

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

API 47-069-00185 County 69-Ohio District 3-Liberty
Quad 648-Valley Grove Pad Name Alice Edge-OHI-Pad1 Field/Pool Name Panhandle Field
Farm name Alice Mae Edge Well Number 206H
Operator (as registered with the OOG) SWN Production CO., LLC
Address 10000 Energy Drive City Spring State TX Zip 77389

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4438937.148 Easting 537467.150
Landing Point of Curve Northing 4438575.700 Easting 537084.375
Bottom Hole Northing 4436543.832 Easting 537927.310

Elevation (ft) 1199' 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 11/20/2014 Date drilling commenced 4/8/2015 Date drilling ceased 4/30/2015
Date completion activities began 7/6/2015 Date completion activities ceased 10/11/2015
Verbal plugging (Y/N) N Date permission granted _____ Granted by _____

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

Freshwater depth(s) ft 400' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 737' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 582'-592' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

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Reviewed by:
03/04/2016

API 47- 069 - 00185 Farm name Alice Mae Edge 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	30	20	100'	N	F-25-94 LB/FT		
Surface	17.5	13.375	624'	N	J-55-54.5 LB/FT		
Coal	12.25	9.625	2,124'	N	J-55-40 LB/FT		
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	8.75/8.5	5.5	5,574/14,554'	N	P-110RY-23 LB/FT		Y
Tubing	4.78	2.375		N	P-110-4.7 LB/FT		
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	A			1.19		GTS	GTS
Surface	A	574	15.6	1.20	689	30	8
Coal	A	801	15.6	1.18	945	30	8
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	A	997/1796	15.6	1.20/1.19	1196/2137	603	24
Tubing							

Drillers TD (ft) 14,554' Loggers TD (ft) 13,903'
 Deepest formation penetrated MARCELLUS Plug back to (ft) _____
 Plug back procedure NA

Kick off depth (ft) 5646'

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 will be ran with a centralizer at a minimum of 1 per every 3 joints 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 _____

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PERFORATION RECORD

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

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	ATTACHED				
							Received	
							Office of Oil & Gas	
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Please insert additional pages as applicable.

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API 47- 069 - 00185 Farm name Alice Mae Edge Well number 206H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
<u>MARCELLUS</u>	<u>6390</u>	<u>TVD</u>	<u>15676</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 NA hrs

OPEN FLOW Gas 3504 mcfpd Oil 362 bpd NGL _____ bpd Water 164 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>		
			<u>see</u>	<u>attached</u>	

Please insert additional pages as applicable.

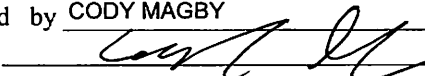
Drilling Contractor SWN DRILLING CO.
Address 1000 Energy Dr City Spring State TX Zip 77389

Logging Company NINE ENERGY SERVICES
Address 8885 State Hwy 21 E City Bryan State TX Zip 77808

Cementing Company CALFRAC WELL SERVICES CORP.
Address 717 17th St #1445 City Denver State CO Zip 80202

Stimulating Company SCHLUMBERGER OIL FIELD SERVICES
Address 1121 Buschong St City Houston State TX Zip 77038

Please insert additional pages as applicable.

Completed by CODY MAGBY Telephone 832-796-6215
Signature  Title SR. REGULATORY ANALYST Date 1/5/2015

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

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PRODUCING FORMATION(S)	DEPTHS	
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_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

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	0		0		
			see	attached	

Please insert additional pages as applicable.

