

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

API 47 - 069 - 00162 County 69-Ohio District 7-Tridelpia
Quad 648- Valley Grove Pad Name CHARLE FRYE-OHI-PAD1 Field/Pool Name Panhandle Field
Farm name CHARLE FRYE-OHI Well Number 6
Operator (as registered with the OOG) SWN Production Company 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 4433741.389 Easting 536073.931
Landing Point of Curve Northing 4433198.042 Easting 535981.354
Bottom Hole Northing 4432018.957 Easting 536784.595

Elevation (ft) 1267.5' 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 4/30/13 Date drilling commenced 2/13/15 Date drilling ceased 3/27/15
Date completion activities began 5/26/15 Date completion activities ceased 6/21/15
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 564' Open mine(s) (Y/N) depths _____
Salt water depth(s) ft 1135' Void(s) encountered (Y/N) depths _____
Coal depth(s) ft 627' Cavern(s) encountered (Y/N) depths _____
Is coal being mined in area (Y/N) N

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Reviewed by:
EP 3/22/16
03/04/2016

API 47-069 - 00162 Farm name CHARLE FRYE-OHI Well number 6

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	126	N	J-55/94 ppf		Y
Surface	17.5	13.375	735	N	J-55/54.5 ppf	615' & 595'	Y
Coal	12.25	9.625	2,226	N	J-55/40 ppf		Y
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	8.75 to 8.5	5.5	12,628	N	HCP-110		Y
Tubing		2.375	7165	N	P-110		N
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	Class A	Grout	19.3	1.19	241.42	Surface	24
Surface	Class A	370	15.6	1.18	436.6	Surface	8
Coal	Class A	824	15.6	1.19	998	Surface	8
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	Class A	2530	15.6	1.19	3010.7	Surface	24
Tubing	NA	NA	NA	NA	NA	NA	NA

Drillers TD (ft) 12,628 Loggers TD (ft) 12,628
 Deepest formation penetrated Marcellus Plug back to (ft) NA
 Plug back procedure NA

Kick off depth (ft) 5690 TVD

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
Surface: 1 bow spring centralizer every third joint TD to Surface Intermediate: 1 bow spring centralizer every third joint TD to Surface Production: 1 solid body centralizer from TD to 30 degrees in the curve, 1 bow spring every third joint from 30 degrees to surface

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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API 47- 069 - 00162 Farm name CHARLE FRYE-OHI Well number 6

PRODUCING FORMATION(S)	DEPTHS	
<u>MARCELLUS</u>	<u>6585'</u> TVD	<u>12,628'</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 217 psi Bottom Hole 4322 psi DURATION OF TEST _____ hrs

OPEN FLOW Gas 2051 mcfpd Oil 261 bpd NGL _____ bpd Water 584 bpd GAS MEASURED BY 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)
	<u>0</u>		<u>0</u>		
BASE OF FRESH WATER					
					SEE ATTACHED

Please insert additional pages as applicable.

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

Logging Company Baker Hughes
Address 9110 Grogans Mill RD City The Woodlands State TX Zip 77380

Cementing Company CalFrac Well Services
Address 1450 Lake Robbins Dr. City The Woodlands State TX Zip 77380

Stimulating Company Baker Hughes
Address 9110 Grogans Mill Rd City The Woodlands State TX Zip 77380

Please insert additional pages as applicable.

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Completed by Cody Magby Telephone 8327966215
Signature _____ Title Sr. Staff Regulatory Analyst Date 9/3/15
WV Department of Environmental Protection

CHARLES 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 (ls)	6317	6352	6623	6691	NA
Mahantango (shale)	6352	6484	6691	7098	NA
Marcellus (shale)	6484		7098		gas

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Well API #: 47069001620000	STIMULATION INFORMATION PER STAGE										
WELL NAME	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		
CHARLES FRYE OHI 6	1	5/26/2015	101	8,153	9,030	4,532	601,158	8,239			
CHARLES FRYE OHI 6	2	5/26/2015	100	7,877	9,070	4,624	600,600	8,439			
CHARLES FRYE OHI 6	3	5/27/2015	101	7,763	8,501	4,552	588,517	8,664			
CHARLES FRYE OHI 6	4	5/27/2015	100	7,155	8,884	4,435	600,052	8,514			
CHARLES FRYE OHI 6	5	5/28/2015	102	7,654	8,676	4,488	602,221	8,357			
CHARLES FRYE OHI 6	6	5/28/2015	100	7,590	9,011	4,580	599,579	8,668			
CHARLES FRYE OHI 6	7	5/28/2015	101	7,872	8,940	4,570	596,853	8,339			
CHARLES FRYE OHI 6	8	5/29/2015	100	7,495	8,338	4,604	605,826	8,603			
CHARLES FRYE OHI 6	9	5/29/2015	102	7,424	8,814	4,593	592,397	8,603			
CHARLES FRYE OHI 6	10	5/30/2015	100	7,470	9,057	4,558	599,001	8,258			
CHARLES FRYE OHI 6	11	5/30/2015	101	7,315	8,792	4,580	605,174	8,258			
CHARLES FRYE OHI 6	12	5/31/2015	84	7,977	9,208	4,456	601,311	8,016			
CHARLES FRYE OHI 6	13	5/31/2015	100	7,404	8,135	4,780	602,020	8,512			
CHARLES FRYE OHI 6	14	6/1/2015	101	7,331	8,926	4,686	597,119	8,340			
CHARLES FRYE OHI 6	15	6/1/2015	100	7,360	8,274	4,780	603,332	8,375			
CHARLES FRYE OHI 6	16	6/1/2015	101	7,624	9,133	4,556	599,032	8,379			
CHARLES FRYE OHI 6	17	6/2/2015	99	7,484	8,546	4,579	604,043	8,399			
CHARLES FRYE OHI 6	18	6/2/2015	101	7,069	8,724	4,733	603,686	8,218			
CHARLES FRYE OHI 6	19	6/3/2015	101	7,142	8,794	4,823	601,856	8,314			
CHARLES FRYE OHI 6	20	6/3/2015	98	7,010	7,973	4,658	604,012	8,176			
CHARLES FRYE OHI 6	21	6/3/2015	101	7,148	8,224	4,790	602,858	8,246			
CHARLES FRYE OHI 6	22	6/4/2015	101	7,047	9,030	4,766	593,882	8,233			

