

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

API 47-069-00233 County OHIO District TRIADELPHIA
Quad VALLEY GROVE Pad Name MASON COTTRELL PAD Field/Pool Name PANHANDLE FIELD WET
Farm name MELVIN W. & CAROL M. KAHLE Well Number MASON COTTRELL OHI 6H
Operator (as registered with the OOG) SWN PRODUCTION COMPANY, LLC
Address PO BOX 12359 City SPRING State TX Zip 77391-2359

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,436,240.11 Easting 532,599.58
Landing Point of Curve Northing 4,435,868.58 Easting 532,531.78
Bottom Hole Northing 4,434,331.68 Easting 533,282.06

Elevation (ft) 1296.4 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 09/07/2017 Date drilling commenced 10/24/2017 Date drilling ceased 11/29/2017
Date completion activities began 03/23/2018 Date completion activities ceased 05/15/2018
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 387 Open mine(s) (Y/N) depths N
Salt water depth(s) ft 752 Void(s) encountered (Y/N) depths N
Coal depth(s) ft 604 Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed
C. [Signature] 8/30/18

Reviewed by:
[Signature]
09/07/2018

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API 47-069 - 00233 Farm name MELVIN W. & CAROL M. KAHLE Well number MASON COTTRELL OHI 6H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	24	20	126	NEW	J-55/94#		Y
Surface	17.5	13.375	664	NEW	J-55/54.5#	635', 614'	Y
Coal	SEE SURFACE						
Intermediate 1	12.25	9.625	2026	NEW	J-55/36#		Y, 33
Intermediate 2							
Intermediate 3							
Production	8.75/8.50	5.5	12631	NEW	HCP-110/20#		Y
Tubing		2.375	6892	NEW	C-75/4.7#		N
Packer type and depth set							

Comment Details Cmt Bskt 15' top of jt - 635'; Cmt bskt 4' f/bottom of jt - 614'

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 TO SURFACE				SURFACE	24
Surface	CLASS A	718	15.60	1.20	861.6	SURFACE	8
Coal	SEE SURFACE						
Intermediate 1	CLASS A	748	15.60	1.19	890.12	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	2233	15.60	1.19	2657.27	SURFACE	24
Tubing							

Drillers TD (ft) 12631 Loggers TD (ft) 12631
 Deepest formation penetrated MARCELLUS Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 5496

Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

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DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

SURFACE: 7 CENTRALIZERS - EVERY THIRD JOINT OF CASING

INTERMEDIATE: 24 CENTRALIZERS - EVERY THIRD JOINT OF CASING

PRODUCTION: 181 CENTRALIZERS - EVERY THIRD JOINT FROM SURFACE TO TOP OF CURVE, THEN EVERY JOINT UNTIL TD

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 - 00233 Farm name MELVIN W. & CAROL M. KAHLE Well number MASON COTTRELL OHI 6H

PRODUCING FORMATION(S)	DEPTHS	
<u>MARCELLUS</u>	<u>6344</u> TVD	<u>6675</u> MD
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 2643 psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas 3208 mcfpd Oil 276 bpd NGL _____ bpd Water 429 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>ATTACHMENT</u>	<u>3</u>		

Please insert additional pages as applicable.

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

Logging Company WEATHERFORD
Address 121 HILLPOINTE DRIVE STE 300 City CANONSBURG State PA Zip 15317

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

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

Please insert additional pages as applicable.

Completed by BOBBY WILLIS Telephone 832-796-2884
Signature [Signature] Title REGULATORY ANALYST Date 8/01/2018