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Signature _____ Title SR. REGULATORY ANALYST Date 1/5/2015

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Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry **03/04/2016**

WELL NAME	STAGE NUM	Stim Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)
ALICE EDGE OHI 206	1	8/30/2015	2	8,223
ALICE EDGE OHI 206	2	8/31/2015	2	8,320
ALICE EDGE OHI 206	3	9/1/2015	2	8,327
ALICE EDGE OHI 206	4	9/2/2015	2	8,397
ALICE EDGE OHI 206	5	9/3/2015	2	8,177
ALICE EDGE OHI 206	6	9/3/2015	2	8,060
ALICE EDGE OHI 206	7	9/4/2015	2	8,314
ALICE EDGE OHI 206	8	9/5/2015	2	8,155
ALICE EDGE OHI 206	9	9/5/2015	2	7,979
ALICE EDGE OHI 206	10	9/9/2015	2	7,527
ALICE EDGE OHI 206	11	9/10/2015	2	7,859
ALICE EDGE OHI 206	12	9/10/2015	2	7,888
ALICE EDGE OHI 206	13	9/11/2015	2	7,806
ALICE EDGE OHI 206	14	9/11/2015	2	7,452
ALICE EDGE OHI 206	15	9/12/2015	2	7,400
ALICE EDGE OHI 206	16	9/12/2015	2	7,549
ALICE EDGE OHI 206	17	9/13/2015	2	7,655
ALICE EDGE OHI 206	18	9/13/2015	2	7,258
ALICE EDGE OHI 206	19	9/14/2015	2	7,097
ALICE EDGE OHI 206	20	9/14/2015	2	7,228
ALICE EDGE OHI 206	21	9/15/2015	2	7,007
ALICE EDGE OHI 206	22	9/15/2015	2	7,301
ALICE EDGE OHI 206	23	9/16/2015	2	7,159
ALICE EDGE OHI 206	24	9/16/2015	2	7,194
ALICE EDGE OHI 206	25	9/17/2015	2	7,016
ALICE EDGE OHI 206	26	9/18/2015	2	7,017
ALICE EDGE OHI 206	27	9/18/2015	2	6,914
ALICE EDGE OHI 206	28	9/18/2015	2	6,897
Grand total	Grand total	8/30/2015	2	7,613

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Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of water bbls
8,914	4,216	504,520	7,381
9,072	4,929	500,140	7,362
8,874	4,685	500,840	7,313
9,139	4,815	500,840	7,256
9,159	4,701	508,260	7,379
9,225	4,752	504,560	7,277
8,091	4,667	498,400	7,332
9,084	4,592	501,840	7,157
9,071	4,657	509,460	7,152
8,445	4,559	500,060	7,413
8,968	4,815	497,020	7,113
8,502	4,713	483,660	7,397
8,884	4,854	499,300	6,587
8,484	4,685	498,320	7,355
8,708	4,667	499,200	7,282
8,899	4,854	504,460	7,169
8,564	4,553	504,780	7,136
8,846	4,590	501,920	7,213
8,525	4,486	500,880	8,240
9,071	4,777	502,160	7,310
8,208	4,903	500,300	7,076
8,288	4,739	500,280	7,388
8,241	4,704	502,500	7,084
8,399	4,853	501,080	6,995
8,227	4,892	499,140	6,998
8,120	4,760	498,700	7,021
8,378	4,815	505,060	6,853
8,536	4,853	499,240	6,900
9,225	4,717	14,026,920	202,139

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	8/30/2015
Job End Date:	9/18/2015
State:	West Virginia
County:	Ohio
API Number:	47-069-00185-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	Alice Edge Ohi 206H
Longitude:	-80.56042700
Latitude:	40.09989400
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	6,499
Total Base Water Volume (gal):	8,489,838
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
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	Corrosion Inhibitor, Acid, Friction Reducer, Fluid Loss Additive, Propping Agent					
			Water (Including Mix Water Supplied by Client)*	NA		83.36489	
			Quartz, Crystalline silica	14808-60-7	98.71267	16.42096	
			Hydrochloric acid	7647-01-0	1.28131	0.21315	
			Ammonium sulfate	7783-20-2	0.27158	0.04518	
			Urea	57-13-6	0.04526	0.00753	
			Methanol	67-56-1	0.00380	0.00063	
			Thiourea formaldehyde polymer	Proprietary	0.00190	0.00032	
			Aliphatic acids	Proprietary	0.00190	0.00032	
			Propargyl alcohol	107-19-7	0.00063	0.00011	
			Aliphatic alcohols, ethoxylated #2	Proprietary	0.00063	0.00011	
			Olefin Hydrocarbon	Proprietary	0.00032	0.00005	
			Hexadec-1-ene	629-73-2	0.00032	0.00005	
			Formaldehyde	50-00-0	0.00001		