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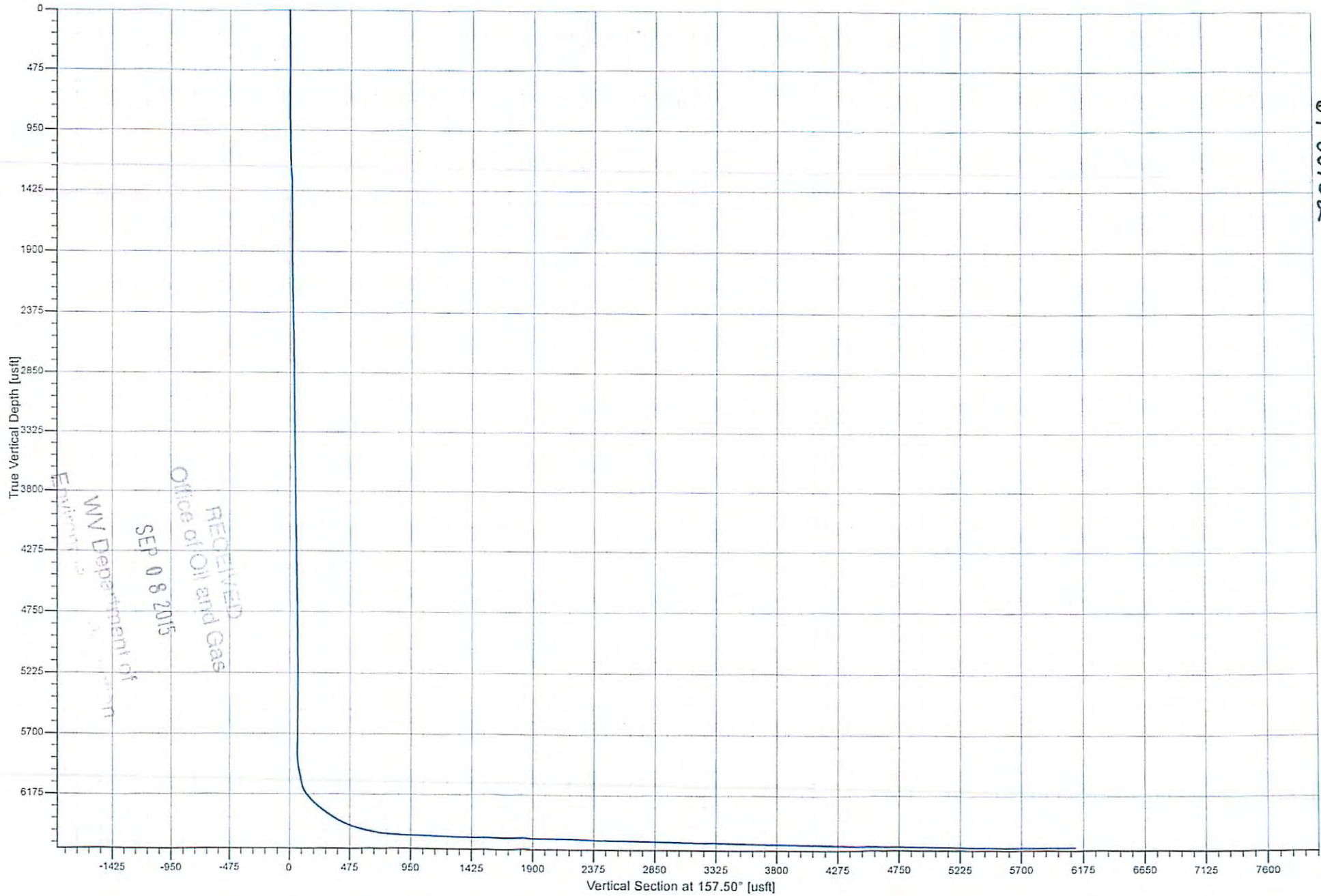
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Well API #: 47069001620000		PERFORATION RECORD				
WELL NAME	STAGE NUM	PERF DATE	PERF TOP MD	PERF BOTTOM MD	# SHOTS PER STG	FORMATION
CHARLES FRYE OHI 6	1	5/26/2015	12,302	12,468	42	Marcellus
CHARLES FRYE OHI 6	2	5/26/2015	12,046	12,246	42	Marcellus
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
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
CHARLES FRYE OHI 6	11	5/30/2015	9,892	10,075	42	Marcellus
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

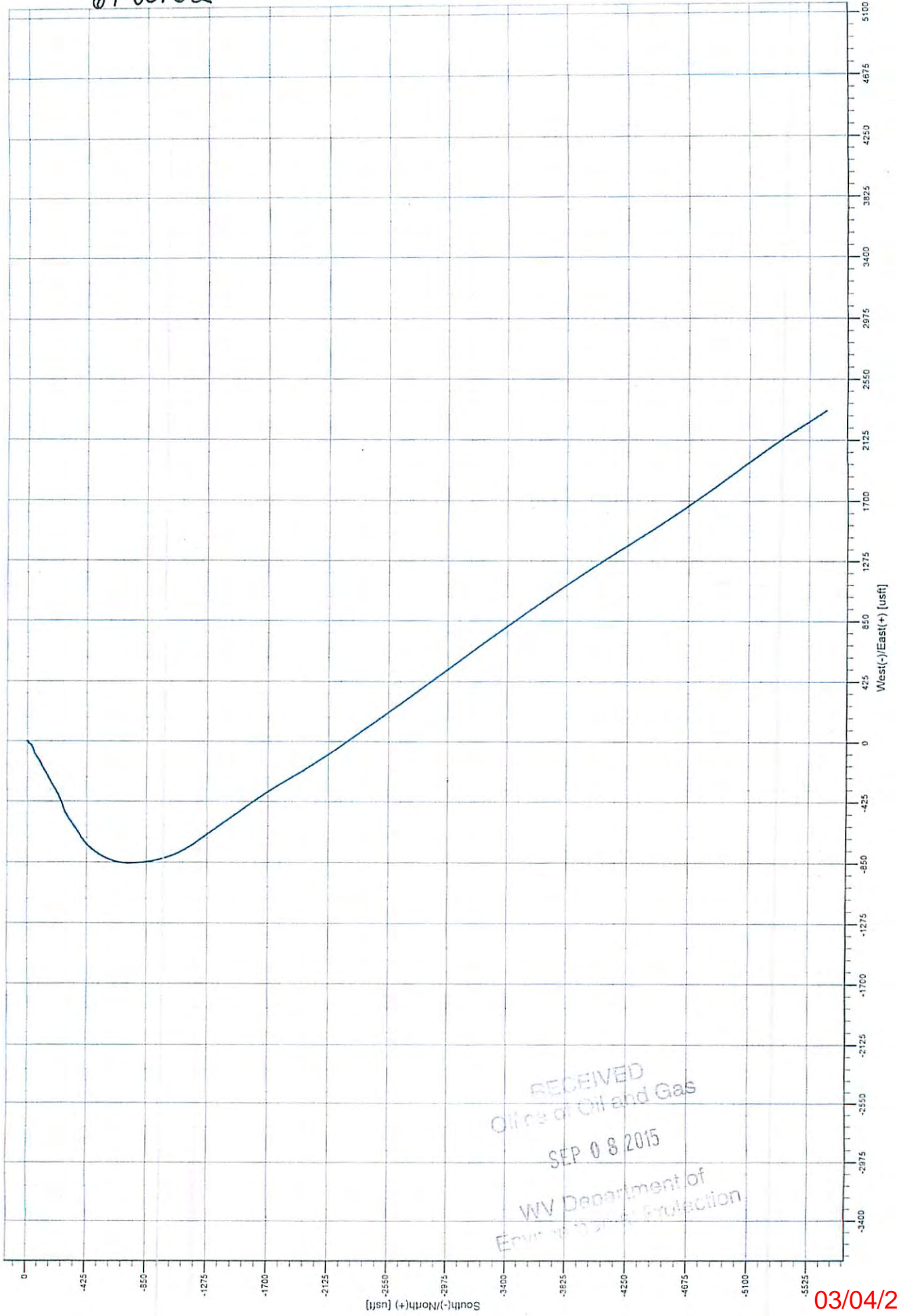
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Actual: Actual (CHARLES FRYE OHI 6H/WB#1)



