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

API <u>47</u> <u>069</u> <u>00162</u>	County 69-Ohio		District 7-Tridelp	hia
Quad 648- Valley Grove	Pad Name CHAR	LE FRYE-OHI-PAD1	Field/Pool Name	Panhandle Field
Farm name CHARLE FRYE-OF			Well Number 6	
Operator (as registered with the O	OG) SWN Production C	Company LLC		
Address 10000 Energy Drive		ng	State TX	Zip 77389
As Drilled location NAD 83/UT Top hole Landing Point of Curve Bottom Hole	Northing 4433741.389	Eas	d deviation survey ting 536073.931 ting 535981.354 ting 536784.595	
Elevation (ft) 1267.5'	L Type of Well	New □ Existing	Type of Repor	rt □Interim
Permit Type Deviated	Horizontal Horizon	tal 6A 🗆 Vertical	Depth Type	□ Deep □ Shallow
Type of Operation □ Convert	□ Deepen ■ Drill □	Plug Back Redri	illing □ Rework	□ Stimulate
Well Type □ Brine Disposal □ C	CBM ■ Gas □ Oil □ Sec	ondary Recovery 🗆 S	olution Mining 🗆 S	Storage Other
Type of Completion ■ Single □ Drilled with □ Cable ■ Rotary Drilling Media Surface hole ■	y			
Production hole Air Mud			2	a directive transfer distriction
Mud Type(s) and Additive(s) SOBM			14	
Date permit issued4/30/13 Date completion activities began _	5/26/15	Date completion act	ivities ceased	1 111100
Verbal plugging (Y/N) N	Date permission granted	! <u> </u>	Granted by	SEP 0 8 2015
Please note: Operator is required (5041			ant of
Freshwater depth(s) ft		Open mine(s) (Y/N)	_	V 606 646!
Salt water depth(s) ft	627'	Void(s) encountered (N1
Coal depth(s) ft	NI NI	Cavern(s) encountere	u (1/N) deptns	
Is coal being mined in area (Y/N)				Reviewed by:

K

WR-35

API 47- 069	_ 00162	Farm nan	ne_CHARLE	FRYE-OI	HI	We	ll number_6		
CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft		Basket Depth(s)	Did cement circ	, ,
Conductor	30	20	126	N		i/94 ppf	Depui(3)		/
Surface	17.5	13.375	735	N	†	54.5 ppf	615' & 595'		<u> </u>
Coal	12.25	9.625	2,226	N		5/40 ppf		1	
Intermediate 1					1				
Intermediate 2									
Intermediate 3									
Production	8.75 to 8.5	5.5	12,628	N	HC	:P-110		 	,
Tubing		2.375	7165	N	+	-110		, N	
Packer type and de	epth set	2.070			<u> </u>	110		<u> </u>	
Comment Details									
CEMENT DATA	Class/Type of Cement	Number of Sacks	Sluri wt (pj		Yield ft ³ /sks)	Volume	e Cem Top (I		WOC (hrs)
Conductor	Class A	Grout	19.3		1.19·	241.42			24
Surface	Class A	370	15.0	6	1.18	436.6	Surfa	ace	8
Coal	Class A	824	15.6	6	1.19	998	Surfa	ace	8
Intermediate I									
Intermediate 2									
Intermediate 3									_
Production	Class A	2530	15.6	3	1.19	3010.7	7 Surf	ace	24
Tubing	NA	NA	NA		NA	NA	N/	4	NA
Drillers TD (ft) Deepest format Plug back proc	tion penetrated_	Marcellus		Loggers T Plug back					
Kick off depth	(ft)_5690 TVD								
Check all wirel	line logs run	a caliper a neutron	■ density ■ resistivity		ted/directi a ray	-	induction temperature	□sonic	
Well cored □	Yes No	Convention	al Side	wall	w	ere cutting	gs collected	⊐Yes ■ No	
_							,		ED
		ZER PLACEMEN					-TD 10	RESEL	Gas
Surface: 1 bow spring	g centralizer every third joint TD to	Surrace Intermediate: 1 bow	spring controllzer overy thire	o joint TD to Surface	Production: 1 sol	ed body centralizer from	n ID to 30 degrees in the curve	office	m 30 pagados to sarálos
)HIO	0 0015
								SEPT	8 6010
			□ Vac ■	No D	ETAILS			- (D (3)	nerit (
WAS WELL C	COMPLETED A	S SHOT HOLE	u i es =					MA	Te Te
		S SHOT HOLE PPEN HOLE?			AILS		E	MV Dec	i.e.