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* 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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WELL NAME	STAGE NUM	Perf Date	Perf Top MD	Perf Bottom MD	# SHOTS PER STG
ALICE EDGE OHI 206	1	8/30/2015	14,182	14,377	42
ALICE EDGE OHI 206	2	8/31/2015	13,925	14,123	42
ALICE EDGE OHI 206	3	9/1/2015	13,671	13,863	42
ALICE EDGE OHI 206	4	9/2/2015	13,412	13,606	42
ALICE EDGE OHI 206	5	9/3/2015	13,155	13,350	42
ALICE EDGE OHI 206	6	9/3/2015	12,901	13,091	42
ALICE EDGE OHI 206	7	9/4/2015	12,642	12,836	42
ALICE EDGE OHI 206	8	9/5/2015	12,385	12,579	42
ALICE EDGE OHI 206	9	9/5/2015	12,128	12,327	42
ALICE EDGE OHI 206	10	9/9/2015	11,871	12,066	42
ALICE EDGE OHI 206	11	9/10/2015	11,617	11,809	42
ALICE EDGE OHI 206	12	9/10/2015	11,358	11,552	42
ALICE EDGE OHI 206	13	9/11/2015	11,101	11,293	42
ALICE EDGE OHI 206	14	9/11/2015	10,844	11,039	42
ALICE EDGE OHI 206	15	9/12/2015	10,587	10,782	42
ALICE EDGE OHI 206	16	9/12/2015	10,330	10,525	42
ALICE EDGE OHI 206	17	9/13/2015	10,074	10,268	42
ALICE EDGE OHI 206	18	9/13/2015	9,817	10,011	42
ALICE EDGE OHI 206	19	9/14/2015	9,560	9,755	42
ALICE EDGE OHI 206	20	9/14/2015	9,303	9,498	42
ALICE EDGE OHI 206	21	9/15/2015	9,047	9,241	42
ALICE EDGE OHI 206	22	9/15/2015	8,790	8,984	42
ALICE EDGE OHI 206	23	9/16/2015	8,533	8,728	42
ALICE EDGE OHI 206	24	9/16/2015	8,276	8,471	42
ALICE EDGE OHI 206	25	9/17/2015	8,019	8,214	42
ALICE EDGE OHI 206	26	9/18/2015	7,763	7,955	42
ALICE EDGE OHI 206	27	9/18/2015	7,507	7,700	42
ALICE EDGE OHI 206	28	9/18/2015	7,251	7,444	42

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03/04/2016

Well Name: ALICE EDGE OHI 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.	400.00	N.A.	400.00	
Top of Salt Water	737.00	N.A.	737.00	N.A.	
Pittsburgh Coal	588.99	594.99	589.00	595.00	
Big Injun (ss)	1825.84	2281.90	1835.00	2295.00	
Berea (siltstone)	2281.90	5798.68	2295.00	5853.91	
Rhinestreet (shale)	5798.68	6053.01	5853.91	6187.87	
Cashaqua (shale)	6053.01	6127.59	6187.87	6344.76	
Middlesex (shale)	6127.59	6204.85	6344.76	6543.42	
Burket (shale)	6204.85	6225.49	6543.42	6591.83	
Tully (ls)	6225.49	6262.15	6591.83	6679.99	
Mahantango (shale)	6262.15	6396.54	6679.99	7161.58	
Marcellus (shale)	6396.54	N.A.	7161.58	N.A.	