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

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MASON COTTRELL OHI 6H
ATTACHMENT 1
PERF REPORT

STAGE NUM	Perf Date	Perf Top MD	Perf Bottom MD	# SHOTS PER STG
1	2/4/2018	12,516	12,409	42
2	3/24/2018	12,376	12,269	42
3	4/5/2018	12,236	12,129	42
4	4/10/2018	12,096	11,989	42
5	4/10/2018	11,956	11,849	42
6	4/11/2018	11,816	11,709	42
7	4/11/2018	11,676	11,569	42
8	4/12/2018	11,536	11,429	42
9	4/12/2018	11,396	11,289	42
10	4/13/2018	11,256	11,149	42
11	4/13/2018	11,116	11,009	42
12	4/14/2018	10,976	10,869	42
13	4/14/2018	10,836	10,729	42
14	4/15/2018	10,696	10,589	42
15	4/15/2018	10,556	10,449	42
16	4/15/2018	10,416	10,309	42
17	4/16/2018	10,276	10,169	42
18	4/16/2018	10,136	10,029	42
19	4/17/2018	9,996	9,889	42
20	4/17/2018	9,856	9,749	42
21	4/17/2018	9,716	9,609	42
22	4/18/2018	9,576	9,469	42
23	4/19/2018	9,436	9,329	42
24	4/19/2018	9,296	9,189	42
25	4/19/2018	9,156	9,049	42
26	4/20/2018	9,016	8,909	42
27	4/20/2018	8,876	8,769	42
28	4/20/2018	8,736	8,629	42
29	4/21/2018	8,596	8,489	42
30	4/21/2018	8,456	8,349	42
31	4/21/2018	8,316	8,209	42
32	4/21/2018	8,176	8,069	42
33	4/22/2018	8,036	7,929	42
34	4/22/2018	7,896	7,789	42
35	4/22/2018	7,756	7,649	42
36	4/23/2018	7,614	7,509	42
37	4/23/2018	7,476	7,372	42
38	4/24/2018	7,336	7,229	42
39	4/24/2018	7,196	7,089	42
40	4/24/2018	7,056	6,949	42
41	4/25/2018	6,916	6,809	42
42	4/25/2018	6,776	6,669	42

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MASON COTTRELL OHI 6H

ATTACHMENT 2

STIM REPORT

STAGE NUM	Stim Date	Ave Pump Rate (BPM)	Ave Treatment	Max Breakdown	ISIP (PSI)	Amount of Proppant (lbs)	Amount of water bbls	Amount of nitrogen/other
1	3/23/2018	82.4	7,777	7,364	4,132	278,080	5,268	0
2	4/4/2018	98.8	7,984	5,288	5,021	276,880	4,886	0
3	4/10/2018	99	8,014	5,431	4,492	277,620	4,553	0
4	4/10/2018	99.8	7,996	6,033	4,478	276,820	4,745	0
5	4/11/2018	99.9	7,956	5,754	4,783	266,890	4,330	0
6	4/11/2018	99.9	7,605	6,418	4,476	274,700	4,794	0
7	4/11/2018	99.3	7,753	6,285	4,698	274,100	5,278	0
8	4/12/2018	100.1	7,502	6,279	4,511	276,760	4,657	0
9	4/12/2018	99.7	7,202	5,535	4,273	273,560	4,264	0
10	4/13/2018	99.9	7,298	6,214	4,612	285,980	4,464	0
11	4/13/2018	97.5	7,639	5,857	4,843	276,800	4,307	0
12	4/14/2018	99.6	7,167	6,414	4,638	288,580	4,007	0
13	4/14/2018	99.6	7,047	6,410	4,656	277,700	4,278	0
14	4/15/2018	99.6	7,557	6,041	4,677	289,000	4,155	0
15	4/15/2018	99.3	7,560	5,632	4,708	274,800	3,830	0
16	4/16/2018	100	7,569	5,891	4,780	270,880	3,839	0
17	4/16/2018	100.6	7,851	5,010	4,662	286,080	4,493	0
18	4/17/2018	100.2	7,483	6,092	4,613	285,840	4,083	0
19	4/17/2018	100.2	7,851	5,372	4,377	276,560	3,443	0
20	4/17/2018	99.5	7,897	5,647	4,326	273,680	3,886	0
21	4/18/2018	100.3	7,619	5,748	4,581	273,800	3,552	0
22	4/18/2018	100.2	7,548	5,813	4,625	274,060	3,527	0
23	4/19/2018	99.7	7,585	6,375	4,662	282,580	3,358	0
24	4/19/2018	99.6	7,984	6,202	4,823	271,860	3,314	0
25	4/20/2018	99.9	7,416	6,411	4,298	277,240	3,266	0
26	4/20/2018	100.2	7,496	5,830	4,576	273,360	3,289	0
27	4/20/2018	99.7	7,263	5,820	4,673	276,440	3,173	0
28	4/20/2018	96	6,974	5,762	4,366	270,960	3,225	0
29	4/21/2018	99.5	7,324	6,014	4,541	276,840	3,226	0
30	4/21/2018	100	7,392	5,939	4,646	270,240	3,124	0
31	4/21/2018	94.8	7,242	6,065	4,626	274,520	4,154	0
32	4/22/2018	93.6	7,116	5,640	4,372	274,120	2,960	0
33	4/22/2018	99.3	7,038	5,271	4,758	277,380	3,339	0
34	4/22/2018	91.4	6,955	6,001	4,671	280,020	3,137	0
35	4/23/2018	94.4	6,795	5,183	4,843	287,960	3,131	0
36	4/23/2018	99.7	6,667	5,382	4,566	277,200	3,438	0
37	4/23/2018	92.8	6,883	6,522	4,183	275,920	2,925	0
38	4/24/2018	95.1	6,966	6,451	4,188	289,070	3,001	0
39	4/24/2018	97.2	6,938	6,116	4,473	274,960	3,973	0
40	4/24/2018	100.8	6,726	5,192	4,388	270,180	3,980	0
41	4/25/2018	100.2	6,790	5,988	4,254	290,240	3,228	0
42	4/25/2018	100.6	6,736	6,616	4,225	285,300	3,803	0