API	₄₇ 069 00162	Farm name CHARLE FRYE-OHI	Well number 6
VI.I	4/	raini name	vven number

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
110.	1 ciroration date	SEE	ATTACHED	renorations	Tormation(3)
			71117131122		
<u> </u>					
	1	 			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)
1.10.		Rute (D1 III)	Tressure (101)	Tressure (151)	1511 (151)	Торран (103)	Water (bois)	Tritrogeta other (units)
		SEE	ATTACHED					
-	ļ						PE	CIVED
							Office o	Oil and Gas
							Omos	- 0 0 1015
							SE	P (3 4 113
								to framework
		.,					MAL	eug Protection
							Environr	epartment of protection

Please insert additional pages as applicable.

Page 4 of 4 WR-35 Rev. 8/23/13 API 47- 069 _ 00162 Farm name CHARLE FRYE-OHI Well number 6 **PRODUCING FORMATION(S) DEPTHS MARCELLUS** 12,628' **TVD** MD Please insert additional pages as applicable. **GAS TEST** □ Build up □ Drawdown □ Open Flow SHUT-IN PRESSURE Surface psi Bottom Hole psi DURATION OF TEST _____ hrs **OPEN FLOW** Oil Gas NGL Water **GAS MEASURED BY** mcfpd bpd bpd bpd □ Estimated □ Orifice □ Pilot LITHOLOGY/ TOP **BOTTOM** TOP **BOTTOM FORMATION** DEPTH IN FT DEPTH IN FT DEPTH IN FT DEPTH IN FT DESCRIBE ROCK TYPE AND RECORD QUANTITYAND NAME TVD TVD MD TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H2S, ETC) 0 0 BASE OF FRESH WATER SEE ATTACHED Please insert additional pages as applicable. Drilling Contractor SWN Drilling Company Zip 77389 Address 10000 Energy Drive State TX Spring City Logging Company Baker Hughes Address 9110 Grogans Mill RD State TX The Woodlands Zip 77380 City Cementing Company CalFrac Well Services Address 1450 Lake Robbins Dr. The Woodlands City Stimulating Company Baker Hughes State TX Address 9110 Grogans Mill Rd The Woodlands City Please insert additional pages as applicable.