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THRASHER

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

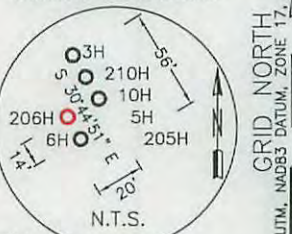
AS-DRILLED SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,438,937.148
EASTING: 537,467.150

AS-DRILLED BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,436,543.832
EASTING: 537,927.310

AS-DRILLED LANDING POINT LOCATION (LPL):
KIGER JULIA (LIFE ESTATE)
03-L11-25

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,438,575.700
EASTING: 537,084.375

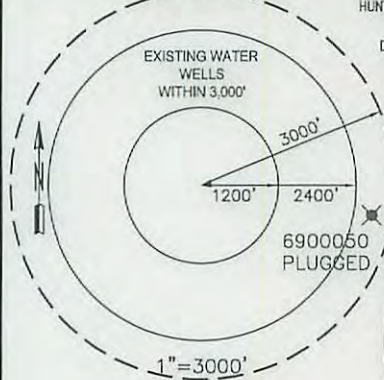
REFERENCES TO PROPOSED HORIZONTAL WELLS SURFACE LOCATIONS



- 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.

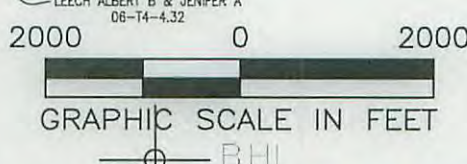


TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL	ACRES	LEASE NO.
1	ALICE MAE EDGE	03-L11-23	103.0	1-292590-000
2	LYNN AND YVONNE REUSSER	03-L11-21	70.908	47-000579-000
3	LYNN AND YVONNE REUSSER	03-L11-20	103.8	47-000579-000
4	VINCENT W & BAMBI A BEVILL	08-VG7-1	2.212	47-000579-000
5	JACK L NELSON	08-VG7-5.1	1.92	1-385817-000
6	VINCENT W & BAMBI A BEVILL	08-VG7-3	0.404	47-000294-000
7	BRENDA S SHEPHERD	08-VG7-5	1.94	1-385804-000
8	JIMMY R & ANNIE J CAMPBELL	08-VG7-4	0.354	47-000074-000
9	GUY P & DEBRA S CALMBACHER	08-VG7-26	0.954	47-000272-001
10	DONALD & PEGGY LOU PLETCHER	03-L14-19.2	1.872	47-000272-001
11	DOUGLAS EDWARD FARMER	03-L14-19	17.625	47-000415-001-5
12	GEORGE A & M.E. PEYTON	08-L14-12	0.796	47-000002-000
13	JOHN & TINA M KOVACS	08-L14-11.1	2.00	47-000067-000
14	RODNEY L & CLAUDIA K MILLER	08-L14-13	15.0	1-300270-000
15	EARL F & GERALDINE PARSONS	03-L14-15	52.08	1-250025-000
16	NANCY MAE CUSTER	06-T4-5	8.812	47-001540-000
17	GLENN & M.J. RITCHEA	06-T4-9	13.506	1-325803-000



AS-DRILLED

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 *[Signature]*

<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 SOURCE OF ELEVATION: SURVEY GRADE GPS (NAVD 88, US FT)</p>	<p>COMPANY: SWN Production Company, LLC</p> <p>ALICE EDGE</p> <p>OPERATOR'S WELL #: OHI 206H</p> <p>API WELL #: 47 069 00185</p> <p>STATE COUNTY PERMIT</p>
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WELL TYPE: OIL WASTE DISPOSAL PRODUCTION DEEP GAS LIQUID INJECTION STORAGE SHALLOW