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Well Name: **Mason Cottrell OHI 6H** 47069002330000

LITHOLOGY/FORMATION	TOP DEPTH, MD (FT)	TOP DEPTH, TVD (FT)	BOTTOM DEPTH, MD (FT)	BOTTOM DEPTH, TVD (FT)	QUANTITY AND TYPE OF FLUID
Base of Fresh Water	0.00	0.00	387.00	387.00	
Top of Salt Water	752.00	752.00	NA	NA	
Pittsburgh Coal	604.00	604.00	NA	NA	
Pottsville (ss)	744.00	744.00	806.00	806.00	
Mauch Chunk (shale)	NA	NA	NA	NA	
Raven Cliff (ss)	1057.00	1057.00	1284.00	1284.00	
Maxton (ss)	1486.00	1486.00	1762.00	1762.00	
Greenbriar (ls)	NA	NA	NA	NA	
Big Injun (ss)	1762.00	1762.00	1967.00	1967.00	
Berea (siltstone)	NA	NA	NA	NA	
Rhinestreet (shale)	6002.00	5918.00	6106.00	6010.00	
Cashaqua (shale)	6122.00	6024.00	6190.00	6085.00	
Middlesex (shale)	6190.00	6085.00	6286.00	6160.00	
Burket (shale)	6286.00	6160.00	6316.00	6182.00	
Tully (ls)	6316.00	6182.00	6373.00	6222.00	
Mahantango (shale)	6373.00	6222.00	6675.00	6344.00	
Marcellus (shale)	6675.00	6344.00	NA	NA	GAS

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	3/23/2018
Job End Date:	4/25/2018
State:	West Virginia
County:	Ohio
API Number:	47-069-00233-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	Mason Cottrell 6H
Latitude:	40.07579835
Longitude:	-80.61766667
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,385
Total Base Water Volume (gal):	6,656,806
Total Base Non Water Volume:	0



Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Fresh Water	Operator	Base Fluid					
			Water	7732-18-5	100.00000	81.06009	Density = 8.340
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	1.84914	

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FDP-S1016-11	Halliburton	Friction Reducer				Listed Below				
SAND- PREMIUM WHITE-40/70, BULK	Halliburton	Proppant								
3rd Party Biocide	Nalco	Biocide				Listed Below				
HA1-150E	Halliburton	Corrosion Inhibitor				Listed Below				
3rd Party Scale Inh	Nalco	Scale Inhibitor								
HYDROCHLORIC ACID	Halliburton	Solvent				Listed Below				
SAND-COMMON WHITE - 100 MESH, 3307 LB BAG	Halliburton	Proppant								
<div style="text-align: right;"> RECEIVED Office of Oil and AUG 3 20 WV Department of Environmental Protection </div>										
Items above are Trade Names with the exception of Base Water. Items below are the individual ingredients.										
						14808-60-7	100.00000	17.03753		
						7647-01-0	15.00000	0.27093		
						64742-47-8	30.00000	0.02146		