Title Sr. Staff Regulatory Analyst

Completed by Cody Magby

Signature

Telephone 8327966215

cotection

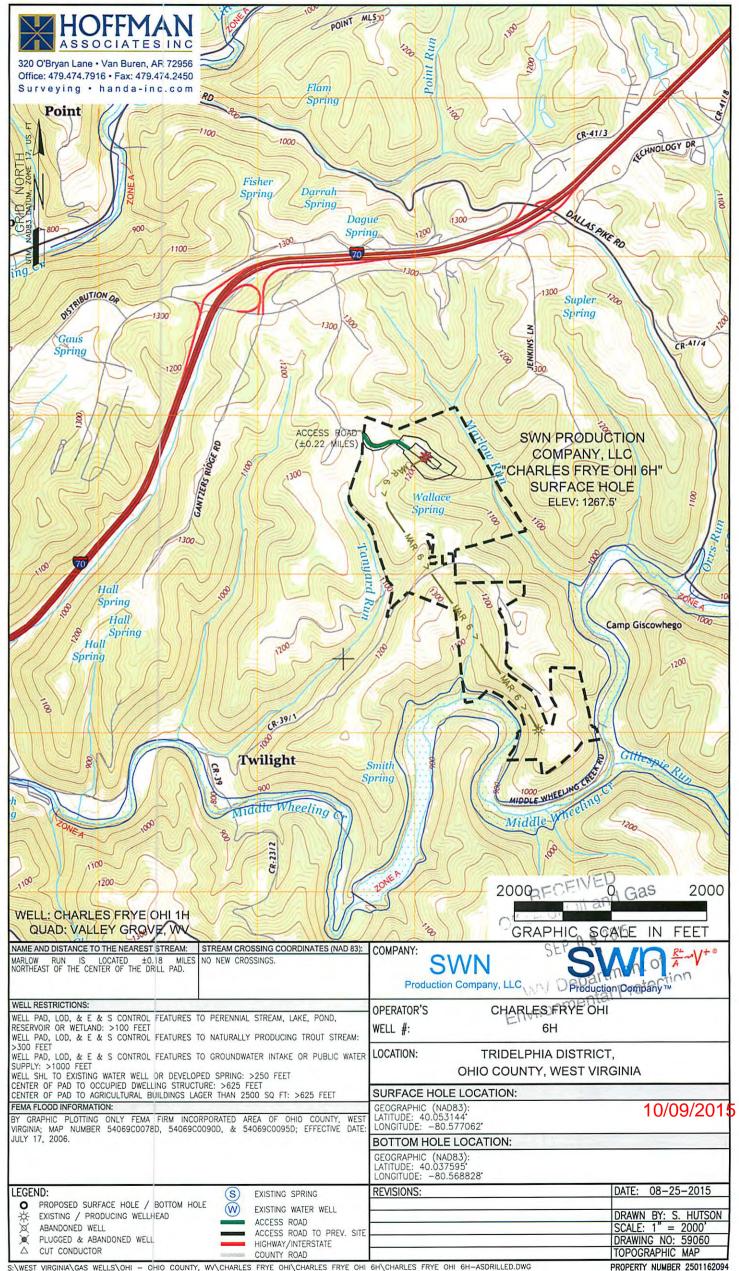
		CHARL	ES FRYE 6H		
LITHOLOGY/FORMATION	TOP DEPTH, TVD (FT)	BOTTOM DEPTH, TVD (FT)	TOP DEPTH, MD (FT)	BOTTOM DEPTH, MD (FT)	QUANTITY AND TYPE OF FLUID
Pittsburgh Coal	627	642	627	642	NA
Big Injun (ss)	1681	2006	1681	2006	100 bbl/hr water
Rhinestreet (shale)	5852	6138	5889	6284	NA
Cashaqua (shale)	6138	6213	6284	6423	NA
Middlesex (shale)	6213	6285	6423	6561	NA
Burket (shale)	6285	6317	6561	6623	NA
Tully (is)	6317	6352	6623	6691	NA
Mahantango (shale)	6352	6484	6691	7098	NA
Marcellus (shale)	6484		7098		gas



Well API #: 47069001620000			STIMULATION INFORMA	TION PER STAGE						-10	••
WELL NAME	STAGE NUM				Max Breakdown Pressure (PSI)	ISIP (PSI)		Particular Control Control		nitrogen/o	tner
CHARLES FRYE OHI 6		5/26/2015	101	8,153	9,030		603,158			5	
CHARLES FRYE OHI 6		5/26/2015	100	7,877	9,070	4,624	600,600	8,459			
CHARLES FRYE OHI 6		5/27/2015		7,763	8,901	4,552	598,517		<u> </u>		
CHARLES FRYE OHI 6		5/27/2015		7,255	8,964	4,435	600,052			O ji	
CHARLES FRYE OHI 6		5/28/2015		7,654	8,876	4,498		(8,357			
CHARLES FRYE OHI 6		5/28/2015		7,590	9,011	4,580				(3)	
CHARLES FRYE OHI 6		5/28/2015		7,872	8,940	4,570				<u> </u>	
CHARLES FRYE OHI 6		5/29/2015	100	7,495	8,538	4,604				ستد ا	
CHARLES FRYE OHI 6		5/29/2015	102	7,424	8,814	4,593	592,397			<u> </u>	
CHARLES FRYE OHI 6		5/30/2015	100	7,470	9,057	4,558	599,001	8,55		G	
CHARLES FRYE OHI 6		5/30/2015		7,315	8,792	4,580	605,174			—	├
CHARLES FRYE OHI 6		5/31/2015	84	7,977	9,208	4,456	601,311				-
CHARLES FRYE OHI 6		5/31/2015		7,404	8,335	4,790	602,020				
CHARLES FRYE OHI 6	14		101	7,531	8,926	4,686	597,119	(8,340	<u> </u>	3	-
CHARLES FRYE OHI 6	15		100	7,360	8,274	4,780	603,332			↓	<u> </u>
CHARLES FRYE OHI 6	16	6/1/2015	101	7,624	9,133	4,556	599,032		15	<u> </u>	لمليا
CHARLES FRYE OHI 6	17	6/2/2015	99	7,484	8,546	4,579	604,043			ļ	——
CHARLES FRYE OHI 6	18		101	7,069	8,724		603,680			<u> </u>	
CHARLES FRYE OHI 6	19		101	7,142	8,794		601,850				
CHARLES FRYE OHI 6	20		98	7,030			604,01	8,17	5		₩
CHARLES FRYE OHI 6	21	6/3/2015	101	7,148	8,224			8,24	5		
CHARLES FRYE OHI 6	22		101	7,047	9,030		593,88	2 8,23	3	<u> </u>	

