

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

API 47 - 049 - 02492 County Marion District Lincoln
Quad Shinnston Pad Name Sands Pad Field/Pool Name Marcellus
Farm name XTO Energy Inc. Well Number Sands Unit B 4H
Operator (as registered with the OOG) XTO Energy Inc.
Address PO Box 1008 City Jane Lew State WV Zip 26378

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4368407.001 Easting 559063.173
Landing Point of Curve Northing 4368512.529 Easting 559241.146
Bottom Hole Northing 435682.233 Easting 561928.236

Elevation (ft) 1,230' 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)
OBM, Fluid Loss, Wetting Agent, Viscosifier, Barite, Emulsifier.

Date permit issued 4/16/2019 Date drilling commenced 8/6/2019 Date drilling ceased 1/29/2020
Date completion activities began 6/26/2021 Date completion activities ceased 10/7/2021
Verbal plugging (Y/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 120', 200' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1,450' & 1,800' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 420' - 427' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) Y

Reviewed by:
D. H. Harris
01/21/2022

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API 47-049 - 02492 Farm name XTO Energy Inc. Well number Sands Unit B 4H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/fl	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	28"	24"	40'	New	PE&B / 95#		N
Surface	17 1/2"	13 3/8"	490'	New	H-40 / 48#		Y
Coal							
Intermediate 1	12 3/8"	9 5/8"	3,166'	New	J-55 / 36#		Y
Intermediate 2							
Intermediate 3							
Production	8 3/4" & 8 1/2"	5 1/2"	20,746'	New	P-110 / 20#		Est. TOC 5,000'
Tubing							
Packer type and depth set							

Comment Details Conductor - cement poured directly into annulus.

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	90				0	8
Surface	A	460	15.6	1.19		0	8
Coal							
Intermediate 1	A	1,125	15.6	1.19		0	8
Intermediate 2							
Intermediate 3							
Production	H	510 / 2,205	15.2 / 15.6	1.10 / 1.57		Est. TOC 5,000'	8
Tubing							

Drillers TD (ft) 20,771' Loggers TD (ft) 20,743'
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 7,089'

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 - Every 120'
 Intermediate - Every 120'
 Production - Every 80'

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 ProTechnics Chemical

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Well Sands Unit B 4H
 API 47-049-02492

Stage	Perf Date	Perf from MD ft.	Perf to MD ft.	Number of Perfs	Formation(s)
1	6/27/2021	20425	20575	36	Marcellus
2	6/29/2021	20225	20375	36	Marcellus
3	6/30/2021	20025	20175	36	Marcellus
4	6/30/2021	19825	19975	36	Marcellus
5	7/1/2021	19625	19775	36	Marcellus
6	7/1/2021	19425	19575	36	Marcellus
7	7/3/2021	19225	19375	36	Marcellus
8	7/3/2021	19025	19175	36	Marcellus
9	7/4/2021	18825	18975	36	Marcellus
10	7/4/2021	18625	18775	36	Marcellus
11	7/6/2021	18425	18575	36	Marcellus
12	7/6/2021	18225	18375	36	Marcellus
13	7/7/2021	18025	18175	36	Marcellus
14	7/7/2021	17825	17975	36	Marcellus
15	7/7/2021	17625	17775	36	Marcellus
16	7/11/2021	17425	17575	36	Marcellus
17	7/11/2021	17275	17375	36	Marcellus
18	7/12/2021	17025	17175	36	Marcellus
19	7/12/2021	16825	16975	36	Marcellus
20	7/12/2021	16625	16775	36	Marcellus
21	7/12/2021	16425	16575	36	Marcellus
22	7/13/2021	16225	16375	36	Marcellus
23	7/26/2021	16025	16173	36	Marcellus
24	7/27/2021	15825	15973	36	Marcellus
25	7/28/2021	15625	15773	36	Marcellus
26	7/29/2021	15425	15573	36	Marcellus
27	7/30/2021	15225	15373	36	Marcellus
28	7/31/2021	15025	15173	36	Marcellus
29	8/1/2021	14825	14973	36	Marcellus
30	8/2/2021	14625	14773	36	Marcellus
31	8/3/2021	14425	14573	36	Marcellus
32	8/4/2021	14225	14373	36	Marcellus
33	8/5/2021	14025	14173	36	Marcellus
34	8/6/2021	13825	13973	36	Marcellus
35	8/7/2021	13625	13773	36	Marcellus
36	8/8/2021	13425	13573	36	Marcellus
37	8/9/2021	13225	13373	36	Marcellus
38	8/10/2021	13025	13173	36	Marcellus
39	8/12/2021	12825	12973	36	Marcellus
40	8/13/2021	12625	12773	36	Marcellus
41	8/14/2021	12425	12573	36	Marcellus
42	8/15/2021	12225	12373	36	Marcellus
43	8/16/2021	12025	12173	36	Marcellus
44	8/17/2021	11825	11973	36	Marcellus
45	8/18/2021	11625	11773	36	Marcellus
46	8/19/2021	11425	11573	36	Marcellus
47	8/20/2021	11225	11373	36	Marcellus
48	8/21/2021	11025	11173	36	Marcellus
49	8/22/2021	10825	10973	36	Marcellus
50	8/24/2021	10625	10773	36	Marcellus
51	8/25/2021	10425	10573	36	Marcellus
52	8/26/2021	10225	10373	36	Marcellus
53	8/27/2021	10025	10173	36	Marcellus
54	8/28/2021	9825	9973	36	Marcellus
55	8/29/2021	9625	9773	36	Marcellus