			Polyacrylate	Proprietary	30.00000	0.02146	
			Methanol	67-56-1	60.00000	0.01127	
			Benzyl-Dimethyl-Ammonium Chloride	68424-85-1	30.00000	0.00563	
			Alcohols, C12-16, ethoxylated	68551-12-2	5.00000	0.00358	
			Amide	Proprietary	5.00000	0.00358	Denise Tuck, Halliburton, 3000 N. Sam Houston Pkwy E., Houston, TX 77032, 281-871-6226
			Salts	Proprietary	5.00000	0.00358	
			Glutaraldehyde	111-30-8	10.00000	0.00188	
			Amine Triphosphate	Proprietary	30.00000	0.00159	
			Ethylene Glycol	107-21-1	30.00000	0.00159	
			Fatty acid ester	Proprietary	1.00000	0.00072	
			Inorganic salt	Proprietary	1.00000	0.00072	
			Non-hazardous food substance	Proprietary	100.00000	0.00055	

* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water
** Information is based on the maximum potential for concentration and thus the total may be over 100%
*** If you are calculating a percentage of total ingredients do not add the water volume below the green line to the water volume above the green line

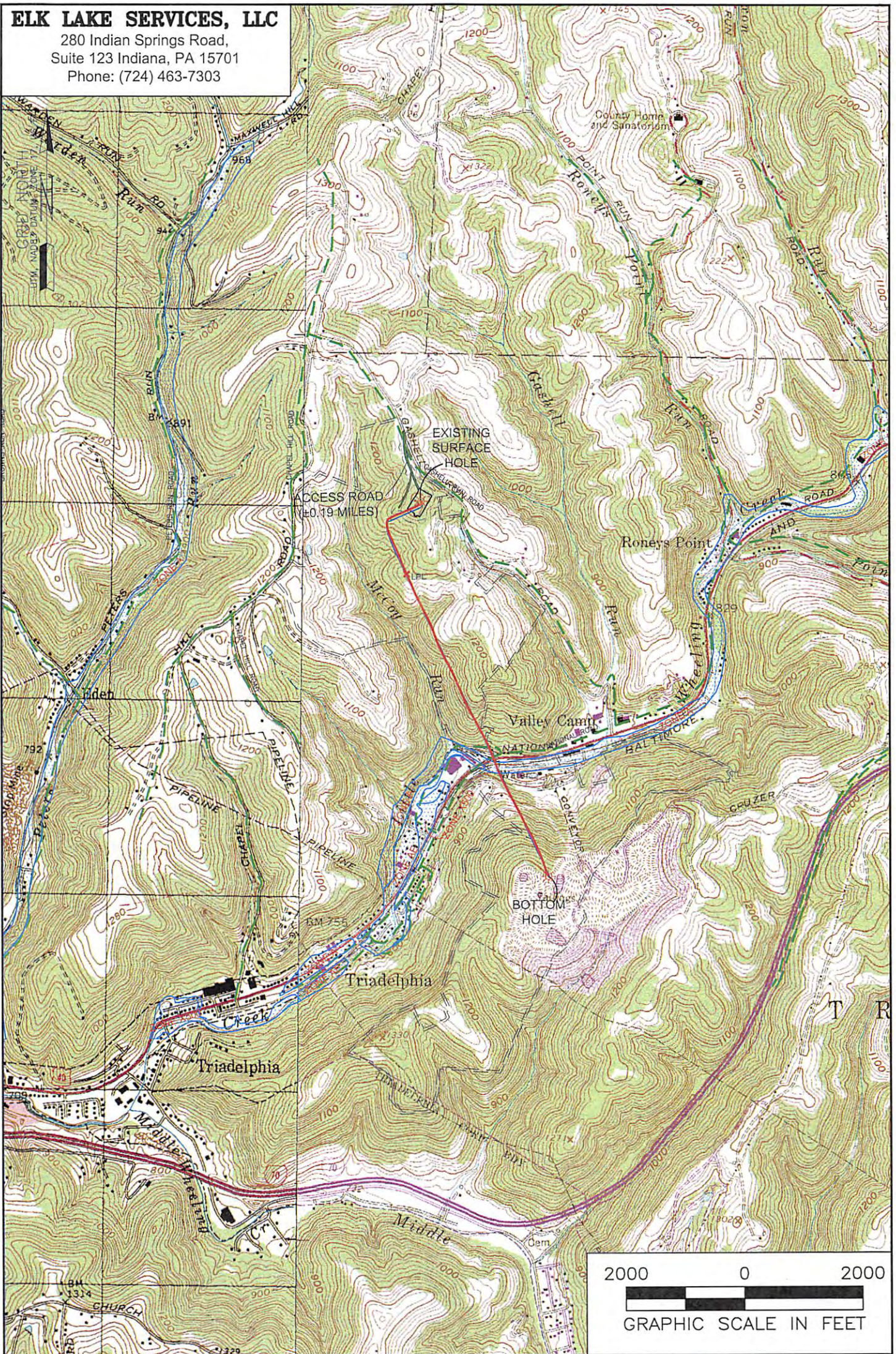
Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.
Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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ELK LAKE SERVICES, LLC