WATERSHED: UPPER OHIO SOUTH ELEVATION: 1,198

DISTRICT: LIBERTY COUNTY: OHIO QUADRANGLE: VALLEY GROVE

SURFACE OWNER: ALICE MAE EDGE ACREAGE: 103±

OIL & GAS ROYALTY OWNER: ALICE MAE EDGE ACREAGE: 416.164±

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

CONVERT PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY) **03/04/2016**

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 6,390 TVD 15,676 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

<p>LEGEND:</p> <ul style="list-style-type: none"> ○ PROPOSED SURFACE HOLE / BOTTOM HOLE ⊙ EXISTING / PRODUCING WELLHEAD ⊗ ABANDONED WELL ⊗ PLUGGED & ABANDONED WELL △ CUT CONDUCTOR --- LEASE BOUNDARY --- DESIGN DHP --- AS-DRILLED DHP --- ABANDONED PATH 	<p>REVISIONS:</p> <p>△ REVISED 001 01-06-2016</p> <p>DATE: 01-07-2016</p> <p>DRAWN BY: KJP</p> <p>SCALE: 1" = 2000'</p> <p>DRAWING NO: 030-2725</p> <p>WELL LOCATION PLAT</p>
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THRASHER

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

NOTES ON SURVEY

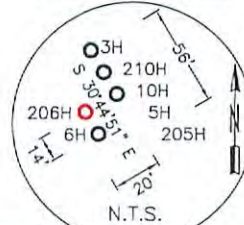
- COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
- SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND FIELD LOCATIONS.
- THIS PLAT DOES NOT 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.

AS-DRILLED SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,438,937.148
EASTING: 537,467.150

AS-DRILLED BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,436,543.832
EASTING: 537,927.310

