221	42
10	10/12/2015	10,757	10,960	42
11	10/13/2015	10,500	10,700	42
12	10/13/2015	10,233	10,436	42
13	10/13/2015	9,971	10,174	42
14	10/13/2015	9,709	9,912	42
15	10/13/2015	9,448	9,651	42
16	10/14/2015	9,186	9,389	42
17	10/15/2015	8,924	9,127	42
18	10/15/2015	8,659	8,860	42
19	10/15/2015	8,400	8,603	42
20	10/15/2015	8,139	8,342	42
21	10/16/2015	7,877	8,080	42
22	10/16/2015	7,615	7,818	42
23	10/16/2015	7,349	7,556	42
24	10/16/2015	7,091	7,294	42
25	10/16/2015	6,830	7,031	42

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GLENN DIDRIKSEN OHI 10 - 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	10/10/2015	2	8,111	9,108	4,553	500,100	7,550	
2	10/11/2015	2	7,995	9,022	4,589	500,180	6,994	
3	10/11/2015	2	7,794	8,191	4,250	500,520	7,438	
4	10/11/2015	2	7,992	8,560	4,543	496,280	7,087	
5	10/11/2015	2	7,682	8,685	4,646	503,980	7,078	
6	10/12/2015	2	7,727	8,556	4,765	497,680	6,905	
7	10/12/2015	2	7,823	8,847	4,402	500,160	7,202	
8	10/12/2015	2	7,651	8,418	4,468	498,780	7,125	
9	10/12/2015	2	7,676	8,892	4,458	502,400	7,066	
10	10/12/2015	2	7,645	8,938	4,337	505,720	7,046	
11	10/13/2015	2	7,518	8,473	4,534	499,040	6,892	
12	10/13/2015	2	7,592	7,996	3,978	502,405	7,185	
13	10/13/2015	2	7,541	8,336	4,360	493,260	6,834	
14	10/13/2015	2	7,575	9,340	4,844	470,780	6,513	
15	10/13/2015	2	7,584	8,976	4,636	500,580	6,716	
16	10/14/2015	2	7,366	8,537	4,367	499,660	6,611	
17	10/15/2015	2	7,345	9,110	4,394	502,560	6,902	
18	10/15/2015	2	7,438	8,475	4,351	494,080	7,319	
19	10/15/2015	2	7,491	9,170	4,308	502,440	7,161	
20	10/15/2015	2	7,450	9,219	432	501,580	7,072	
21	10/16/2015	2	7,380	8,525	4,413	499,580	6,868	
22	10/16/2015	2	7,167	8,457	4,427	496,609	6,652	
23	10/16/2015	2	7,414	8,502	4,282	496,210	6,719	
24	10/16/2015	2	7,172	7,503	4,240	505,540	6,762	
25	10/16/2015	2	7,111	9,095	4,194	500,160	6,881	
Grand total		2	7,570	9,340	4,271	12,470,284	174,578	

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GLENN DIDRIKSEN OHI 10H

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.	194.00	N.A.	194.00	
Top of Salt Water	1055.00	N.A.	1055.00	N.A.	
Pittsburgh Coal	662.98	670.98	663.00	671.00	
Big Injun (ss)	1877.85	2362.77	1878.00	2363.00	
Berea (siltstone)	2362.77	5790.46	2363.00	5900.66	
Rhinestreet (shale)	5790.46	6066.31	5900.66	6188.37	
Cashaqua (shale)	6066.31	6124.23	6188.37	6253.29	
Middlesex (shale)	6124.23	6199.94	6253.29	6345.12	
Burket (shale)	6199.94	6220.48	6345.12	6372.38	
Tully (ls)	6220.48	6265.22	6372.38	6434.85	
Mahantango (shale)	6265.22	6395.33	6434.85	6704.21	
Marcellus (shale)	6395.33	N.A.	6704.21	N.A./	

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	10/10/2015
Job End Date:	10/16/2015
State:	West Virginia
County:	Ohio
API Number:	47-069-00191-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	Glen Didriksen 10H
Longitude:	-80.59496000
Latitude:	40.11403600
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	6,550
Total Base Water Volume (gal):	7,332,276
Total Base Non Water Volume:	0

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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
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.							
Proppant Transport	Schlumberger	Acid Corrosion Inhibitor, Acid, Friction Reducer, Myacide TS GA 25, Fluid Loss Additive, Propping Agent					
			Water (Including Mix Water Supplied by Client)*	NA		82.90240	
			Quartz, Crystalline silica	14808-60-7	98.63648	16.86447	
			Hydrochloric acid	7647-01-0	1.08064	0.18476	
			Ammonium sulfate	7783-20-2	0.14704	0.02514	
			Acrylamide, 2-acrylamido-2-methylpropanesulfonic acid, sodium salt polymer	38193-60-1	0.10853	0.01856	
			Polymer of 2-acrylamido-2-methylpropanesulfonic acid sodium salt and methyl acrylate	136793-29-8	0.01163	0.00199	
			Urea	57-13-6	0.00714	0.00122	
			Propan-2-ol	67-63-0	0.00203	0.00035	
			Sodium sulfate	7757-82-6	0.00167	0.00028	
			Silicon Dioxide	7631-86-9	0.00149	0.00025	
			Fatty acid, tall-oil reaction products with acetophenone	68188-40-9	0.00079	0.00013	