Actual: Actual (CHARLES FRYE OHI 6H/WB#1)

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	5/26/2015
Job End Date:	6/4/2015
State:	West Virginia
County:	Ohio
API Number:	47-069-00162-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	OHI FRYE CHARLES 6H
Longitude:	-80.56872000
Latitude:	40.03719000
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	6,586
Total Base Water Volume (gal):	7,933,212
Total Base Non Water Volume:	0



6/9/2016

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	82.51860	
Sand, White, 40/70	Baker Hughes	Proppant	MSDS and Non-MSDS Ingredients Listed Below	N/A		8.26349	
Sand, White, 100 mesh	Baker Hughes	Proppant	MSDS and Non-MSDS Ingredients Listed Below	N/A		8.02663	
HCl, 10.1 - 15%	Baker Hughes	Acidizing	MSDS and Non-MSDS Ingredients Listed Below	N/A		1.03949	SmartCare Product
MaxPerm-20A, 265 gallon tote	Baker Hughes	Friction Reducer	MSDS and Non-MSDS Ingredients Listed Below	N/A		0.08815	SmartCare Product
Ferrotrol 300L	Baker Hughes	Iron Control	MSDS and Non-MSDS Ingredients Listed Below	N/A		0.00757	SmartCare Product
CI-39	Baker Hughes	Corrosion Inhibitor	MSDS and Non-MSDS Ingredients Listed Below	N/A		0.00221	
GBW-5	Baker Hughes	Breaker	MSDS and Non-MSDS Ingredients Listed Below	N/A			

		MSDS and Non-MSDS Ingredients Listed Below	N/A	0.00126	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	16.27975
		Water	7732-18-5	85.00000	0.93982
		Hydrochloric Acid	7647-01-0	15.00000	0.15582
		1-Propanesulfonic acid, 2- methyl-2-[(1-oxo-2-propen-1-yl) amino]-, polymer with 2- propanamide, sodium salt	93446-68-8	60.00000	0.05285
		Hydrotreated Light Distillate	64742-47-8	30.00000	0.02643
		Citric Acid	77-92-9	60.00000	0.00454
		Polyoxyethylene sorbitan monooleate	9005-65-6	5.00000	0.00440
		Sorbitan, mono-(9Z)-9- octadecenoate	1338-43-8	5.00000	0.00440
		Oxyalkylated alcohol	78330-21-9	5.00000	0.00440
		Sodium Chloride	7647-14-5	5.00000	0.00440
		Ammonium Persulphate	7727-54-0	100.00000	0.00126
		Oxyalkylated Fatty Acid	61791-002	40.00000	0.00088
		Aldehyde	104-55-2	30.00000	0.00066
		Formic Acid	64-18-6	30.00000	0.00066
		Tar Bases, Quinoline Derivs., Benzyl Chloride-Quaternized	72480-70-7	30.00000	0.00066
		Isopropanol	67-63-0	5.00000	0.00011
		Quaternary Ammonium Compound	100765-57-9	5.00000	0.00011
		Sulfurized polyolefin	58037-13-8	5.00000	0.00011
		Potassium Iodide	7681-11-0	2.00000	0.00004
		Polyalkylene	7756-94-7	1.00000	0.00002
		Potassium Acetate	127-08-2	0.50000	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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Field:			
Map Units:	usFt		
Vertical Reference Datum (VRD):	Mean Sea Level		
Projected Coordinate System:	Zone 17N (84 W to 78 W)		
Section:			
Company Name:	Southwestern Energy Company		
Units:	Feet		
TVD Reference:	Rotary Table		
Position:			
	Northing:	14,546,367.140	
	Easting:	1,758,769.009	
North Reference:	Grid	Grid Cor	
Comment :			
Slot:			
Position (Relative to SW Corner Of Section)			
N/S	0	Northing:	14,546,367.140
E/W	0	Easting:	1,758,769.009
Ground Level Elevation (usft):	Ground Level:		
Comment :			
Well:			
Type:	Main well		
KB Elevation	RKB @ 1294.00usft (SDC 40)		
Closure Distance:	6113.11	Closure Azimut	
Comment:			
Vertical Section:			
Position of Origin (Relative to Slot centre)	RN/S 0		
Vertical Section Azimuth:	157.50		

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Survey						
Name		Definitive Survey		Company	SWN	
Magnetic Parameters:						
Model:	BGGM2014	Field Strength:	52,524	Declination:	-8.76	Dip:
Survey Tool Ranges:						
Survey Tool	Start MD (ft)		End MD (ft)			
MS-SRG-WLINE	100.00		2243.00			
MWD	2373.00		5620.00			
MWD	5671.00		5996.00			
MWD	6042.00		12628.00			
Survey Points: (Relative to Slot Centre, TVD Relative to Slot TVD Reference)						
MD (Ft)	Inq	Az	TVD (Ft)	+N/-S (Ft)	+E/-W (Ft)	V Sec (Ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.23	103.54	100.00	-0.05	0.20	0.12
200.00	0.32	128.50	200.00	-0.27	0.61	0.48
300.00	0.30	116.96	300.00	-0.56	1.06	0.92
400.00	0.23	87.18	400.00	-0.67	1.49	1.19
500.00	0.22	58.41	500.00	-0.56	1.86	1.23
600.00	0.24	293.87	599.99	-0.37	1.83	1.05
700.00	0.21	97.58	699.99	-0.31	1.82	0.99
800.00	0.38	2.33	799.99	-0.01	2.02	0.78
900.00	2.15	223.18	899.97	-1.04	0.75	1.25
1000.00	3.91	233.68	999.83	-4.43	-3.29	2.84
1100.00	5.25	234.80	1099.51	-9.09	-9.77	4.66
1200.00	6.96	220.47	1198.94	-16.33	-17.44	8.41
1300.00	6.44	214.51	1298.26	-25.56	-24.55	14.22
1400.00	5.25	233.69	1397.75	-32.90	-31.42	18.37
1500.00	4.94	258.12	1497.36	-36.49	-39.32	18.67
1600.00	5.96	247.43	1596.91	-39.37	-48.33	17.88
1700.00	6.36	246.49	1696.34	-43.57	-58.20	17.98
1800.00	5.99	246.35	1795.76	-47.88	-68.06	18.18
1900.00	6.44	249.35	1895.17	-51.95	-78.09	18.11
2000.00	6.27	237.44	1994.56	-56.86	-87.94	18.88
2100.00	5.64	236.63	2094.02	-62.51	-96.64	20.76
2200.00	5.25	237.66	2193.57	-67.66	-104.61	22.47
2243.00	5.42	241.44	2236.38	-69.68	-108.06	23.02
2373.00	4.58	233.61	2365.89	-75.69	-117.17	24.91
2466.00	7.32	233.38	2458.38	-81.43	-125.98	27.25
2559.00	6.66	230.87	2550.69	-88.37	-134.31	30.24
2651.00	6.86	247.48	2642.05	-93.84	-142.98	31.77
2744.00	6.60	240.75	2734.41	-98.58	-153.32	32.40