280 Indian Springs Road,
Suite 123 Indiana, PA 15701
Phone: (724) 463-7303



NOTES ON SURVEY

1. 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.
2. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
3. ALL INSETS ARE GRID NORTH UNLESS OTHERWISE DEPICTED.

LEGEND:

- PROPOSED SURFACE HOLE / BOTTOM HOLE
- ⊗ EXISTING / PRODUCING WELLHEAD
- LPLx LANDING POINT LOCATION
- FLOOD PLAIN
- ACCESS ROAD TO PREV. SITE
- PUBLIC ROAD
- LEASE BOUNDARY
- ASDRILLED PATH
- PROPOSED PATH

09/07/2018

WELL OPERATOR:
SWN PRODUCTION COMPANY, LLC

ADDRESS:
P.O. BOX 1300 JANE LEW, WV 26378

SURFACE OWNER:
LOUIS COTTRELL, JR. AS TRUSTEE FOR MASON LOUIS COTTRELL

WELL (FARM) NAME: MASON COTTRELL OHI	WELL # 6H	SERIAL # XXXX
COUNTY OHIO COUNTY - 69	DISTRICT: TRIADELPHIA	
USGS 7 1/2 QUADRANGLE MAP NAME VALLEY GROVE, WV		

Latitude: 40°05'00" SURFACE HOLE 9608'

Latitude: 40°05'00" BOTTOM HOLE 7398'

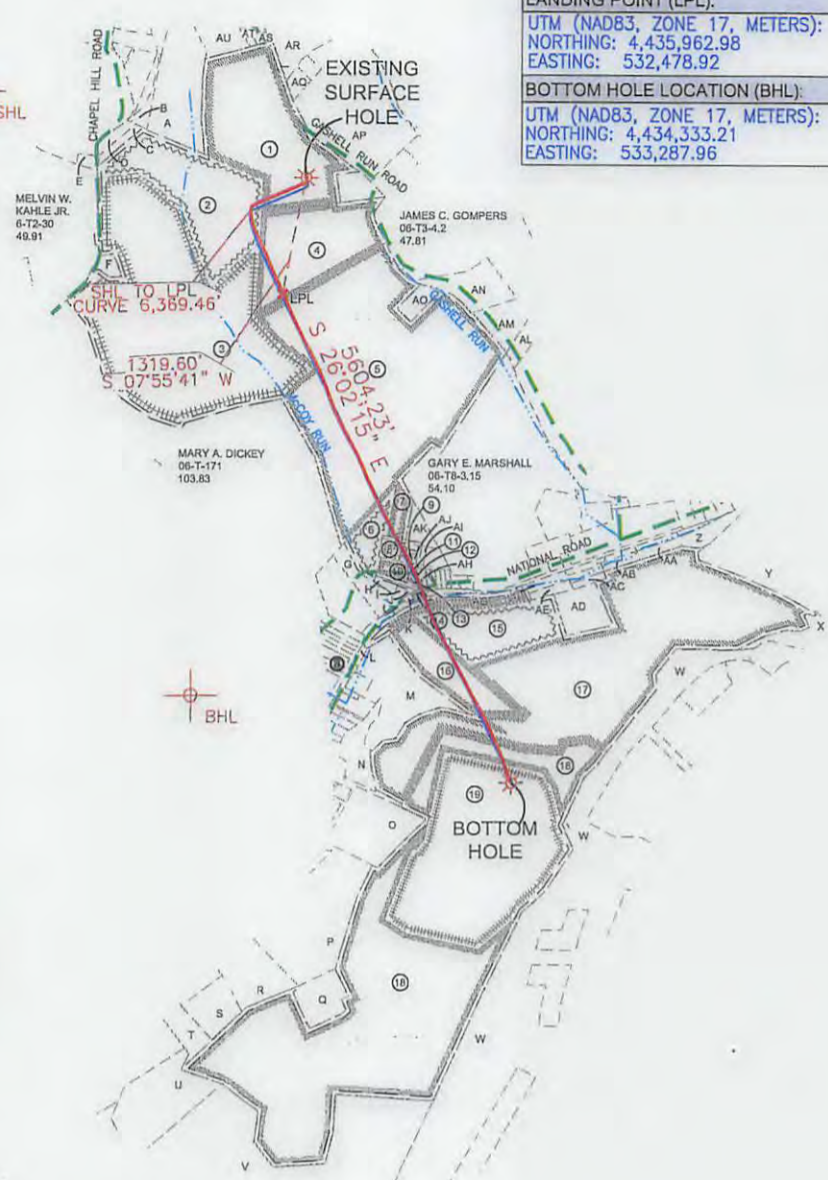
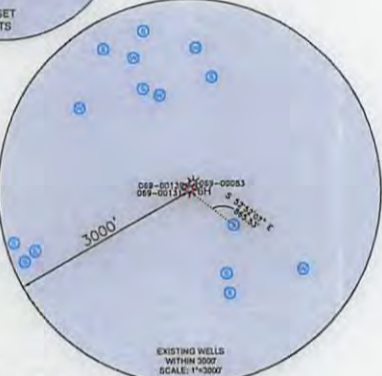
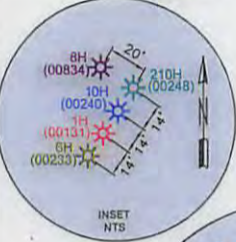
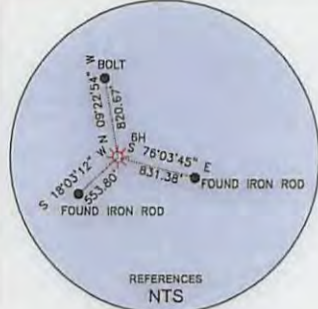
ELK LAKE SERVICES, LLC