		Alcohols, C12-C16, ethoxylated	58551-12-2	0.00066	0.00011
		Isodecanol w/6-7 Moles Ethylene Oxide	26183-52-8	0.00044	0.00008
		2-Propenamid (impurity)	79-06-1	0.00036	0.00006
		Cinnamaldehyde	104-55-2	0.00029	0.00005
		Tetrasodium ethylenediaminetetraacetate	64-02-8	0.00018	0.00003
		Glutaraldehyde	111-30-8	0.00016	0.00003
		Dimethyl siloxanes and silicones	63148-62-9	0.00010	0.00002
		Amines, tallow alkyl, ethoxylated	61791-26-2	0.00008	0.00001
		Dodecyl poly(oxyethylene) ether	9002-92-0	0.00004	0.00001
		Dodecamethylcyclohexasiloxane	540-97-6		
		Copper(II) sulfate	7758-98-7		
		Glycols, polyethylene, monotetradecyl ether	27306-79-2	0.00003	
		Octamethylcyclotetrasiloxane	556-67-2	0.00001	
		Siloxanes and silicones, dimethyl, reaction products with silica	67762-90-7	0.00001	
		Decamethyl cyclopentasiloxane	541-02-6	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%

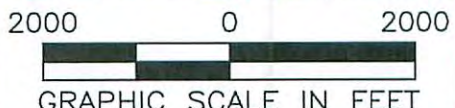
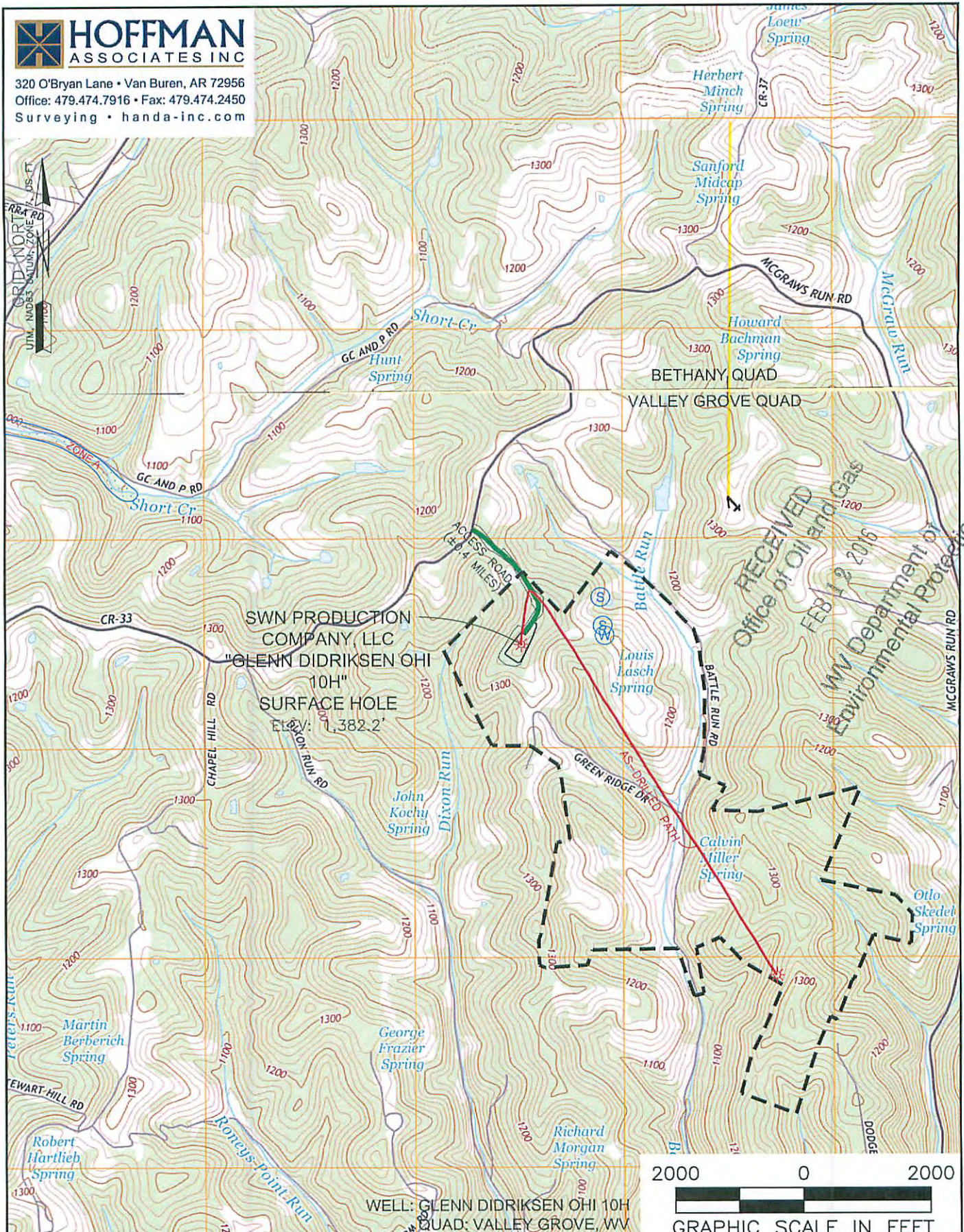
Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