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2837.00	5.62	240.90	2826.89	-103.41	-161.96	33.55
2904.00	6.01	246.41	2893.54	-106.40	-168.04	33.99
2930.00	6.17	248.36	2919.39	-107.46	-170.59	33.99
3023.00	6.05	233.11	3011.87	-112.25	-179.16	35.14
3115.00	6.20	241.04	3103.35	-117.56	-187.38	36.90
3208.00	5.82	238.06	3195.84	-122.49	-195.77	38.24
3301.00	5.87	246.02	3288.36	-126.92	-204.12	39.13
3394.00	6.09	239.24	3380.85	-131.37	-212.71	39.97
3487.00	5.83	237.44	3473.35	-136.44	-220.93	41.50
3579.00	6.14	237.66	3564.85	-141.59	-229.02	43.16
3672.00	7.37	236.23	3657.20	-147.56	-238.18	45.17
3765.00	7.26	246.37	3749.45	-153.23	-248.52	46.45
3858.00	7.22	245.81	3841.70	-157.98	-259.24	46.74
3950.00	6.23	241.10	3933.07	-162.77	-268.88	47.47
4043.00	5.84	236.02	4025.56	-167.85	-277.22	48.97
4136.00	6.36	243.78	4118.03	-172.77	-285.77	50.25
4228.00	6.25	237.54	4209.48	-177.71	-294.57	51.44
4321.00	7.01	241.29	4301.85	-183.15	-303.82	52.93
4414.00	6.65	240.03	4394.19	-188.57	-313.46	54.25
4507.00	6.45	238.43	4486.59	-193.99	-322.57	55.77
4600.00	6.54	233.12	4578.99	-199.91	-331.26	57.91
4692.00	5.36	236.59	4670.49	-205.42	-339.04	60.02
4785.00	5.54	247.98	4763.08	-209.49	-346.83	60.81
4878.00	5.57	241.39	4855.64	-213.34	-354.95	61.25
4971.00	5.34	241.09	4948.22	-217.59	-362.70	62.21
5064.00	5.41	235.57	5040.81	-222.16	-370.10	63.60
5156.00	5.03	250.34	5132.43	-225.97	-377.48	64.30
5249.00	5.57	247.84	5225.03	-229.04	-385.50	64.07
5342.00	5.50	239.51	5317.60	-233.01	-393.52	64.66
5435.00	5.23	244.39	5410.20	-237.10	-401.18	65.51
5528.00	5.51	247.85	5502.79	-240.62	-409.14	65.71
5620.00	6.12	252.55	5594.31	-243.75	-417.91	65.25
5671.00	6.77	249.07	5644.99	-245.64	-423.31	64.93
5717.00	9.41	247.91	5690.53	-248.02	-429.33	64.83
5764.00	15.04	249.70	5736.45	-251.59	-438.62	64.57
5810.00	20.93	249.64	5780.18	-256.52	-451.93	64.03
5857.00	24.80	250.73	5823.48	-262.70	-469.11	63.16
5903.00	27.17	248.19	5864.83	-269.78	-487.97	62.49
5950.00	30.69	239.93	5905.97	-279.79	-508.33	63.94
5996.00	37.46	238.34	5944.05	-293.03	-530.42	67.72
6042.00	41.50	235.21	5979.55	-309.07	-556.66	73.19
6089.00	42.03	234.74	6014.61	-327.04	-580.06	79.98
6135.00	47.75	234.54	6047.19	-345.82	-606.96	87.20
6182.00	51.18	238.23	6077.73	-365.57	-638.90	94.05

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6228.00	54.08	238.16	6105.65	-384.83	-667.77	99.96
6274.00	55.66	231.38	6132.14	-406.53	-698.46	108.27
6321.00	56.98	224.42	6158.23	-432.74	-727.43	121.39
6367.00	57.68	219.75	6183.07	-461.47	-753.37	138.00
6414.00	58.21	215.63	6208.02	-492.98	-777.71	157.80
6460.00	58.12	210.23	6232.29	-525.76	-798.95	179.96
6506.00	58.30	205.20	6256.54	-560.36	-817.12	204.97
6553.00	58.48	200.12	6281.19	-597.28	-832.53	233.18
6599.00	59.18	194.17	6305.01	-634.86	-844.12	263.47
6646.00	59.71	189.12	6328.91	-674.49	-852.28	296.95
6692.00	59.79	183.74	6352.10	-713.95	-856.73	331.71
6739.00	61.38	177.78	6375.20	-754.86	-857.25	369.30
6785.00	65.07	173.67	6395.92	-795.79	-854.17	408.30
6831.00	67.53	172.07	6414.41	-837.58	-848.94	448.91
6878.00	70.08	170.55	6431.41	-880.89	-842.31	491.46
6924.00	72.46	167.47	6446.18	-923.65	-834.00	534.14
6971.00	75.27	164.38	6459.24	-967.43	-823.01	578.79
7017.00	77.56	161.42	6470.05	-1010.15	-809.86	623.30
7063.00	80.37	157.18	6478.86	-1052.37	-793.90	668.41
7110.00	81.60	151.44	6486.23	-1094.18	-773.79	714.73
7156.00	83.27	148.83	6492.28	-1133.72	-751.08	759.95
7203.00	86.09	147.01	6496.64	-1173.37	-726.23	806.09
7295.00	87.41	144.71	6501.86	-1249.38	-674.68	896.05
7388.00	90.22	144.58	6503.78	-1325.21	-620.89	986.69
7481.00	88.99	144.39	6504.42	-1400.90	-566.86	1077.30
7574.00	88.29	143.37	6506.63	-1476.00	-512.06	1167.65
7667.00	88.20	144.60	6509.48	-1551.19	-457.40	1258.03
7760.00	88.20	145.79	6512.40	-1627.51	-404.35	1348.85
7852.00	88.37	146.12	6515.15	-1703.71	-352.86	1438.95
7945.00	89.69	150.07	6516.73	-1782.63	-303.73	1530.67
8038.00	89.96	150.20	6517.01	-1863.28	-257.42	1622.90
8131.00	89.87	148.53	6517.15	-1943.30	-210.03	1714.96
8224.00	88.20	146.28	6518.71	-2021.63	-159.95	1806.50
8316.00	87.67	146.59	6522.03	-2098.24	-109.11	1898.75
8409.00	90.40	145.53	6523.60	-2175.38	-57.20	1991.86
8502.00	89.08	144.55	6524.02	-2251.59	-3.92	2078.67
8595.00	89.34	144.70	6525.30	-2327.42	49.92	2169.32
8687.00	88.72	145.31	6526.86	-2402.77	102.67	2259.13
8780.00	87.41	144.81	6530.00	-2478.96	155.90	2349.89
8873.00	87.93	145.13	6533.78	-2555.05	209.27	2440.60
8966.00	88.02	144.39	6537.07	-2630.96	262.87	2531.26
9059.00	90.31	144.68	6538.42	-2706.69	316.82	2621.87
9151.00	88.99	143.61	6538.98	-2781.26	370.70	2711.38
9244.00	89.43	144.50	6540.26	-2856.54	425.29	2801.82