Well API #: 47069001620000						
WELL NAME	STAGE NUM	PERF DATE	PERF TOP MD	PERF BOTTOM MD	# SHOTS PER STG	FORMATION
CHARLES FRYE OHI 6	1	5/26/2015	12,302	12,468	42	Marcellus
CHARLES FRYE OHI 6	2	5/26/2015	12,046	12,246	42	Marcellus
CHARLES FRYE OHI 6	3	5/27/2015	11,829	12,008	42	Marcellus
CHARLES FRYE OHI 6	4	5/27/2015	11,581	11,775	42	Marcellus
CHARLES FRYE OHI 6	5	5/28/2015	11,327	11,504	42	Marcellus
CHARLES FRYE OHI 6	6	5/28/2015	11,077	11,275	42	Marcellus 🖔
CHARLES FRYE OHI 6	7	5/28/2015	10,846	11,029	42	Marcellus
CHARLES FRYE OHI 6	8	5/29/2015	10,598	10,781	42	Marcellus G
CHARLES FRYE OHI 6	9	5/29/2015	10,375	10,556	42	Marcellus
CHARLES FRYE OHI 6	10	5/30/2015	10,117	10,308	42	Marcellus 14
CHARLES FRYE OHI 6	11	5/30/2015	9,892	10,075	42	Marcellus W
CHARLES FRYE OHI 6	12	5/31/2015	9,615	9,846	75	Marcellus
CHARLES FRYE OHI 6	13	5/31/2015	9,402	9,575	42	Marcellus
CHARLES FRYE OHI 6	14	6/1/2015	9,173	9,348	42	Marcellus
CHARLES FRYE OHI 6	15	6/1/2015	8,942	9,094	42	Marcellus
CHARLES FRYE OHI 6	16	6/1/2015	8,692	8,846	42	Marcellus
CHARLES FRYE OHI 6	17	6/2/2015	8,442	8,633	42	Marcellus
CHARLES FRYE OHI 6	18	6/2/2015	8,217	8,398	42	Marcellus
CHARLES FRYE OHI 6	19	6/3/2015	7,992	8,148	42	Marcellus
CHARLES FRYE OHI 6	20	6/3/2015	7,731	7,908	42	Marcellus
CHARLES FRYE OHI 6	21	6/3/2015	7,502	7,671	42	Marcellus
CHARLES FRYE OHI 6	22	6/4/2015	7,252	7,429	42	Marcellus