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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320 O'Bryan Lane • Van Buren, AR 72956
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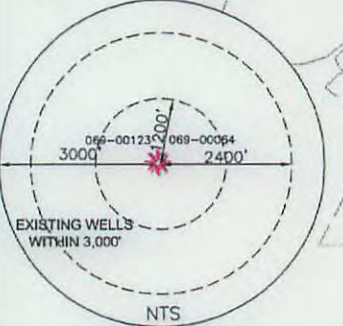
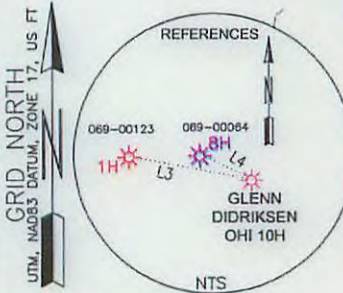
WELL: GLENN DIDRIKSEN OHI 10H
 QUAD: VALLEY GROVE, WV

NAME AND DISTANCE TO THE NEAREST STREAM: DIXON RUN IS LOCATED ±0.17 MILES NORTHWEST OF THE CENTER OF THE DRILL PAD.		STREAM CROSSING COORDINATES (NAD 83): NO NEW CROSSINGS.		COMPANY: 	
WELL RESTRICTIONS: WELL PAD, LOD, & E & S CONTROL FEATURES TO PERENNIAL STREAM, LAKE, POND, RESERVOIR OR WETLAND: >100 FEET WELL PAD, LOD, & E & S CONTROL FEATURES TO NATURALLY PRODUCING TROUT STREAM: >300 FEET WELL PAD, LOD, & E & S CONTROL FEATURES TO GROUNDWATER INTAKE OR PUBLIC WATER SUPPLY: >1000 FEET WELL SHL TO EXISTING WATER WELL OR DEVELOPED SPRING: >250 FEET CENTER OF PAD TO OCCUPIED DWELLING STRUCTURE: >625 FEET CENTER OF PAD TO AGRICULTURAL BUILDINGS LARGER THAN 2500 SQ FT: >625 FEET		OPERATOR'S GLENN DIDRIKSEN OHI		WELL #: 10H	
FEMA FLOOD INFORMATION: BY GRAPHIC PLOTTING ONLY FEMA FIRM INCORPORATED AREA OF OHIO COUNTY, WEST VIRGINIA; MAP NUMBER 54069C0080D; EFFECTIVE DATE JULY 17, 2006.		LOCATION: LIBERTY DISTRICT, OHIO COUNTY, WEST VIRGINIA		SURFACE HOLE LOCATION: GEOGRAPHIC (NAD83): LATITUDE: 40.114042° LONGITUDE: -80.594956°	
LEGEND: ○ PROPOSED SURFACE HOLE / BOTTOM HOLE ● EXISTING / PRODUCING WELLHEAD ✖ ABANDONED WELL ✖ PLUGGED & ABANDONED WELL △ CUT CONDUCTOR		● EXISTING SPRING ● EXISTING WATER WELL — ACCESS ROAD — ACCESS ROAD TO PREV. SITE — HIGHWAY/INTERSTATE — COUNTY ROAD		BOTTOM HOLE LOCATION: GEOGRAPHIC (NAD83): LATITUDE: 40.099775° LONGITUDE: -80.580809°	
		REVISIONS: ▲ UPDATED DHP, 05/28/2015 ▲ REVISED SHL, LP, & BHL FOR ASDRILLED DIRECTIONAL PATH 11-16-2015		DATE: 07-21-2015 DRAWN BY: J. HARNESS SCALE: 1" = 2000' DRAWING NO: 59388 TOPOGRAPHIC MAP	

03/04/2016



320 O'Bryan Lane • Van Buren, AR 72956
Office: 479.474.7916 • Fax: 479.474.2450
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- NOTES ON SURVEY**
- COORDINATE 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/OR FIELD LOCATIONS.
 - THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
 - NO OCCUPIED DWELLINGS AND AGRICULTURE BUILDINGS GREATER THAN 2500 SQ. FT. 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, OR RESERVOIRS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
 - NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.
 - NO GROUND INTAKE OR PUBLIC WATER SUPPLY WITHIN 1000 FEET OF WELL PAD, LIMITS OF DISTURBANCE, E & S CONTROLS OR PUBLIC WATER SUPPLY.

SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,440,493.498 EASTING: 534,516.939
LANDING POINT (LP):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,440,582.134 EASTING: 534,691.583
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,438,915.573 EASTING: 535,729.981

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. 2315



(+) 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)

COMPANY: **SWN** Production Company, LLC
GLENN DIDRIKSEN OHI
OPERATOR'S WELL #: 10H
API WELL #: 47 69 00191
STATE COUNTY PERMIT

WELL TYPE: OIL WASTE DISPOSAL PRODUCTION DEEP GAS LIQUID INJECTION STORAGE SHALLOW
WATERSHED: LITTLE WHEELING CREEK
DISTRICT: LIBERTY COUNTY: OHIO
SURFACE OWNER: GLENN DIDRIKSEN
OIL & GAS ROYALTY OWNER: D&D FAST FOOD, INC.
DRILL DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION
CONVERT PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY) AS-DRILLED
TARGET FORMATION: MARCELLUS DEPTH: 6,426' TYP. 17,437' TYP.

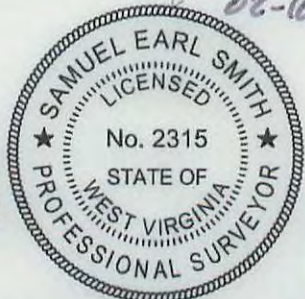
WELL OPERATOR: SWN PRODUCTION COMPANY, LLC
ADDRESS: P.O. BOX 1300
CITY: JANE LEW STATE: WV ZIP CODE: 26378
DESIGNATED AGENT: DEE SOUTHALL
ADDRESS: P.O. BOX 1300
CITY: JANE LEW STATE: WV ZIP CODE: 26378

LEGEND:	REVISIONS:	DATE: 07-21-2015
○ PROPOSED SURFACE HOLE / BOTTOM HOLE	▲ UPDATED DHP, 05/28/2015	
⊗ EXISTING / PRODUCING WELLHEAD	▲ REVISED SHL, LP, & BHL FOR ASDRILLED	DRAWN BY: J. HARNISS
⊗ ABANDONED WELL	▲ DIRECTIONAL PATH 11-16-2015	SCALE: 1" = 2000'
⊗ PLUGGED & ABANDONED WELL	▲ REVISED ASDRILLED & PERMITTED DIRECTIONAL	DRAWING NO: 59388
△ CUT CONDUCTOR	▲ PATH COLOR, ADD LP COORDINATES 02-09-2016	WELL LOCATION PLAT
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LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	S 13°03'24" E	323.52'	SHL TO LANDMARK	FOUND POST
L2	N 51°25'12" E	1,052.59'	SHL TO LANDMARK	FOUND REBAR
L3	N 79°02'44" W	44.39'	SHL TO REF. PNT.	GLENN DIDRIKSEN OHI 1H WELLHEAD (069-00123)
L4	N 63°37'14" W	20.39'	SHL TO REF. PNT.	GLENN DIDRIKSEN OHI 8H WELLHEAD (069-00064)
LINE	CHORD BEARING	CHORD DIST.	CURVE LENGTH	DESCRIPTION
L5	N 63°05'28" E	642.55'		SHL TO LP
L6	S 31°55'34" E	6,442.22'		LP TO BHL

TRACT	SURFACE OWNER (S)	ROYALTY OWNER (R)	TAX PARCEL	ACRES	LEASE NUMBER
1	GLENN DIDRIKSEN (S)	D&D FAST FOOD, INC. (R)	3-L7-42	47.93	1-268336-000
2	ROBERT WALTER & DONNA JEAN LASCH (S/R)		3-L10-40	141.71	1-313594-001
3	RONALD M. SCOTT AND MARGO L. SCOTT (S/R)		3-L10-40.1	2.75	1-385460-000
4	ROBERT WALTER & DONNA JEAN LASCH (S/R)		3-L10-39	75.00	1-313594-001
5	J. MATHEW PADDEN & JUDITH M. PADDEN (S/R)		3-L10-38	96.00	1-313595-001
6	RONALD & HELEN LEMASTERS (S)		3-L10-42	5.00	
7	RICHARD J. SCOTT & KAREN SURE SCOTT (R)		3-L10-42	5.00	1-385463-000
8	C. DWANE BUTTS & LINDA J. BUTTS (S/R)		3-L10-43	89.74	1-313596-001
9	ERIC W. LYTLE (S/R)		3-L10-49	121.50	1-385466-001
9	BETH A. MARTIN NELSON, MICHAEL W. MARTIN & WILLIAM D. MARTIN (S/R)		3-L10-44	33.80	1-324675-000