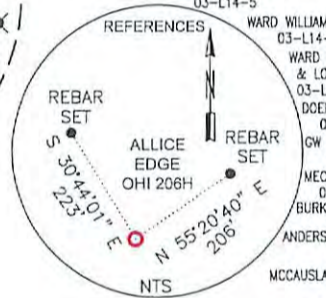
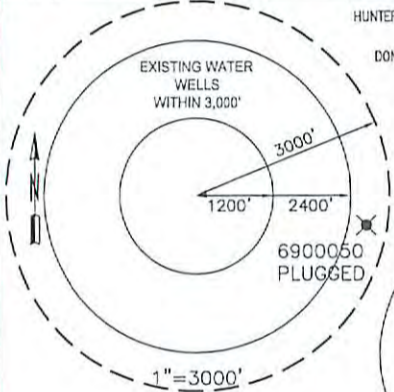
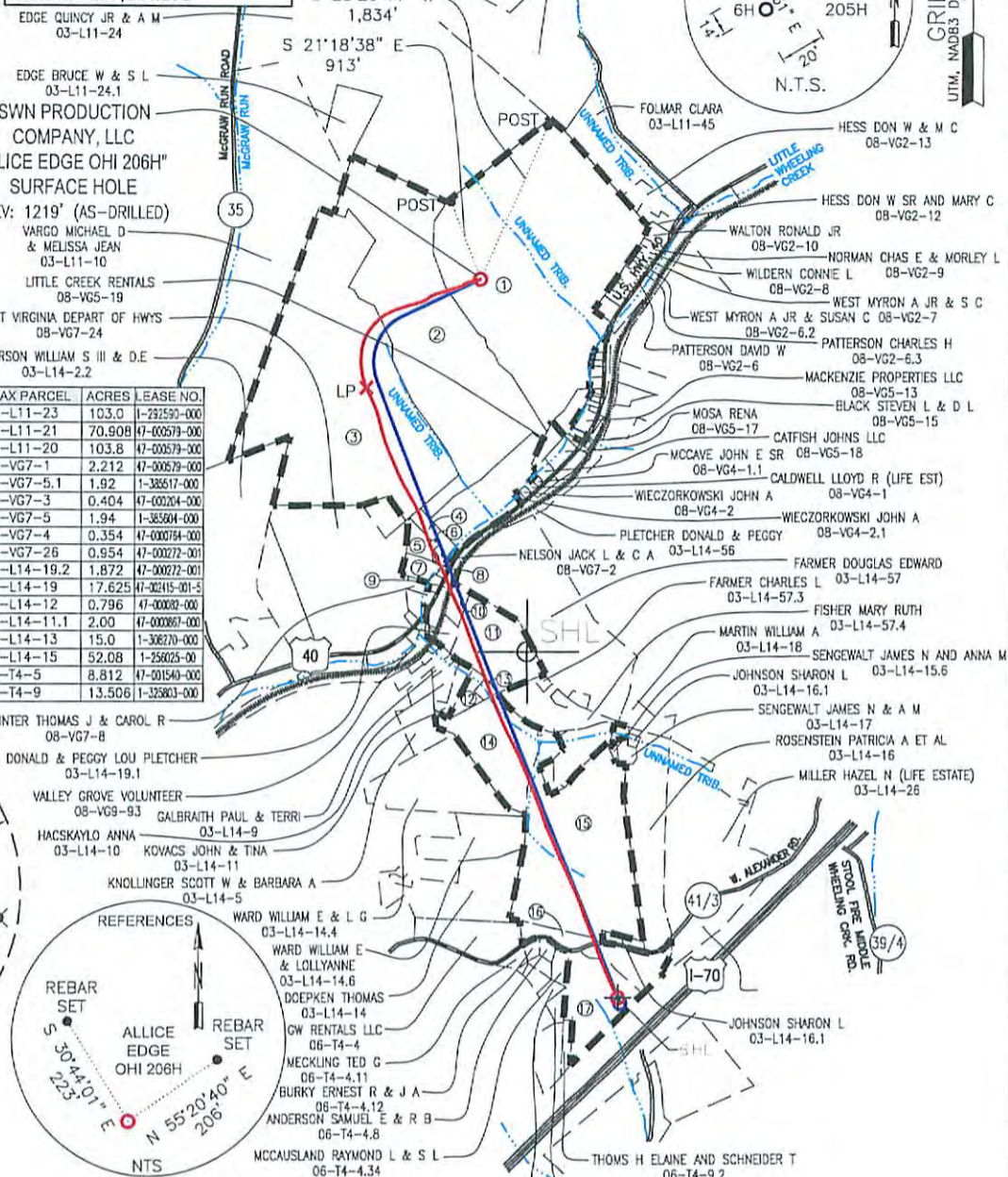
AS-DRILLED LANDING POINT LOCATION (LPL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,438,575.700
EASTING: 537,084.375

REFERENCES TO PROPOSED HORIZONTAL WELLS SURFACE LOCATIONS



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

TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL	ACRES	LEASE NO.
1	ALICE MAE EDGE	03-L11-23	103.0	1-29259-000
2	LYNN AND YVONNE REUSSER	03-L11-21	70.908	47-00579-000
3	LYNN AND YVONNE REUSSER	03-L11-20	103.8	47-00579-000
4	VINCENT W & BAMBI A BEVILL	08-VG7-1	2.212	47-00579-000
5	JACK L NELSON	08-VG7-5.1	1.92	1-38517-000
6	VINCENT W & BAMBI A BEVILL	08-VG7-3	0.404	47-00204-000
7	BRENDA S SHEPHERD	08-VG7-5	1.94	1-38504-000
8	JIMMY R & ANNIE J CAMPBELL	08-VG7-4	0.354	47-00079-000
9	GUY P & DEBRA S CALMBACHER	08-VG7-26	0.954	47-00272-001
10	DONALD & PEGGY LOU PLETCHER	03-L14-19.2	1.872	47-00272-001
11	DOUGLAS EDWARD FARMER	03-L14-19	17.625	47-02415-001-5
12	GEORGE A & M.E. PEYTON	08-L14-12	0.796	47-00082-000
13	JOHN & TINA M KOVACS	08-L14-11.1	2.00	47-00087-000
14	RODNEY L & CLAUDIA K MILLER	08-L14-13	15.0	1-38270-000
15	EARL F & GERALDINE PARSONS	03-L14-15	52.08	1-25025-000
16	NANCY MAE CUSTER	06-T4-5	8.812	47-00150-000
17	GLENN & M.J. RITCHEA	06-T4-9	13.506	1-32803-000