280 Indian Springs Road,
Suite 123 Indiana, PA 15701
Phone: (724) 463-7303

SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,436,240.11 EASTING: 532,599.58
LANDING POINT (LPL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,435,962.98 EASTING: 532,531.78
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,434,333.21 EASTING: 533,282.06

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

SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,436,240.17 EASTING: 532,599.78
LANDING POINT (LPL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,435,962.98 EASTING: 532,478.92
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,434,333.21 EASTING: 533,282.96

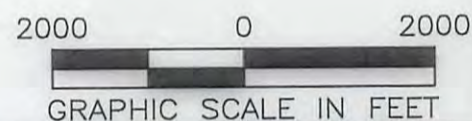


- WELL RESTRICTIONS**
1. NO OCCUPIED DWELLINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
 2. NO AGRICULTURE BUILDINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
 3. WATER WELLS OR DEVELOPED SPRINGS ARE WITHIN 665 FEET OF PROPOSED WELL.
 4. PERENNIAL STREAMS, LAKES, PONDS, OR RESERVOIRS ARE WITHIN THE LIMITS OF DISTURBANCE.
 5. NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.
 6. NO GROUND INTAKE OR PUBLIC WATER SUPPLY WITHIN 1000 FEET OF WELL PAD, LIMITS OF DISTURBANCE, E & S CONTROLS OR PUBLIC WATER SUPPLY.

- NOTES ON SURVEY**
1. 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.
 2. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
 3. ALL INSETS ARE GRID NORTH UNLESS OTHERWISE DEPICTED.

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. 2164



COMPANY:
SWN Production Company, LLC

<p>(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS</p> <p>WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034</p>	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 #: 6H API WELL #: 47 069 00233 STATE COUNTY PERMIT
	WELL TYPE: OIL <input type="checkbox"/> WASTE DISPOSAL <input type="checkbox"/> PRODUCTION <input checked="" type="checkbox"/> DEEP <input type="checkbox"/> GAS <input checked="" type="checkbox"/> LIQUID INJECTION <input type="checkbox"/> STORAGE <input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/>	WATERSHED: UPPER OHIO SOUTH DISTRICT: TRIADELPHIA COUNTY: OHIO COUNTY SURFACE OWNER: LOUIS COTTRELL, JR. AS TRUSTEE FOR MASON LOUIS COTTRELL OIL & GAS ROYALTY OWNER: LOUIS COTTRELL, JR. AS TRUSTEE FOR MASON LOUIS COTTRELL