SHL TO "S" #1	N 59°10'40" E	1449.18'
SHL TO "S" #2	N 77°07'38" E	1313.85'
SHL TO WATER WELL	N 83°55'59" E	1317.63'



COMPANY: **SWN** Production Company, LLC

03/04/2016

<ul style="list-style-type: none"> ▽ CUI CONDUCTOR ⊗ BEARDED & UNDRILLED METT ⊗ UNDRILLED METT ⊗ EXISTING \ BROODING METTHEAD ⊗ BROODING SURFACE HOGE \ BOTTOM HOGE 	<ul style="list-style-type: none"> — UNDRILLED BYIN — DRILLING BYIN — BEYRILLED — Y2-DRIFTED BYIN — FEYGE BOYIDIVA 	BYIN COGON' VDD TБ COORDINATE 05-08-2018 BEARDED Y2DRIFTED & BEYRILLED DIRECTION DIRECTION BYIN 11-18-2018 BEARDED SH' TБ & BHG FOR Y2DRIFTED UNDRILLED DNB' 02/28/2018 BEYRILLED:	METT COCUION BYIN DRY. C NO: 28288 SCALE: 1" = 5000' DRYMI BA: T HANIE22 DATE: 01-31-2018
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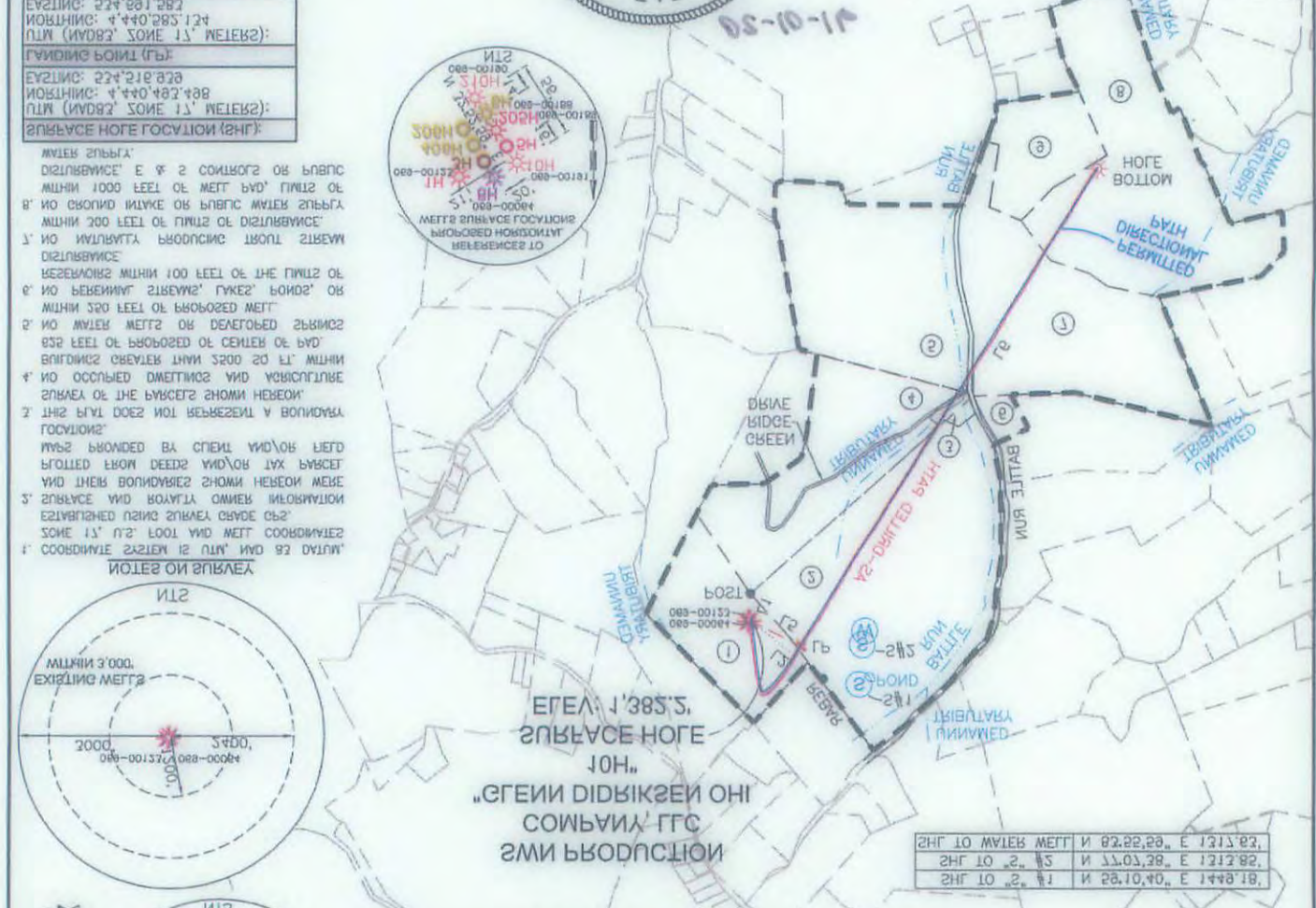
CITY: TIME GEM STATE: MA ZIP CODE: 38238 CITY: TIME GEM STATE: MA ZIP CODE: 38238
 ADDRESS: 50' BOX 1300 ADDRESS: 50' BOX 1300
 METT OPERATOR: SMI PRODUCTION COMPANY LLC DESIGNATED AGENCY: DEE SOUTHATT