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API 47-049-02492

Stage	Stimulation Date	Avg. Pump Rate (BPM)	Avg. Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen
1	06/29/2021	90.85	8763	6175	4151.00	358069	11326	0
2	06/29/2021	89.26	8703	5955	5066.00	355121	13177	0
3	06/30/2021	90.64	8836	5548	5326.00	363330	12050	0
4	06/30/2021	92.96	8986	5652	4912.00	357205	11898	0
5	07/01/2021	95.47	9040	5728	5117.00	359045	11736	0
6	07/03/2021	96.55	9152	6855	5118.00	361890	12033	0
7	07/03/2021	95.96	9008	7128	5006.00	358715	11437	0
8	07/04/2021	93.50	9048	4340	4988.00	359385	11584	0
9	07/04/2021	97.05	9124	6979	5038.00	363610	11414	0
10	07/06/2021	97.53	8946	6152	4902.00	361437	11592	0
11	07/06/2021	99.08	9025	5447	5302.08	360413	10984	0
12	07/07/2021	99.44	9003	6204	5491.44	363070	11006	0
13	07/07/2021	97.66	8902	6833	5294.00	358470	12421	0
14	07/07/2021	97.79	8997	7029	4930.00	357040	11622	0
15	07/07/2021	98.44	9002	6209	5381.03	363780	11000	0
16	07/12/2021	100.35	8947	6354	4981.97	358410	10948	0
17	07/12/2021	98.09	9010	6500	5070.00	358200	11373	0
18	07/12/2021	94.52	9035	7185	5393.00	359990	11223	0
19	07/12/2021	96.92	9049	7325	5569.75	360550	11286	0
20	07/12/2021	99.54	9032	6629	5079.34	361600	11419	0
21	07/13/2021	100.10	8853	6019	5306.00	361510	11484	0
22	07/14/2021	100.06	8722	6954	4840.00	365880	11893	0
23	7/26/2021	97.00	8949	5943	5026.00	371732	10838	0
24	7/27/2021	99.10	9050	6397	5103.00	369430	10754	0
25	7/28/2021	98.00	8949	6459	5474.00	369556	10664	0
26	7/29/2021	97.00	8857	6201	5360.00	369668	10690	0
27	7/30/2021	96.00	8669	5051	5141.00	369971	10823	0
28	7/31/2021	99.30	8631	6348	5396.00	369732	10614	0
29	8/1/2021	97.50	8676	6128	5550.00	370842	10563	0
30	8/2/2021	99.00	8686	5813	5894.00	371065	10536	0
31	8/3/2021	92.20	8391	6556	5433.00	369442	10543	0
32	8/4/2021	97.70	8812	6047	5524.00	369844	10612	0
33	8/5/2021	98.30	8771	6209	5383.00	355342	10485	0
34	8/6/2021	98.20	8418	5995	5504.00	370041	10499	0
35	8/7/2021	91.50	7956	5831	5316.00	368080	12196	0
36	8/8/2021	94.70	8003	6052	5431.00	368106	11655	0
37	8/9/2021	91.00	7685	5993	5315.00	367942	10643	0
38	8/10/2021	98.20	8075	5770	5319.00	370961	10738	0
39	8/12/2021	98.70	8079	5850	5400.00	369110	10617	0
40	8/13/2021	99.50	8421	5910	5188.00	368017	10655	0
41	8/14/2021	95.10	8371	6406	5462.00	367616	10582	0
42	8/15/2021	98.80	8373	6276	5028.00	367567	10513	0
43	8/16/2021	98.00	8642	6617	5321.00	334870	10099	0
44	8/17/2021	94.80	8030	6220	5258.00	368305	10922	0
45	8/18/2021	99.00	8407	6044	5157.00	368181	10623	0
46	8/19/2021	93.60	8251	5824	5278.00	368039	10717	0
47	8/20/2021	97.20	8273	6732	5646.00	368225	10466	0
48	8/21/2021	99.70	8644	6682	5737.00	368923	10499	0
49	8/22/2021	96.20	8344	6093	5744.00	368289	10503	0
50	8/24/2021	98.10	8210	6453	5635.00	368807	10879	0
51	8/25/2021	98.90	8130	6537	5590.00	369514	10301	0
52	8/26/2021	98.80	8121	6251	5325.00	370340	10232	0
53	8/27/2021	96.20	7835	5724	5415.00	369400	10844	0
54	8/28/2021	99.60	7767	5669	4959.00	369931	10097	0
55	8/29/2021	100.00	7565	5547	5267.00	369041	10237	0
56	8/31/2021	100.50	7757	6206	5315.00	369074	9757	0
57	9/1/2021	97.90	8117	6853	5188.00	369380	9881	0
58	9/2/2021	92.20	8130	6745	4424.00	368128	10013	0