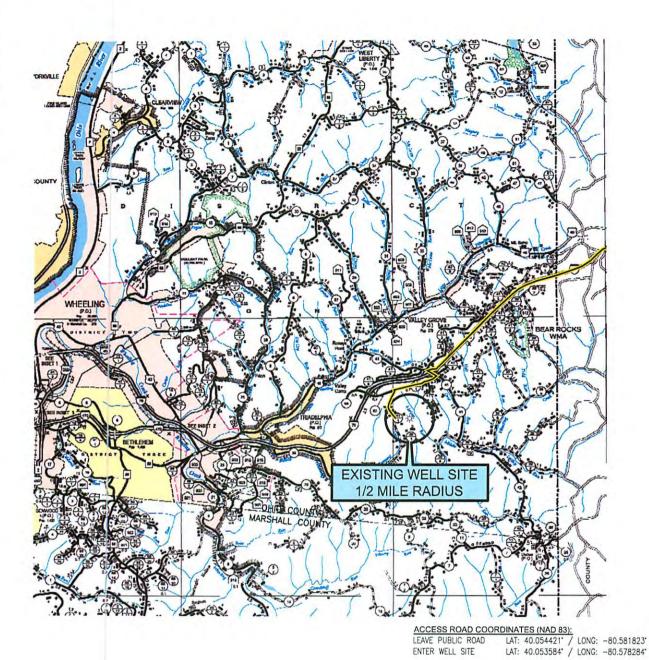
Environmental Protection





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





OHIO COUNTY WEST VIRGINIA VIRGINIA DEPARTMENT OF TRANSPORTATION
PLANNING DIMISION

IN COPPORATION WITH U.S. DEPARTMENT OF TRANSPORTATION FEDERAL INCOMESY ADMINISTRATION

COUNTY MARSHALL

WEST VIRGINIA WEST VIRGINIA DEPARTMENT OF TRANSPORTATION PLANNING DIVISION

U.S. DEPARTMENT OF TRANSPORTATION



DRIVING DIRECTIONS:

DRIVING DIRECTIONS: DRIVING DIRECTIONS:
FROM THE INTERSECTION OF HACKERS CREEK ROAD AND I-79N (EXIT 105) IN JANE LEW, WEST VIRGINIA; TRAVEL NORTH ON I-79 FOR ±92.4 MILES TO I-70W; BEAR LEFT ONTO I-70W AND TRAVEL ±20.9 MILES TO DALLAS PIKE (EXIT 11); TURN LEFT (EAST) ONTO DALLAS PIKE AND TRAVEL ±0.1 MILES TO MCCUTCHEON ROAD; TURN RIGHT (SOUTHWEST) ONTO MCCUTCHEON ROAD AND TRAVEL ±1.0 MILES; TURN LEFT (SOUTH) ONTO MCCUTCHEON ROAD AND TRAVEL ±0.7 MILES TO EXISTING SWN PRODUCTION COMPANY, LLC "CHARLES FRYE OH!" ACCESS ROAD; TURN LEFT (EAST) ONTO EXISTING ACCESS ROAD AND TRAVEL ±0.2 MILES TO EXISTING SWN PRODUCTION COMPANY, LLC "CHARLES FRYE OH!" GAS WELL PAD.

DRIVING PRECAUTIONS: DRIVING DIRECTIONS NOT PROVIDED BY SWN.

COMPANY:

SWN

Production Company, LLC

Production Company Tection W

OPERATOR'S

CHARLES FRYE OHI

WELL #:

6H

LOCATION:

TRIDELPHIA DISTRICT. OHIO COUNTY, WEST VIRGINIA

SURFACE HOLE LOCATION:

GEOGRAPHIC (NAD83): LATITUDE: 40.053144* LONGITUDE: -80.577062 **BOTTOM HOLE LOCATION:**

10/09/2015

DISTANCE / DIRECTION FROM NEAREST TOWN: ±1.7 MILES SOUTHEAST FROM VALLEY CAMP, WEST VIRGINIA 26059

LEGEND:

PROPOSED SURFACE HOLE / BOTTOM HOLE EXISTING / PRODUCING WELLHEAD ABANDONED WELL 0

PLUGGED & ABANDONED WELL CUT CONDUCTOR

- DRIVING DIRECTION ROUTE

GEOGRAPHIC (NAD83): LATITUDE: 40.037595° LONGITUDE: -80.568828° REVISIONS:

DATE: 08-25-2015 DRAWING NO:

DRIVING DIRECTION MAP

VIRGINIA\GAS WELLS\OHI - OHIO COUNTY, WY\CHARLES FRYE OHI\CHARLES FRYE OHI 6H\CHARLES FRYE OHI 6H-ASDRILLED.DWG TUESDAY SEPTEMBER 01 2015 08:53AM

PROPERTY NUMBER 2501162094

PROPERTY NUMBER 2501162094





VIA FEDEREAL EXPRESS OVERNIGHT

September 03, 2015

West Virginia Department of Environmental Protection- Office of Oil and Gas 601 57th Street SE Charleston, WV 25304 RE: Charles Frye 1H, 6H, and 8H

Dear Sir and/or Madam,

Enclosed please find the original Well Operator's Report of Well Work and the frac focus report for the above referenced well. We are not able to provide the production related data at this time due to the wells not being on sales yet. We will update the forms as soon as the information is available. If there are any errors or questions feel free to contact me either by phone or email.

Regards,

Cody D. Magby Sr. Staff Regulatory Analyst Cody magby@swn.com 832-796-6215

Enclosure; Charles Frye 1H, 6H, and 8H completion reports, and corresponding Frac Focus Reports