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9337.00	88.99	144.36	6541.55	-2932.18	479.38	2892.41
9430.00	88.55	144.43	6543.54	-3007.77	533.51	2982.96
9523.00	88.81	144.61	6545.69	-3083.49	587.48	3073.56
9615.00	89.43	145.11	6547.10	-3158.71	640.43	3163.32
9708.00	89.16	145.46	6548.24	-3235.15	693.38	3254.21
9801.00	88.11	144.77	6550.46	-3311.41	746.56	3345.02
9894.00	88.72	144.50	6553.03	-3387.22	800.36	3435.65
9986.00	88.90	144.88	6554.94	-3462.28	853.53	3525.34
10079.00	88.46	145.24	6557.08	-3538.50	906.78	3616.14
10172.00	89.16	145.37	6559.02	-3614.95	959.70	3707.02
10265.00	89.34	145.41	6560.23	-3691.48	1012.52	3797.94
10357.00	89.08	145.74	6561.50	-3767.36	1064.52	3887.95
10450.00	88.72	146.06	6563.29	-3844.36	1116.65	3979.03
10543.00	89.25	145.89	6564.93	-3921.42	1168.68	4070.14
10636.00	88.55	145.79	6566.72	-3998.36	1220.89	4161.21
10729.00	88.99	146.70	6568.72	-4075.67	1272.56	4252.40
10821.00	87.93	146.79	6571.19	-4152.57	1322.99	4342.75
10914.00	87.85	147.71	6574.61	-4230.73	1373.26	4434.20
11007.00	88.72	147.47	6577.40	-4309.21	1423.09	4525.77
11100.00	89.96	147.81	6578.47	-4387.76	1472.86	4617.39
11192.00	89.60	145.79	6578.82	-4464.74	1523.23	4707.79
11285.00	89.08	146.06	6579.89	-4541.77	1575.33	4798.89
11378.00	89.16	145.45	6581.32	-4618.64	1627.66	4889.93
11471.00	89.87	145.79	6582.11	-4695.39	1680.17	4980.94
11564.00	89.43	144.62	6582.67	-4771.75	1733.24	5071.80
11656.00	89.08	144.08	6583.87	-4846.51	1786.86	5161.38
11749.00	89.52	144.99	6585.01	-4922.25	1840.81	5252.00
11842.00	89.78	143.88	6585.58	-4997.89	1894.90	5342.59
11935.00	89.16	145.27	6586.44	-5073.67	1948.80	5433.23
12027.00	89.78	144.18	6587.29	-5148.78	2001.93	5522.95
12120.00	89.60	144.78	6587.79	-5224.47	2055.96	5613.56
12213.00	89.60	144.99	6588.44	-5300.54	2109.46	5704.31
12306.00	91.80	148.52	6587.30	-5378.30	2160.43	5795.65
12399.00	90.66	147.93	6585.31	-5457.34	2209.39	5887.42
12491.00	89.43	148.20	6585.23	-5535.41	2258.05	5978.17
12577.00	90.04	147.24	6585.63	-5608.12	2303.88	6062.92
12628.00	90.04	147.24	6585.60	-5651.01	2331.57	6113.10

Wellpath created using minimum curvature

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CHARLES FRYE OHI 6H

Ohio Co. WV

PANHANDLE (CHARLES FRYE)

Latitude:	40.0531456600
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Longitude:	-80.5770625600
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Divergence:	0.27
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CHARLES FRYE OHI 6H

Latitude:	40.0531456600
-----------	---------------

Longitude:	-80.5770625600
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CHARLES FRYE OHI 6H

Rig Height (Drill Floor):	26
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h:	157.579
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0.00	E/W	0.00	
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67.37 Date: 2/22/2015

Source Survey

Gyro /MS Survey/SDC40 (W
 MWD/SLB/SDC40/spudder (V
 MWD/SLB/SDC 40 Reentry (V
 MWD/SLB/SDC40/Reentry/DMA

DLS (deg/ 100ft)	Build Rate (deg/ 100ft)	Turn Rate (deg/ 100ft)	
0.00	0.00	0.00	
0.23	0.23	0.00	Gyro
0.15	0.09	24.96	Gyro
0.07	-0.02	-11.54	Gyro
0.15	-0.07	-29.78	Gyro
0.11	-0.01	-28.77	Gyro
0.41	0.02	-124.54	Gyro
0.45	-0.03	163.71	Gyro
0.45	0.17	-95.25	Gyro
2.45	1.77	-139.15	Gyro
1.84	1.76	10.50	Gyro
1.34	1.34	1.12	Gyro
2.28	1.71	-14.33	Gyro
0.87	-0.52	-5.96	Gyro
2.27	-1.19	19.18	Gyro
2.17	-0.31	24.43	Gyro
1.44	1.02	-10.69	Gyro
0.41	0.40	-0.94	Gyro
0.37	-0.37	-0.14	Gyro
0.55	0.45	3.00	Gyro
1.33	-0.17	-11.91	Gyro
0.64	-0.63	-0.81	Gyro
0.40	-0.39	1.03	Gyro
0.91	0.40	8.79	Gyro
0.83	-0.65	-6.02	MWD,
2.95	2.95	-0.25	MWD,
0.78	-0.71	-2.70	MWD,
2.13	0.22	18.05	MWD,
0.89	-0.28	-7.24	MWD,

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1.05	-1.05	0.16	MWD,
1.01	0.58	8.23	MWD,
1.01	0.63	7.49	MWD,
1.74	-0.13	-16.40	MWD,
0.93	0.16	8.62	MWD,
0.53	-0.41	-3.20	MWD,
0.87	0.05	8.56	MWD,
0.79	0.24	-7.29	MWD,
0.34	-0.28	-1.94	MWD,
0.34	0.34	0.24	MWD,
1.33	1.32	-1.54	MWD,
1.39	-0.12	10.90	MWD,
0.09	-0.04	-0.60	MWD,
1.23	-1.08	-5.12	MWD,
0.71	-0.42	-5.46	MWD,
1.05	0.56	8.34	MWD,
0.75	-0.12	-6.78	MWD,
0.94	0.82	4.03	MWD,
0.42	-0.39	-1.35	MWD,
0.29	-0.22	-1.72	MWD,
0.65	0.10	-5.71	MWD,
1.34	-1.28	3.77	MWD,
1.18	0.19	12.25	MWD,
0.69	0.03	-7.09	MWD,
0.25	-0.25	-0.32	MWD,
0.56	0.08	-5.94	MWD,
1.51	-0.41	16.05	MWD,
0.63	0.58	-2.69	MWD,
0.87	-0.08	-8.96	MWD,
0.57	-0.29	5.25	MWD,
0.46	0.30	3.72	MWD,
0.84	0.66	5.11	MWD,
1.49	1.27	-6.82	MWD,
5.75	5.74	-2.52	MWD,
12.00	11.98	3.81	MWD,
12.80	12.80	-0.13	MWD,
8.28	8.23	2.32	MWD,
5.69	5.15	-5.52	MWD,
11.31	7.49	-17.57	MWD,
14.84	14.72	-3.46	MWD,
9.79	8.78	-6.80	MWD/SLI
1.31	1.13	-1.00	MWD/SLI
12.44	12.43	-0.43	MWD/SLI
9.42	7.30	7.85	MWD/SLI