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Sands Unit B 4H
47-049-02492

Lithology/Formation Name	Top Depth TVD	Bottom Depth TVD	Top Depth MD	Bottom Depth MD	Describe Rock Type and Record Quantity and Type of Fluid (Freshwater, Brine, Oil, Gas, H2S, ETC)
Dirt	0	31	0	31	
Sandstone	31	143	31	143	
Shale	143	279	143	279	
Sandstone	279	420	279	420	
Coal	420	427	420	427	
Shale	427	542	427	542	
SDY Shale	542	629	542	629	
Red Rock	629	639	629	639	
SDY Shale	639	659	639	659	
Red Rock	659	704	659	704	
Shale	704	969	704	969	
Sandstone	969	1,009	969	1,009	
SDY Shale	1,009	1,409	1,009	1,409	
Sandstone	1,409	1,539	1,409	1,539	
Shale	1,539	1,819	1,539	1,819	
Sandstone	1,819	1,899	1,819	1,899	
Shale	1,899	2,039	1,899	2,039	
Sandstone	2,039	2,109	2,039	2,109	
SDY Shale	2,109	2,309	2,109	2,309	
Sandstone	2,309	2,389	2,309	2,389	
SDY Shale	2,389	2,519	2,389	2,519	
Sandstone	2,519	2,549	2,519	2,549	
SDY Shale	2,549	2,629	2,549	2,629	
Sandstone	2,629	2,739	2,629	2,739	
Shale	2,739	2,889	2,739	2,889	
Sandstone	2,889	2,919	2,889	2,919	
SDY Shale	2,919	3,154	2,919	3,154	
Shale	3,154	3,989	3,154	3,989	
Sandstone	3,989	4,259	3,989	4,259	
Shale	4,259	4,469	4,259	4,469	
SDY Shale	4,469	4,638	4,469	4,638	
Sandstone	4,638	4,679	4,638	4,679	
SDY Shale	4,679	5,209	4,679	5,209	
Shale	5,209	5,319	5,209	5,319	
Sandstone	5,319	5,459	5,319	5,459	
Shale	5,459	7,245	5,459	7,338	
Burket Shale	7,244	7,268	7,339	7,368	
Tully Limestone	7,268	7,314	7,368	7,428	
Hamilton Shale	7,314	7,459	7,428	7,674	
Marcellus	7,459		7,674	20,771	