DRILL <input type="checkbox"/> DRILL DEEPER <input type="checkbox"/> REDRILL <input type="checkbox"/> FRACTURE OR STIMULATE <input type="checkbox"/> PLUG OFF OLD FORMATION <input type="checkbox"/> PERFORATE NEW FORMATION <input type="checkbox"/> CONVERT <input type="checkbox"/> PLUG & ABANDON <input type="checkbox"/> CLEAN OUT & REPLUG <input type="checkbox"/> OTHER CHANGE <input checked="" type="checkbox"/> (SPECIFY) AS-DRILLED TARGET FORMATION: MARCELLUS	ESTIMATED DEPTH: 6,399' TVD 12,631' TMD DATE: 09/07/2018
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WELL OPERATOR: SWN PRODUCTION COMPANY, LLC ADDRESS: P.O. BOX 1300 CITY: JANE LEW STATE: WV ZIP CODE: 26378	DESIGNATED AGENT: BRITTANY WOODY. ADDRESS: P.O. BOX 1300 CITY: JANE LEW STATE: WV ZIP CODE: 26378
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LEGEND: ○ PROPOSED SURFACE HOLE / BOTTOM HOLE * EXISTING / PRODUCING WELLHEAD LPL * LANDING POINT LOCATION (W) EXISTING WATER WELL (S) EXISTING SPRING — SURVEYED BOUNDARY — DRILLING UNIT - - - - LEASE BOUNDARY — ASDRILLED PATH — PROPOSED PATH	REVISIONS: DATE: 7/27/2018 FILE NO: 16-53 DRAWN BY: JMB SCALE: 1" = 2000' DRAWING NO: 1 WELL LOCATION PLAT 1
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ELK LAKE SERVICES, LLC

280 Indian Springs Road,
Suite 123 Indiana, PA 15701
Phone: (724) 463-7303

WELL BORE TABLE FOR SURFACE / ROYALTY OWNERS			
TRACT	SURFACE OWNER / ROYALTY OWNER	TAX PARCEL	ACRES
1	LOUIS COTTRELL, JR. AS TRUSTEE FOR MASON LOUIS COTTRELL	6-T3-1.1	37.475000
TRACT	SURFACE OWNER	TAX PARCEL	ACRES
2	MELVIN W. KAHLE, JR.	6-T2-36	27.990000
3	MELVIN W. KAHLE, JR. AND CAROL M. KAHLE	6-T7-170	84.990000
4	CHARLES R. OCH III AND MELISSA R. OCH	6-T8-1	22.605000
5	GARY E. MARSHALL AND DEBORAH A. MARSHALL	6-T8-2.1	88.000000
6	FRANCIS A. RIGGS AND DAISY M. RIGGS AKA DAISY MAE RIGGS	6-T8E-3	4.000000
7	FRANCIS A. RIGGS AND DAISY M. RIGGS AKA DAISY MAE RIGGS	6-T8E-2	2.460000
8	BRIAN S. SCHULTZ	6-T8E-13	1.664400
9	BRIAN S. SCHULTZ	6-T8E-13.3	0.057400
10	FRANCIS A. RIGGS AND DAISY M. RIGGS AKA DAISY MAE RIGGS	6-T8E-11	1.101900
11	FRED C. HLAD, III DBA ALLSTATE CONSTRUCTION	6-T8E-16	0.130700
12	CHAUNCEY T. HALL AND CONSTANCE J. HALL	6-T8E-17	0.278600
13	FRANCIS A. RIGGS AND DAISY M. RIGGS AKA DAISY MAE RIGGS	6-T8E-12	0.270900
14	FRED C. HLAD, III DBA ALLSTATE CONSTRUCTION	6-T8E-5	0.120000
15	OHIO COUNTY COMMISSION	6-T8-40.1	19.140000
16	MICHAEL EARL RICHARDS & LEROY EUGENE RICHARDS	6-T8-41.2	12.437000
17	OHIO COUNTY COMMISSION	6-T8-40	105.370000
18	OHIO COUNTY DEVELOPMENT AUTHORITY	6-T8-40.5	2.690000
19	OHIO COUNTY COMMISSION	6-T8-40.45	59.940000