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6.31	6.30	-0.15	MWD/SLI
12.53	3.43	-14.74	MWD/SLI
12.64	2.81	-14.81	MWD/SLI
8.68	1.52	-10.15	MWD/SLI
7.51	1.13	-8.77	MWD/SLI
9.97	-0.20	-11.74	MWD/SLI
9.30	0.39	-10.93	MWD/SLI
9.21	0.38	-10.81	MWD/SLI
11.17	1.52	-12.93	MWD/SLI
9.32	1.13	-10.74	MWD/SLI
10.10	0.17	-11.70	MWD/SLI
11.55	3.38	-12.68	MWD/SLI
11.31	8.02	-8.93	MWD/SLI
6.22	5.35	-3.48	MWD/SLI
6.21	5.43	-3.23	MWD/SLI
8.18	5.17	-6.70	MWD/SLI
8.70	5.98	-6.57	MWD/SLI
7.99	4.98	-6.43	MWD/SLI
10.92	6.11	-9.22	MWD/SLI
12.34	2.62	-12.21	MWD/SLI
6.69	3.63	-5.67	MWD/SLI
7.13	6.00	-3.87	MWD/SLI
2.88	1.43	-2.50	MWD/SLI
3.02	3.02	-0.14	MWD/SLI
1.34	-1.32	-0.20	MWD/SLI
1.33	-0.75	-1.10	MWD/SLI
1.33	-0.10	1.32	MWD/SLI
1.28	0.00	1.28	MWD/SLI
0.40	0.18	0.36	MWD/SLI
4.48	1.42	4.25	MWD/SLI
0.32	0.29	0.14	MWD/SLI
1.80	-0.10	-1.80	MWD/SLI
3.01	-1.80	-2.42	MWD/SLI
0.67	-0.58	0.34	MWD/SLI
3.15	2.94	-1.14	MWD/SLI
1.77	-1.42	-1.05	MWD/SLI
0.32	0.28	0.16	MWD/SLI
0.95	-0.67	0.66	MWD/SLI
1.51	-1.41	-0.54	MWD/SLI
0.66	0.56	0.34	MWD/SLI
0.80	0.10	-0.80	MWD/SLI
2.48	2.46	0.31	MWD/SLI
1.85	-1.43	-1.16	MWD/SLI
1.07	0.47	0.96	MWD/SLI

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0.50	-0.47	-0.15	MWD/SLI
0.48	-0.47	0.08	MWD/SLI
0.34	0.28	0.19	MWD/SLI
0.87	0.67	0.54	MWD/SLI
0.48	-0.29	0.38	MWD/SLI
1.35	-1.13	-0.74	MWD/SLI
0.72	0.66	-0.29	MWD/SLI
0.46	0.20	0.41	MWD/SLI
0.61	-0.47	0.39	MWD/SLI
0.77	0.75	0.14	MWD/SLI
0.20	0.19	0.04	MWD/SLI
0.46	-0.28	0.36	MWD/SLI
0.52	-0.39	0.34	MWD/SLI
0.60	0.57	-0.18	MWD/SLI
0.76	-0.75	-0.11	MWD/SLI
1.09	0.47	0.98	MWD/SLI
1.16	-1.15	0.10	MWD/SLI
0.99	-0.09	0.99	MWD/SLI
0.97	0.94	-0.26	MWD/SLI
1.38	1.33	0.37	MWD/SLI
2.23	-0.39	-2.20	MWD/SLI
0.63	-0.56	0.29	MWD/SLI
0.66	0.09	-0.66	MWD/SLI
0.85	0.76	0.37	MWD/SLI
1.34	-0.47	-1.26	MWD/SLI
0.70	-0.38	-0.59	MWD/SLI
1.09	0.47	0.98	MWD/SLI
1.23	0.28	-1.19	MWD/SLI
1.64	-0.67	1.49	MWD/SLI
1.36	0.67	-1.18	MWD/SLI
0.67	-0.19	0.65	MWD/SLI
0.23	0.00	0.23	MWD/SLI
4.47	2.37	3.80	MWD/SLI
1.38	-1.23	-0.63	MWD/SLI
1.37	-1.34	0.29	MWD/SLI
1.32	0.71	-1.12	MWD/SLI
0.00	0.00	0.00	

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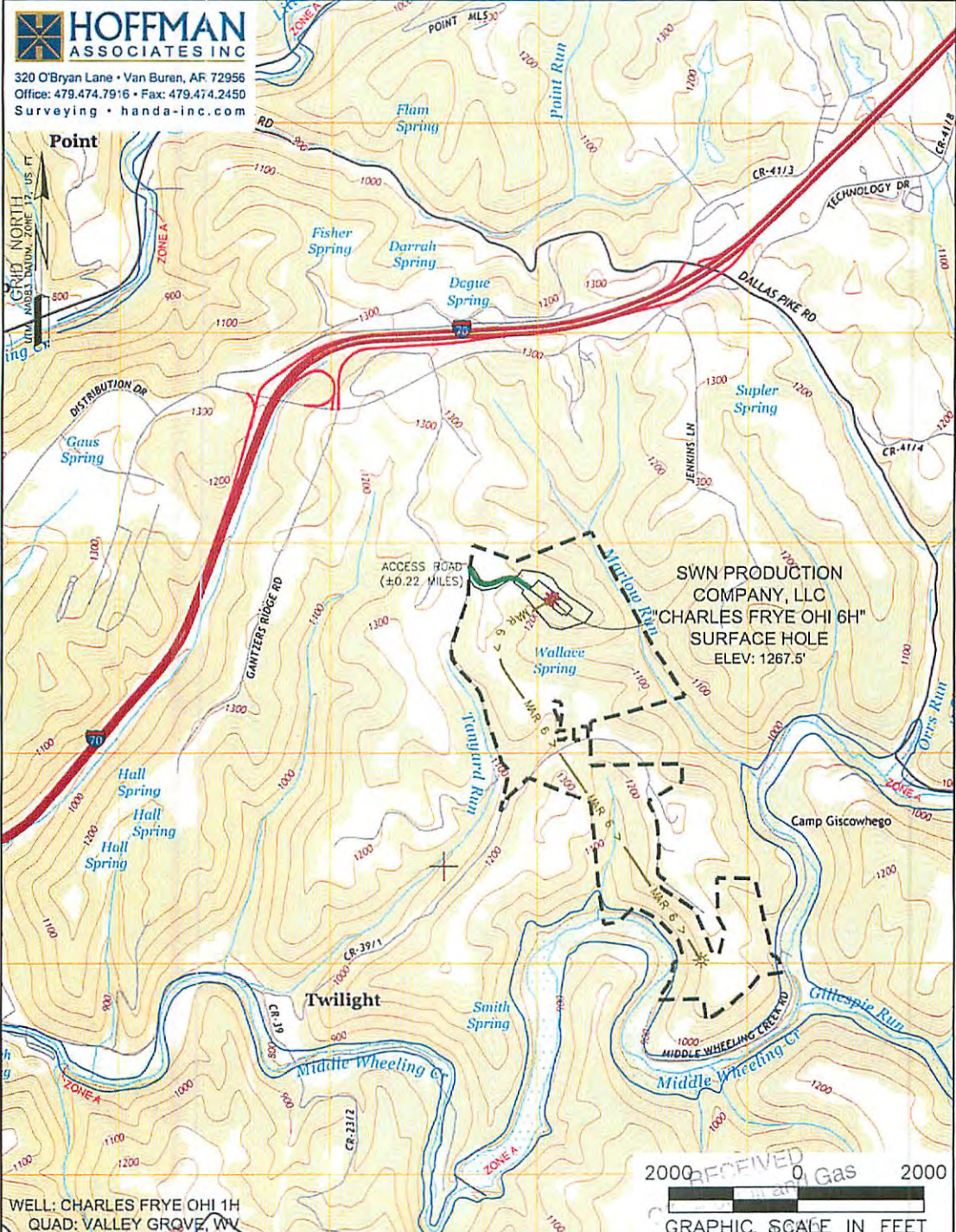
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B#1)
VB#1)
VB#1)
G (WB#1