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	6/29/2021
Job End Date:	9/8/2021
State:	West Virginia
County:	Marion
API Number:	47-049-02492-00-00
Operator Name:	XTO Energy/ExxonMobil
Well Name and Number:	Sands Unit B 4H
Latitude:	39.46322300
Longitude:	-80.31342000
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7,558
Total Base Water Volume (gal):	29,686,755
Total Base Non Water Volume:	0



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Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	Cabot	Carrier/Base Fluid					
			Water	7732-18-5	100.00000	90.84095	None
Sand	Upp	Proppant					
			Crystalline Silica in the form of Quartz	14808-60-7	99.90000	8.56689	None
HCL Acid (15%)	Upp	Acidizing					
			Hydrochloric Acid	7647-01-0	7.50000	0.04034	None
Scale Hib PE-18 (Summer)	Upp	Scale Inhibitor					
			Hydrotreated distillate	Proprietary	30.00000	0.00844	None
			Polyacrylate	Proprietary	30.00000	0.00844	None
			Ammonium sulfate	7783-20-2	30.00000	0.00844	None
			Proprietary Scale Inhibitor	Proprietary	30.00000	0.00193	None
			Surfactant blend	Proprietary	5.00000	0.00141	None
			Ethoxylated alcohol	Proprietary	5.00000	0.00141	None
			Sorbitan monooleate polyoxyethylene derivative	9005-65-6	1.00000	0.00028	None
			Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8	1.00000	0.00028	None
			Phosphoric Acid Salt	Proprietary	5.00000	0.00015	None

			Sodium chloride	7647-14-5	5.00000	0.00015	None
			Modified thiourea polymer	Proprietary	30.00000	0.00003	None
			Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3	30.00000	0.00003	None
			Ethoxylated alcohols	Proprietary	5.00000	0.00001	None
			Hexadecene	629-73-2	5.00000	0.00001	None
			Propargyl alcohol	107-19-7	5.00000	0.00001	None
FR-3	UJP	Friction reducer					
			Hydrotreated Petroleum Distillate	64742-47-8	20.00000	0.00839	None
			Ammonium Chloride	12125-02-9	1.50000	0.00204	None
			Oleic Acid Diethanolamide	93-83-4	1.50000	0.00063	None
			Alcohol Ethoxylate Surfactants	68551-12-2	1.00000	0.00042	None
MBC 10:5	UJP	Biocide					
			Glutaraldehyde	111-30-8	5.00000	0.00123	None
			Alkyl dimethyl benzyl ammonium chloride (C 12-16)	68424-85-1	10.00000	0.00073	None
			Ethanol	64-17-5	5.00000	0.00032	None
Unihib G	UJP	Acid inhibitor					
			Methanol	67-56-1	5.00000	0.00192	None
			Butyl diglycol	112-34-5	75.00000	0.00018	None
			Alcohols, C10-16, ethoxylated	68002-97-1	50.00000	0.00012	None
			Formaldehyde	50-00-0	1.00000	0.00001	None
			Thiourea	62-56-6	1.00000	0.00000	None
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.							
Other Chemical(s)	Listed Above	See Trade Name(s) List					
			Ammonium sulfate	7783-20-2	30.00000	0.00844	
			Polyacrylate	Proprietary	30.00000	0.00844	
			Hydrotreated distillate	Proprietary	30.00000	0.00844	
			Ammonium Chloride	12125-02-9	1.50000	0.00204	
			Methanol	67-56-1	5.00000	0.00192	
			Surfactant blend	Proprietary	5.00000	0.00141	
			Ethoxylated alcohol	Proprietary	5.00000	0.00141	
			Glutaraldehyde	111-30-8	5.00000	0.00123	
			Oleic Acid Diethanolamide	93-83-4	1.50000	0.00063	
			Alcohol Ethoxylate Surfactants	68551-12-2	1.00000	0.00042	
			Ethanol	64-17-5	5.00000	0.00032	
			Sorbitan, mono-9-octadecenoate, (Z)	1338-43-8	1.00000	0.00028	
			Sorbitan monooleate polyoxyethylene derivative	9005-65-6	1.00000	0.00028	
			Phosphoric Acid Salt	Proprietary	5.00000	0.00015	
			Sodium chloride	7647-14-5	5.00000	0.00015	
			Alcohols, C10-16, ethoxylated	68002-97-1	50.00000	0.00012	