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P.S. 2270 *[Signature]*



(+) 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 SOURCE OF ELEVATION: SURVEY GRADE GPS (NAVD 88, US FT)

COMPANY: **SWN** Production Company, LLC

OPERATOR'S WELL #: ALICE EDGE OHI 206H

API WELL #: 47 069 00185

STATE COUNTY PERMIT

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

WATERSHED: UPPER OHIO SOUTH ELEVATION: 1,198

DISTRICT: LIBERTY COUNTY: OHIO QUADRANGLE: VALLEY GROVE

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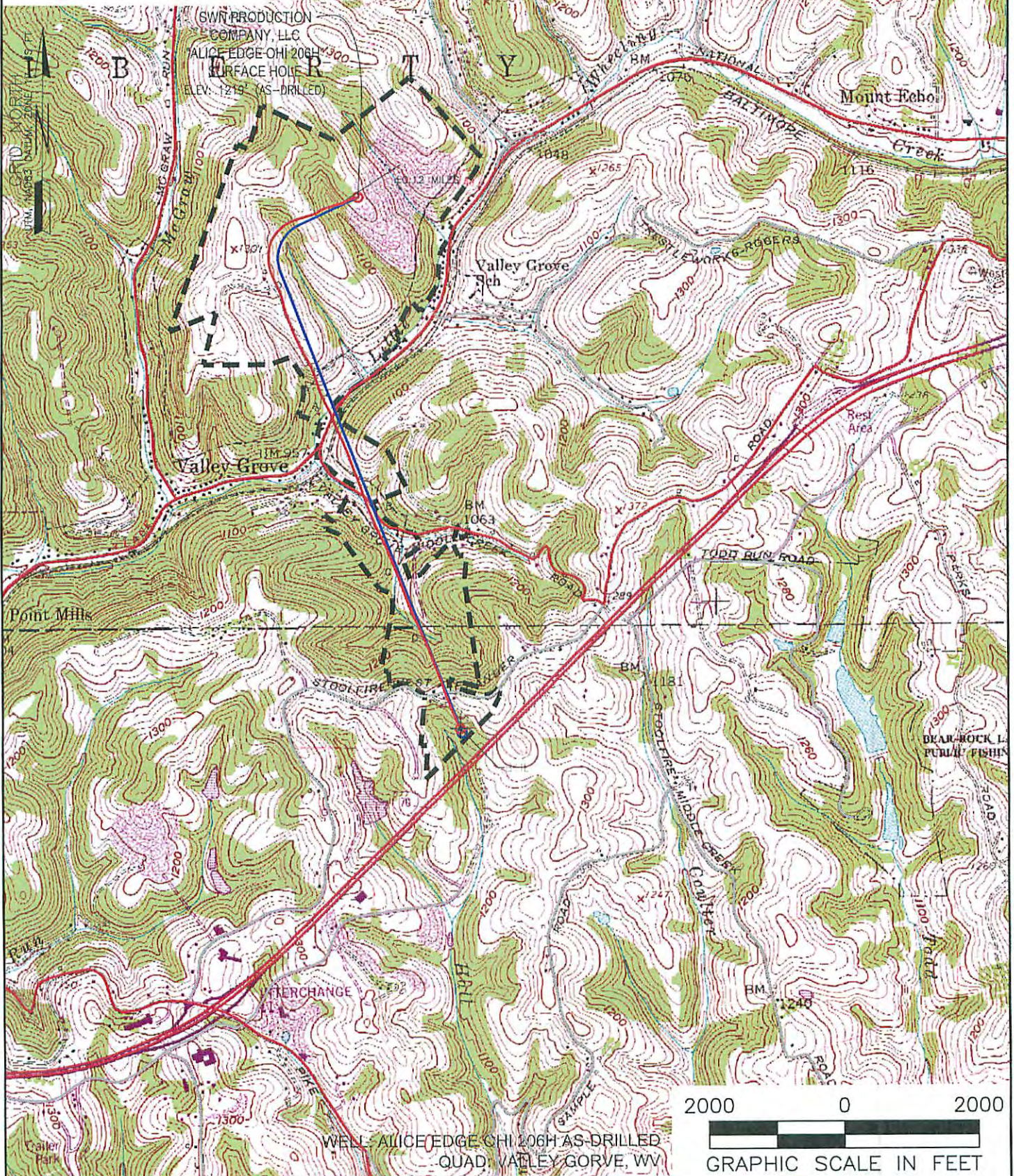
CITY: JANE LEW STATE: WV ZIP CODE: 26378 CITY: JANE LEW STATE: WV ZIP CODE: 26378