TYPE OF FORMATION: MARGELLITE DEPTH: 8'438, 110 12'432, 110
 COMEYR BYIN & UNDRILL CEMI ONI & BEYRILL OTHER CHANCE (SPECIAL) Y2-DRIFTED
 DRIFT DRIFT DEEBEY BEYRILL FEYCTURE OR SHIMMATE BYIN OFF OLD FORMATION BEYRILLATE IEM FORMATION
 OIG & CV2 BOAYIA OMIEB: DFD EY2I FOOD' INC. ACSEYGE: 741'82
 SURFACE OMIEB: CEMI DIDIKSEI ACSEYGE: 741'82
 DISTANCE: PIVEYIA COMILA: ONIO ONYDRYINGE: MYTEA COYOE' MA
 MYLEKSHED: PUSSE MHEEPIE CREEK ELEVATION: 1285'3
 METT TYPE: OIG MYSTE DISBOYAT BROODING DEEB CV2 PIONID INJECTION STOVACE SHIMTOM

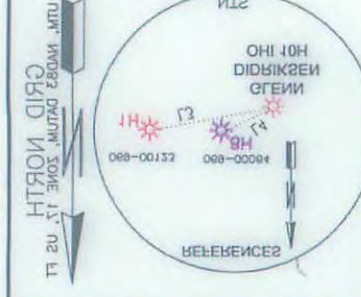
CHARGESION' MA 2024 801 2111 STREET OFFICE OF OIG & CV2 MADEB UNITED STATES GOVERNMENT MA2 (+) DENOTES LOCATION OF METT ON	ELEVATION: (MAYD 88' U2 FT) SOURCE OF GRADE CH2 BYOBEXI ACCURACY: 1/500 DEGREE OF MINIMUM	STATE: MA COUNTY: 08 BEYRILL: 00101 OBYEYATOK,2 METT #: 10H CEMI DIDIKSEI ONI
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DEPARTMENT OF ENVIRONMENTAL PROTECTION REGULATIONS ISSUED AND DESCRIBED BY THE THE INFORMATION RECEIVED BY GVM AND MA KNOWLEDGE AND BELIEF AND THOMAS VGT THAT THIS BYIN IS CORRECT TO THE BEST OF I' THE UNDERSIGNED HEREBY CERTIFY

GRAPHIC SCALE IN FEET
 5000 0 5000
 PRODUCTION COMPANY LLC PRODUCTION COMPANY MA
 SMI SMI
 COMPANY:



- NOTES ON SURVEY
1. NO SURVEYING SURVEYING PUNKS' BONDZ' OR WITHIN 200 FEET OF BROODING METT
 2. NO SURVEY METTS OR DELEGATED SURVEY 822 FEET OF BROODING OF CENTER OF BYD BYGONING GREATER THAN 2000 20 FT' WITHIN
 3. NO OCCUPIED BEMTTING AND YKONICITURE SURVEY OF THE BYBCEY2 SHOMI HEREON
 4. THIS BYIN DOES NOT BEYRILLATE A BOYIDIVA COCUIONZ
 5. MY2E BYONDED BY SPENL VIO\OYR BYED BYGOTED EBON DEEBZ VIO\OYR IAX BYBCEY AND IEMR BOYIDIVAYEZ SHOMI HEREON MEYB
 6. SURFACE AND BOAYIA OMIEB INFORMATION ESTABLISHED BYIN SURFACE GRADE 062' 30ME 11' 12' 000' AND METT COORDINATEZ
 7. COORDINATE EXACTEN IS CUI' AND 82 DRYMI