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			Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3	30.00000	0.00003	
			Modified thiourea polymer	Proprietary	30.00000	0.00003	
			Hexadecene	629-73-2	5.00000	0.00001	
			Ethoxylated alcohols	Proprietary	5.00000	0.00001	
			Propargyl alcohol	107-19-7	5.00000	0.00001	
			Formaldehyde	50-00-0	1.00000	0.00001	
			Thiourea	62-56-6	1.00000	0.00000	

* 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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BOTTOM HOLE ← TOP HOLE ← 8576' 6141'

SANDS UNIT B 4H AS-DRILLED

SCALE: 1" = 2000' LATITUDE: 39°30'00" (TOP HOLE)
 SCALE: 1" = 2000' LATITUDE: 39°27'30" (BOTTOM HOLE)

PERMITTED

State Plane Coordinate West Virginia North
Top Hole Location
 NAD 27 Feet
 N: 351831.811
 E: 1770291.900
 UTM Zone 17 (SPCS83) Meters
 N: 4366407.001
 E: 559063.173
 NAD 27
 N: 39.4631298
 W: 80.3136082
Landing Point Location
 NAD 27 Feet
 N: 352168.315
 E: 1770881.403
 UTM Zone 17 (SPCS83) Meters
 N: 4366512.515
 E: 559241.067
 NAD 27
 N: 39.4640683
 W: 80.3115311

State Plane Coordinate West Virginia North
Inflection Point One Location
 NAD 27 Feet
 N: 344570.343
 E: 1778346.922
 UTM Zone 17 (SPCS83) Meters
 N: 4366135.598
 E: 561554.140
 NAD 27
 N: 39.4433906
 W: 80.2848547
Inflection Point Two Location
 NAD 27 Feet
 N: 344245.040
 E: 1778603.544
 UTM Zone 17 (SPCS83) Meters
 N: 4366137.793
 E: 561633.975
 NAD 27
 N: 39.44250367
 W: 80.2839360
Bottom Hole Location
 NAD 27 Feet
 N: 342676.916
 E: 1779585.045
 UTM Zone 17 (SPCS83) Meters
 N: 4365665.025
 E: 561940.966
 NAD 27
 N: 39.4382219
 W: 80.2804126

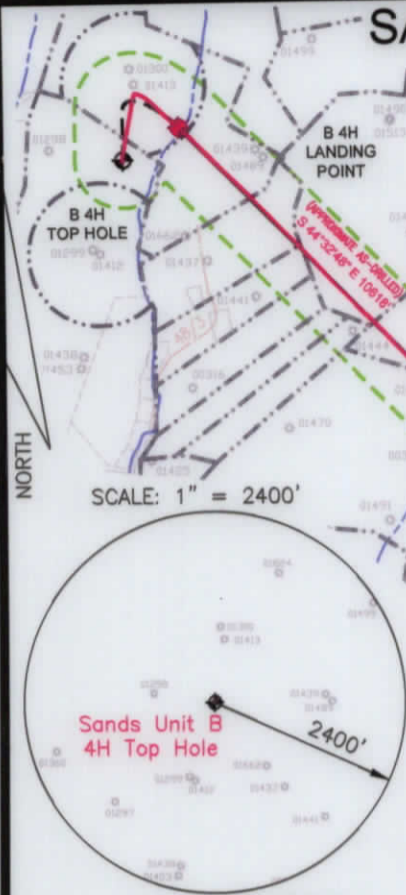
SCALE: 1" = 100'