ADJOINING OWNERS TABLE			
TRACT	SURFACE OWNER	TAX PARCEL	ACRES
A	MELVIN W. KAHLE JR.	06-T2-35	15.22
B	DONNA JEAN GROVER	6-T2-35.1	1.19
C	JOHN P. & BARBARA A PONKO	6-T2-36.3	1.0
D	JOHN P. & BARBARA A PONKO	6-T2-36	1.04
E	YAHN KEYSTONE TRUST	6-T2-29	0.63
F	MELVIN W. & CAROL M. KAHLE JR.	6-T7-170.2	1.14
G	CHAS M. SLEDD COMPANY	7-TW7-1.1	2.96
H	MAIN STREET BANK CORP	6-T8E-8	0.29
I	MAIN STREET BANK CORP	6-T8E-7	0.57
J	CHAUNCEY T. & CONSTANCE J. HALL	6-T8E-6	0.15
K	MAIN STREET BANK CORP	6-T8E-4	0.13
L	OHIO COUNTY PUBLIC SERVICE DISTRICT	7-TW7-13	0.28
M	MARCIA KIRKLAND	6-T8-41.1	12.89
N	CHRISTOPHER & ALYCE F. PAGANO	6-T8-62	4.95
O	THOMAS J. HOWARD	6-T8-42	11.34
P	OHIO COUNTY COMMISSION	6-T8-40.7	24.87
Q	OHIO COUNTY DEVELOPMENT	6-T8-40.31	5.0
R	ANTHONY KRUPINSKI III	6-T8-43.1	8.01
S	DANIEL LEWIS & SHEILA ROBINSON	6-T8-43.3	5.0
T	AUGUST FRANKLIN ROBINSON	6-T8-43	4.65
U	OHIO COUNTY DEVELOPMENT	7-TW5-24	14.0
V	OHIO COUNTY COMMISSION	7-TW10-1	106.51
W	OHIO COUNTY DEVELOPMENT	6-T8-40.11	231.73
X	OHIO COUNTY DEVELOPMENT	6-T8-40.20	6.45
Y	GAIL W. KAHLE	6-T8-38	20.49
Z	PHK LLC	6-T8-58	3.27
AA	L D REALTY INC	6-T8-58.1	1.06
AB	PHK LLC	6-T8-59	0.58
AC	PHK LLC	6-T8-57	0.35
AD	BETTY WOODS NUTTING	6-T8-40.62	4.93
AE	CONTRACT DEVELOPMENT INC	6-T8-57.1	0.74
AF	CONTRACT DEVELOPMENT INC	6-T8-51	0.69
AG	KATHRYN M. KNOLLINGER	7-TW7-12	3.8
AH	CHAUNCEY T. & CONSTANCE J. HALL	6-T8E-18	0.27
AI	RANDY ROBERTS	6-T8E-13.2	0.23
AJ	BRIAN S. SCHULTZ	6-T8E-13.1	0.11
AK	H3 LLC	6-T8E-1	1.79
AL	THOM O. & M.E. BOREMAN	06-T8-6	6.49
AM	LOIS J. SHORES	6-T8-5	4.21
AN	THOM O. & M.E. BOREMAN	6-T3-4	6.58
AO	JOSHUA A. AND JENNIFER A. MARSHALL	6-T8-2.2	1.91
AP	ELWOOD FRED RICHTER	6-T3-4.1	23.76
AQ	RAYMOND J. RAINES	6-T3-2.2	1.0
AR	MATTHEW B. & AMBER L. HINES	6-T3-2	6.91
AS	WALTER R. PAUL JR & WALTER R. PAUL SR	6-T3-29	0.29
AT	WALTER R. PAUL JR & WALTER R. PAUL SR	6-T3-30	0.61
AU	WM. C. & RACHEL D. GROVER	6-T2-32	18.13

09/07/2018

REVISIONS:	COMPANY:	 	
	OPERATOR'S	MASON COTTRELL OHI	
	WELL #:	6H	
	DISTRICT:	COUNTY:	STATE:
	TRIADDELPHIA	OHIO COUNTY	WV
			DATE: 7/26/2018
			FILE NO: 16-53
			DRAWN BY: JMB
			SCALE: N/A
			DRAWING NO: 1
			WELL LOCATION PLAT 1