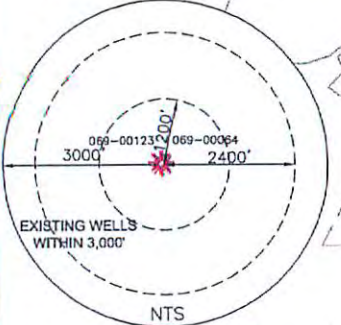
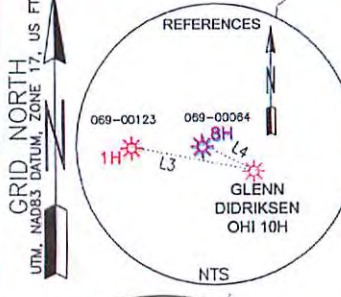
BYIN	BYIN NAME	BYIN TYPE	BYIN DATE	BYIN DEPTH	BYIN AGENCY
1	BYIN 1	BYIN 1	2-11-11	2780	1-254832-000
2	BYIN 2	BYIN 2	2-11-11	13120	1-282488-000
3	BYIN 3	BYIN 3	2-11-11	8834	1-212884-001
4	BYIN 4	BYIN 4	2-11-11	2'00	1-282488-000
5	BYIN 5	BYIN 5	2-11-11	2'00	1-282488-000
6	BYIN 6	BYIN 6	2-11-11	89'00	1-212882-001
7	BYIN 7	BYIN 7	2-11-11	32'00	1-212884-001
8	BYIN 8	BYIN 8	2-11-11	5'32	1-282488-000
9	BYIN 9	BYIN 9	2-11-11	141'31	1-212884-001
10	BYIN 10	BYIN 10	2-11-11	43'82	1-282488-000
11	BYIN 11	BYIN 11	2-11-11	43'82	1-282488-000

OFFICE: 410.474.7010 • FAX: 410.474.2480
 350 OBYIN LANE • VAN BYIN MA 28882
 ASSOCIATES INC
 HOFFMAN
 DATE: 03/04/2016
 SCALE: 1" = 5000'

HOFFMAN ASSOCIATES INC
 320 O'Bryan Lane • Van Buren, AR 72956
 Office: 479.474.7916 • Fax: 479.474.2450
 Surveying • handa-inc.com

LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	S 13°03'24" E	323.52'	SHL TO LANDMARK	FOUND POST
L2	N 51°25'12" E	1,052.59'	SHL TO LANDMARK	FOUND REBAR
L3	N 79°02'44" W	44.39'	SHL TO REF. PNT.	GLENN DIDRIKSEN OHI 1H WELLHEAD (069-00123)
L4	N 63°37'14" W	20.39'	SHL TO REF. PNT.	GLENN DIDRIKSEN OHI 8H WELLHEAD (069-00064)
LINE	CHORD BEARING	CHORD DIST.	CURVE LENGTH	DESCRIPTION
L5	N 63°05'28" E	642.55'		SHL TO LP
L6	S 31°55'34" E	6,442.22'		LP TO BHL

Latitude: 40°07'30"
 Longitude: 80°35'00"

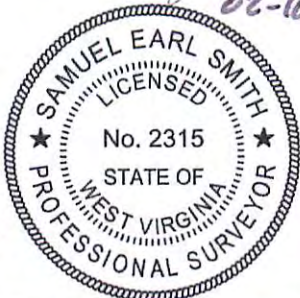
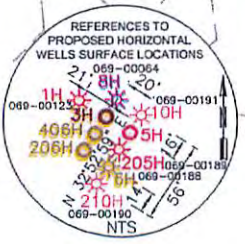
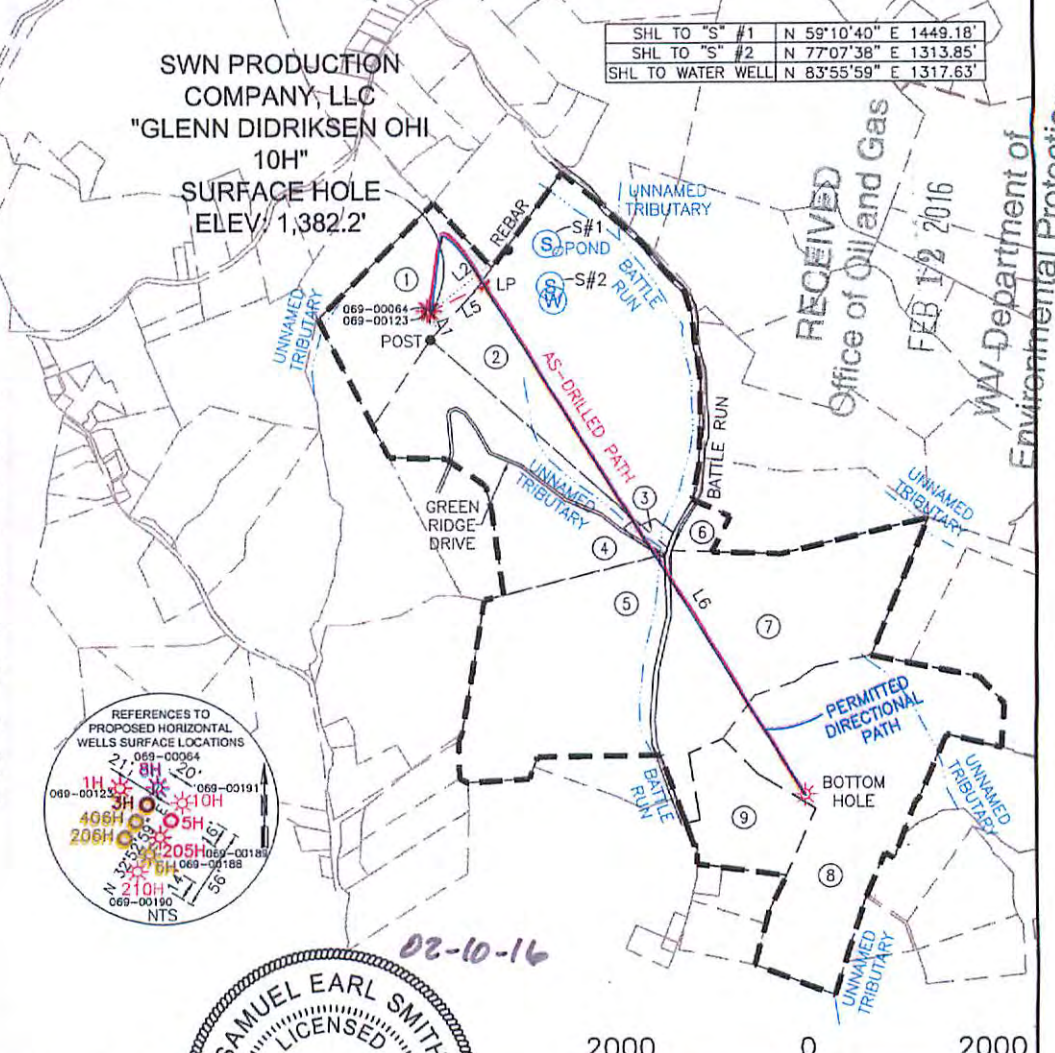