AS-DRILLED

State Plane Coordinate West Virginia North
Top Hole Location
 NAD 27 Feet
 N: 351831.811
 E: 1770291.900
 UTM Zone 17 (SPCS83) Meters
 N: 4366407.001
 E: 559063.173
 NAD 27
 N: 39.4631298
 W: 80.3136082
Landing Point Location
 NAD 27 Feet
 N: 352168.315
 E: 1770881.663
 UTM Zone 17 (SPCS83) Meters
 N: 4366512.529
 E: 559241.146
 NAD 27
 N: 39.4640685
 W: 80.3115301
Inflection Point One Location
 NAD 27 Feet
 N: 344601.303
 E: 1778329.862
 UTM Zone 17 (SPCS83) Meters
 N: 4366244.944
 E: 561548.785
 NAD 27
 N: 39.4434752
 W: 80.2849160
Inflection Point Two Location
 NAD 27 Feet
 N: 344227.150
 E: 1778617.284
 UTM Zone 17 (SPCS83) Meters
 N: 4366132.412
 E: 561638.252
 NAD 27
 N: 39.4424549
 W: 80.2838868
Bottom Hole Location
 NAD 27 Feet
 N: 342734.077
 E: 1779544.215
 UTM Zone 17 (SPCS83) Meters
 N: 4365682.233
 E: 561928.236
 NAD 27
 N: 39.4383779
 W: 80.2805589

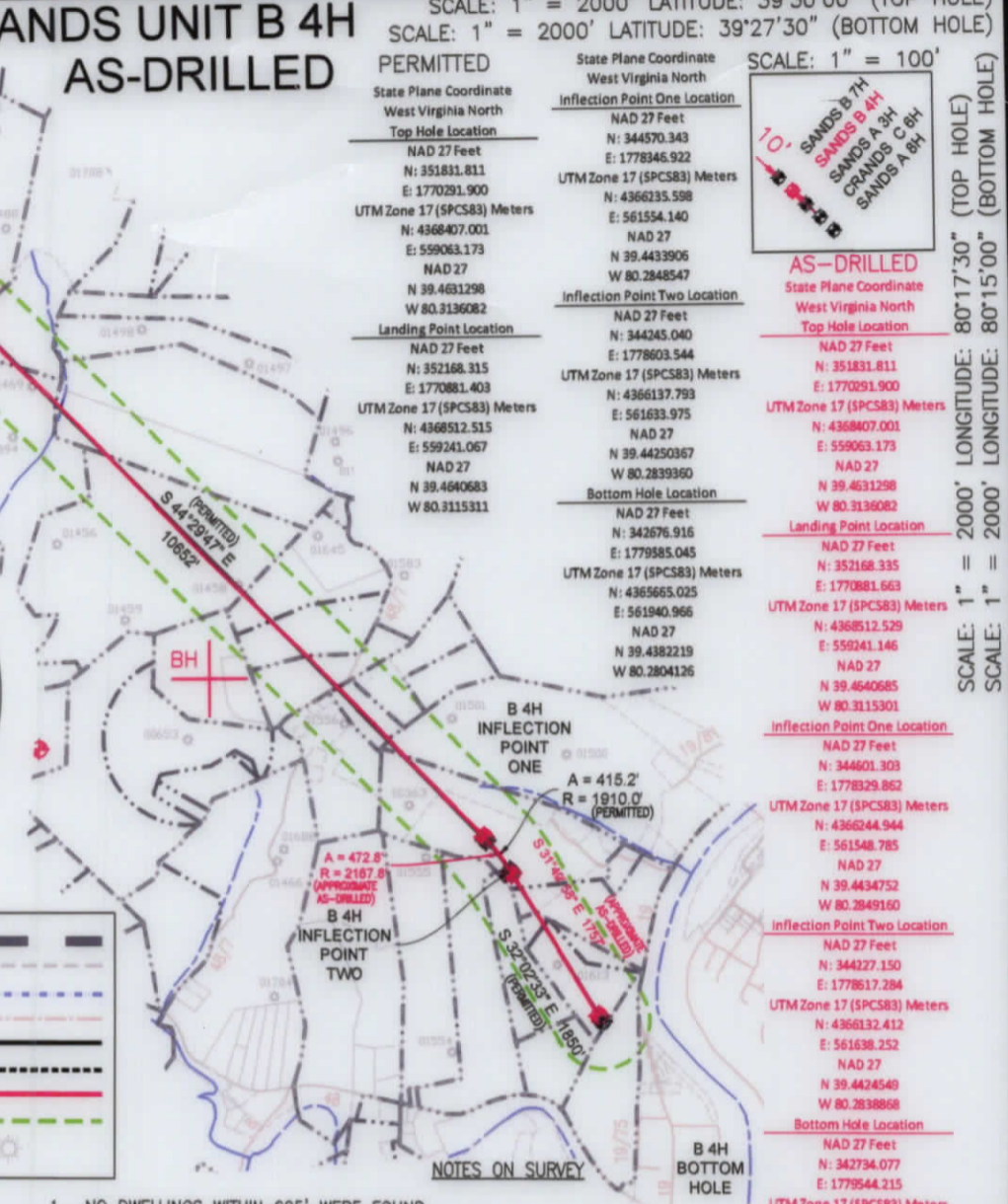
SCALE: 1" = 2000' LONGITUDE: 80°17'30" (TOP HOLE)
 SCALE: 1" = 2000' LONGITUDE: 80°15'00" (BOTTOM HOLE)