Survey Type	Survey Tool	Comment
Surface		
/MS Survey/SDC40 (WB#1)		
/MS Survey/SDC40 (WB#1)		
/MS Survey/SDC40 (WB#1)		
/MS Survey/SDC40 (WB#1)		
/MS Survey/SDC40 (WB#1)		
/MS Survey/SDC40 (WB#1)		
/MS Survey/SDC40 (WB#1)		
/MS Survey/SDC40 (WB#1)		
/MS Survey/SDC40 (WB#1)		
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/MS Survey/SDC40 (WB#1)		
/MS Survey/SDC40 (WB#1)		
/MS Survey/SDC40 (WB#1)		
/MS Survey/SDC40 (WB#1)		
/SLB/SDC40/spudder (WB#1)		
/SLB/SDC40/spudder (WB#1)		
/SLB/SDC40/spudder (WB#1)		
/SLB/SDC40/spudder (WB#1)		
/SLB/SDC40/spudder (WB#1)		

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<p>WELL: CHARLES FRYE OHI 1H QUAD: VALLEY GROVE, WV</p>		<p>NAME AND DISTANCE TO THE NEAREST STREAM: MARLOW RUN IS LOCATED ±0.18 MILES NORTHEAST OF THE CENTER OF THE DRILL PAD.</p>		<p>STREAM CROSSING COORDINATES (NAD 83): NO NEW CROSSINGS.</p>		<p>COMPANY: SWN Production Company, LLC</p>	
<p>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</p>		<p>OPERATOR'S: CHARLES FRYE OHI WELL #: 6H</p>		<p>LOCATION: TRIDELPHIA DISTRICT, OHIO COUNTY, WEST VIRGINIA</p>		<p>SURFACE HOLE LOCATION: GEOGRAPHIC (NAD83): LATITUDE: 40.053144° LONGITUDE: -80.577062°</p>	
<p>FEMA FLOOD INFORMATION: BY GRAPHIC PLOTTING ONLY FEMA FIRM INCORPORATED AREA OF OHIO COUNTY, WEST VIRGINIA: MAP NUMBER 54069C007D8, 54069C009D3, & 54069C0095D; EFFECTIVE DATE: JULY 17, 2006.</p>		<p>BOTTOM HOLE LOCATION: GEOGRAPHIC (NAD83): LATITUDE: 40.037599° LONGITUDE: -80.568628°</p>		<p>REVISIONS:</p>		<p>DATE: 08-25-2015</p>	
<p>LEGEND: ○ PROPOSED SURFACE HOLE / BOTTOM HOLE ⊗ EXISTING / PRODUCING WELLHEAD ⊗ ABANDONED WELL ⊗ PLUGGED & ABANDONED WELL △ CUT CONDUCTOR</p>		<p>⊗ EXISTING SPRING ⊗ EXISTING WATER WELL — ACCESS ROAD — ACCESS ROAD TO PREV. SITE — HIGHWAY/INTERSTATE — COUNTY ROAD</p>		<p>DRAWN BY: S. HUTTON SCALE: 1" = 2000' DRAWING NO: 59060 TOPOGRAPHIC MAP</p>		<p>PROPERTY NUMBER 2501162094 PAD ID 3001155647</p>	

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

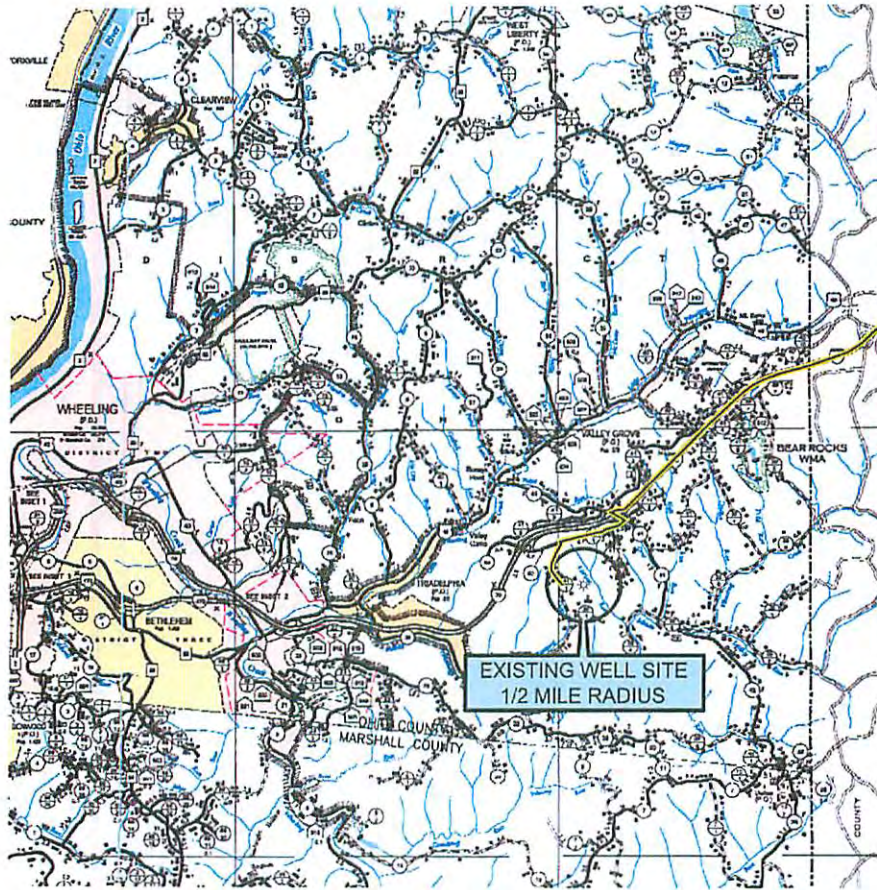
03/04/2016

69-00162



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

GRID NORTH
 UTM BASED DATUM: ZONE 17
 US FT



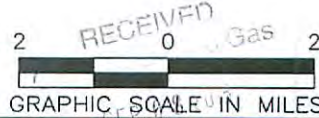
ACCESS ROAD COORDINATES (NAD 83):
 LEAVE PUBLIC ROAD LAT: 40.054421° / LONG: -80.581823°
 ENTER WELL SITE LAT: 40.053584° / LONG: -80.578284°



FEDERAL HIGHWAY MAP
 OHIO COUNTY
 WEST VIRGINIA
 DIVISION OF HIGHWAYS
 WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
 PLANNING DIVISION
IN COOPERATION WITH
 U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION



FEDERAL HIGHWAY MAP
 MARSHALL COUNTY
 WEST VIRGINIA
 DIVISION OF HIGHWAYS
 WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
 PLANNING DIVISION
IN COOPERATION WITH
 U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION



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.