LEGEND:	REVISIONS:	DATE:
○ PROPOSED SURFACE HOLE / BOTTOM HOLE	△ REVISED 001 01-06-2016	01-07-2016
☼ EXISTING / PRODUCING WELLHEAD		
⊗ ABANDONED WELL		
⊗ PLUGGED & ABANDONED WELL		
△ CUT CONDUCTOR		
--- LEASE BOUNDARY		
--- DESIGN DHP		
--- AS-DRILLED DHP		
--- ABANDONED PATH		
		DRAWN BY: KJP
		SCALE: 1" = 2000'
		DRAWING NO: 030-2725
		WELL LOCATION PLAT

THRASHER

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

AS-DRILLED



NAME AND DISTANCE TO THE NEAREST STREAM:	STREAM CROSSING COORDINATES (NAD 83):
AN UNNAMED TRIBUTARY TO LITTLE WHEELING CREEK IS LOCATED ±0.12 MILES (NE) OF THE CENTER OF THE DRILL PAD.	A. LAT: 40.091280' / LONG: -80.562007' B. LAT: 40.087001' / LONG: -80.559810' C. LAT: 40.084721' / LONG: -80.558508' D. LAT: 40.082360' / LONG: -80.557292'

COMPANY:

SWN
Production Company, LLC

SWN
Production 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
FEMA FLOOD INFORMATION:
NO FLOOD ZONES.

OPERATOR'S	ALICE EDGE
WELL #:	OHI 206H
LOCATION:	LIBERTY DISTRICT, OHIO, WEST VIRGINIA

AS-DRILLED SURFACE HOLE LOCATION:	GEOGRAPHIC (NAD83): LATITUDE: 40.099894' LONGITUDE: -80.560427'
	03/04/2016

AS-DRILLED BOTTOM HOLE LOCATION:	GEOGRAPHIC (NAD83): LATITUDE: 40.078311' LONGITUDE: -80.555169'
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LEGEND:

PROPOSED SURFACE HOLE / BOTTOM HOLE	EXISTING SPRING
EXISTING / PRODUCING WELLHEAD	EXISTING WATER WELL
ABANDONED WELL	ACCESS ROAD
PLUGGED & ABANDONED WELL	ACCESS ROAD TO PREV. SITE
CUT CONDUCTOR	HIGHWAY/INTERSTATE
	COUNTY ROAD

REVISIONS:	DATE: 01-07-2016
REVISED 001 01-06-2016	DRAWN BY: KJP
	SCALE: 1" = 2000'
	DRAWING NO: 030-2725
	TOPOGRAPHIC MAP