TRACT	SURFACE OWNER (S) ROYALTY OWNER (R)	TAX PARCEL	ACRES	LEASE NUMBER
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8	C. DWANE BUTTS & LINDA J. BUTTS (S/R)	3-L10-43	89.74	1-313596-001
9	ERIC W. LYTLE (S/R)	3-L10-49	121.50	1-385466-001
	BETH A. MARTIN NELSON, MICHAEL W. MARTIN & WILLIAM D. MARTIN (S/R)	3-L10-44	33.80	1-324675-000

- NOTES ON SURVEY**
- COORDINATE 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/OR FIELD LOCATIONS.
 - THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
 - NO OCCUPIED DWELLINGS AND AGRICULTURE BUILDINGS GREATER THAN 2500 SQ. FT. 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, OR RESERVOIRS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
 - NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.
 - NO GROUND INTAKE OR PUBLIC WATER SUPPLY WITHIN 1000 FEET OF WELL PAD, LIMITS OF DISTURBANCE, E & S CONTROLS OR PUBLIC WATER SUPPLY.

SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,440,493.498 EASTING: 534,516.939
LANDING POINT (LP):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,440,582.134 EASTING: 534,691.583
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,438,915.573 EASTING: 535,729.981

SWN PRODUCTION COMPANY, LLC
"GLENN DIDRIKSEN OHI 10H"
SURFACE HOLE
ELEV: 1,382.2'



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. 2315

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)	OPERATOR'S WELL #: 10H API WELL #: 47 STATE 69 COUNTY 00191 PERMIT
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WELL TYPE: OIL WASTE DISPOSAL PRODUCTION DEEP GAS LIQUID INJECTION STORAGE SHALLOW

WATERSHED: LITTLE WHEELING CREEK ELEVATION: 1382.2'

DISTRICT: LIBERTY COUNTY: OHIO QUADRANGLE: VALLEY GROVE, WV

SURFACE OWNER: GLENN DIDRIKSEN ACREAGE: ±47.93

OIL & GAS ROYALTY OWNER: D&D FAST FOOD, INC. ACREAGE: ±47.93

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

CONVERT PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY) AS-DRILLED

TARGET FORMATION: MARCELLUS DEPTH: 6,426' TVD, 13,437' TMD

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

LEGEND:	- - - - LEASE BOUNDARY ○ PROPOSED SURFACE HOLE / BOTTOM HOLE * EXISTING / PRODUCING WELLHEAD ✕ ABANDONED WELL ✕ PLUGGED & ABANDONED WELL △ CUT CONDUCTOR	- - - - AS-DRILLED PATH - - - - PERMITTED DIRECTIONAL PATH - - - - ABANDONED PATH	REVISIONS: △ UPDATED DHP, 05/28/2015 △ REVISED SHL, LP, & BHL FOR ASDRILLED △ DIRECTIONAL PATH 11-16-2015 △ REVISED ASDRILLED & PERMITTED DIRECTIONAL PATH COLOR, ADD LP COORDINATES 02-09-2016	DATE: 07-21-2015 DRAWN BY: J. HARNISS SCALE: 1" = 2000' DRAWING NO: 59388 WELL LOCATION PLAT
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