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

LEGEND:

○	PROPOSED SURFACE HOLE / BOTTOM HOLE	—	DRIVING DIRECTION ROUTE
⊗	EXISTING / PRODUCING WELL HEAD		
⊘	ABANDONED WELL		
⊗	PLUGGED & ABANDONED WELL		
△	CUT CONDUCTOR		

COMPANY:
 SWN Production Company, LLC

OPERATOR'S: CHARLES FRYE OH
 WELL #: 6H

LOCATION: TRIDELPHIA DISTRICT,
 OHIO COUNTY, WEST VIRGINIA

SURFACE HOLE LOCATION:
 GEOGRAPHIC (NAD83):
 LATITUDE: 40.053144°
 LONGITUDE: -80.577062°

BOTTOM HOLE LOCATION:
 GEOGRAPHIC (NAD83):
 LATITUDE: 40.037595°
 LONGITUDE: -80.568828°

REVISIONS:	DATE: 08-25-2015
	DRAWN BY: S. HUTSON
	SCALE: 1" = 2 MILES
	DRAWING NO: 59060
	DRIVING DIRECTION MAP

03/04/2016

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	N 28°48'20" E	1235'	SHL TO LANDMARK	PARCEL CORNER
L2	S 61°10'01" E	1918'	SHL TO LANDMARK	PARCEL CORNER
L3	S 72°51'37" W	24.49'	SHL TO REF. PNT.	CHARLES FRYE OHI 3H WELL HEAD (069-00079)
L4	S 50°43'21" E	13.51'	SHL TO REF. PNT.	CHARLES FRYE OHI 10H WELL HEAD (069-00091)
LINE	BEARING	DISTANCE	CURVE LENGTH	DESCRIPTION
L5	S 09°40'10" W	1808.32'		SHL TO LP
L6	S 34°15'51" E	4680.72'		LP TO BHL

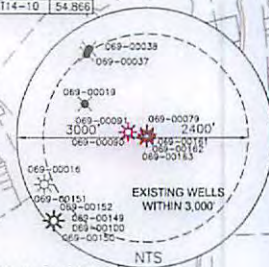
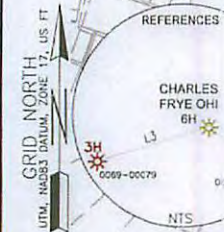
Latitude: 40°05'00"

Longitude: 80°32'30"

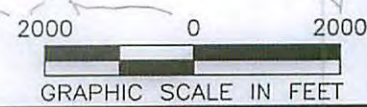
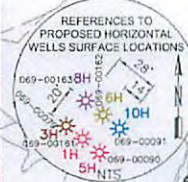
NOTES ON SURVEY

- 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.

TRACT	SURFACE OWNER(S) / ROYALTY OWNER (R)	TAX PARCEL	ACRES
1	CHARLES FRYE & DOROTHY FRYE (S) DOROTHY V FRYE (R)	06-114-01	105.00
2	ZACHARY ALLAN MEYER (S) ZACHARY MEYER & JENNIFER MEYER (R)	06-114-02	91.58
3	ROBERT F LEECH (S) ROBERT F LEECH & DEBORAH A LEECH (R)	06-114-04	5.62
4	ROBERT F LEECH (S) ROBERT F LEECH & DEBORAH A LEECH (R)	06-114-04.1	7.10
5	JUSTUS LUZADER JR, LIFE ESTATE (S) JUSTUS LUZADER JR (R)	06-114-11	57.513
6	CHRISTY M BOFF (S/R)	06-114-10	54.866



SURFACE HOLE LOCATION (SHL):	
GEOGRAPHIC (NAD83):	LATITUDE: 40.053144°
	LONGITUDE: -80.577062°
UTM (NAD83, ZONE 17, FEET):	NORTHING: 14,546,366.538
	EASTING: 1,758,769.222
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4,433,741.389
	EASTING: 536,073.931
LANDING POINT LOCATION (LPL):	
GEOGRAPHIC (NAD83):	LATITUDE: 40.048255°
	LONGITUDE: -80.578177°
UTM (NAD83, ZONE 17, FEET):	NORTHING: 14,544,583.908
	EASTING: 1,758,465.492
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4,433,198.042
	EASTING: 535,981.354
BOTTOM HOLE LOCATION (BHL):	
GEOGRAPHIC (NAD83):	LATITUDE: 40.037595°
	LONGITUDE: -80.568828°
UTM (NAD83, ZONE 17, FEET):	NORTHING: 14,540,715.528
	EASTING: 1,761,100.792
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4,432,018.957
	EASTING: 536,784.595



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 *Samuel Smith*

COMPANY: **SWN** Production Company, LLC

WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034	(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS MINIMUM DEGREE OF ACCURACY: 1/200 PROVEN SOURCE OF SURVEY GRADE GPS ELEVATION: (NAVD 88, US FT)	COMPANY: CHARLES FRYE OHI OPERATOR'S WELL #: 6H API WELL #: 47 69 00162H6A STATE COUNTY PERMIT
	WELL TYPE: OIL WASTE DISPOSAL PRODUCTION <input checked="" type="checkbox"/> DEEP GAS <input checked="" type="checkbox"/> LIQUID INJECTION STORAGE SHALLOW <input checked="" type="checkbox"/> WATERSHED: MIDDLE WHEELING CREEK DISTRICT: TRIDELPHIA COUNTY: OHIO SURFACE OWNER: CHARLES FRYE & DOROTHY FRYE OIL & GAS ROYALTY OWNER: DOROTHY V FRYE 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 checked="" type="checkbox"/> CONVERT <input type="checkbox"/> PLUG & ABANDON <input type="checkbox"/> CLEAN OUT & REPLUG <input type="checkbox"/> OTHER CHANGE <input checked="" type="checkbox"/> (SPECIFY) AS-DRILLED TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 6,586' TVD 12,628' TMD	ELEVATION: 1267.5' QUADRANGLE: VALLEY GROVE ACREAGE: ±105.00 ACREAGE: ±105.00

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:
<ul style="list-style-type: none"> ○ PROPOSED SURFACE HOLE / BOTTOM HOLE ☆ EXISTING / PRODUCING WELLHEAD ⊗ ABANDONED WELL ⊗ PLUGGED & ABANDONED WELL △ CUT CONDUCTOR --- LEASE BOUNDARY --- 500' DHP BUFFER - MAR 1 > - MARCELLUS DHP --- ABANDONED PATH 	REVISIONS: DATE: 08-25-2015	DRAWN BY: S. HUTSON SCALE: 1" = 2000' DRAWING NO: 59060 WELL LOCATION PLAT

03/04/2016

VIA FEDERALEXpress 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

RECEIVED
Office of Oil and Gas
SEP 03 2015
Department of Environmental Protection