SCALE: 1" = 2400'

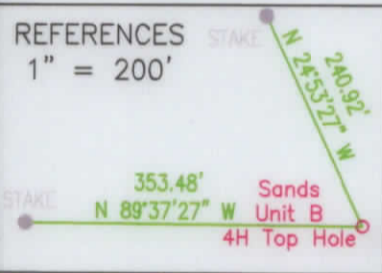
LINE LEGEND

LEASE BOUNDARY	---
SURFACE BOUNDARY	- - - -
CREEK / STREAM	~~~~~
ROADS	— · — · —
PROPOSED LATERAL	— · — · —
APPROXIMATE CURVE	— · — · —
AS-DRILLED LATERAL	— · — · —
500' LATERAL OFFSET	— · — · —
EXISTING GAS WELL	⊙



NOTES ON SURVEY

1. NO DWELLINGS WITHIN 625' WERE FOUND.
2. NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250' WERE FOUND.
3. TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV NORTH ZONE NAD 83.
4. WELL ELEVATION ESTABLISHED BY RTK GPS NAVD 88.
5. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF MARION COUNTY IN AUGUST 2021 AND FILES PROVIDED BY XTO ENERGY INC.
6. WELLS SHOWN ARE TAKEN FROM RECORDS OF WVDEP AND SURVEYED LOCATIONS OF WELLS WITHIN 500' OF WELL BORE.



REFERENCES

1" = 200'

JONES CONSULTANTS 2402 PENNSYLVANIA 66 DELMONT, PA 15626
 (724) 757 - 2417 www.jonesconsultant.com SHEET 1 OF 2

FILE #: JC2018-74
 DRAWING #: SANDS B 4H AS-DRILLED
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: 1:2500
 PROVEN SOURCE OF ELEVATION: RTK GPS

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 THE RULES ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Signed: Ryan Jones
 R.P.E.: _____ P.S.: 2165



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 WVDEP
 OFFICE OF OIL & GAS
 601 57TH STREET
 CHARLESTON, WV 25304

DATE: 12/20/2021
 OPERATOR'S WELL #: SANDS UNIT B 4H
 API WELL #: 47 049 02492
 STATE COUNTY PERMIT

Well Type: Oil Waste Disposal Production Deep
 Gas Liquid Injection Storage Shallow
 WATERSHED: LOWER WEST FORK RIVER (0502000206)
 COUNTY/DISTRICT: MARION / LINCOLN
 SURFACE OWNER: XTO ENERGY INC
 OIL & GAS ROYALTY OWNER: XTO ENERGY INC

ELEVATION: 1,230' (EXISTING GRADE)
 QUADRANGLE: SHINNSTON 7.5'
 ACREAGE: 105.34±
 ACREAGE: 1007.6±

01/21/2022

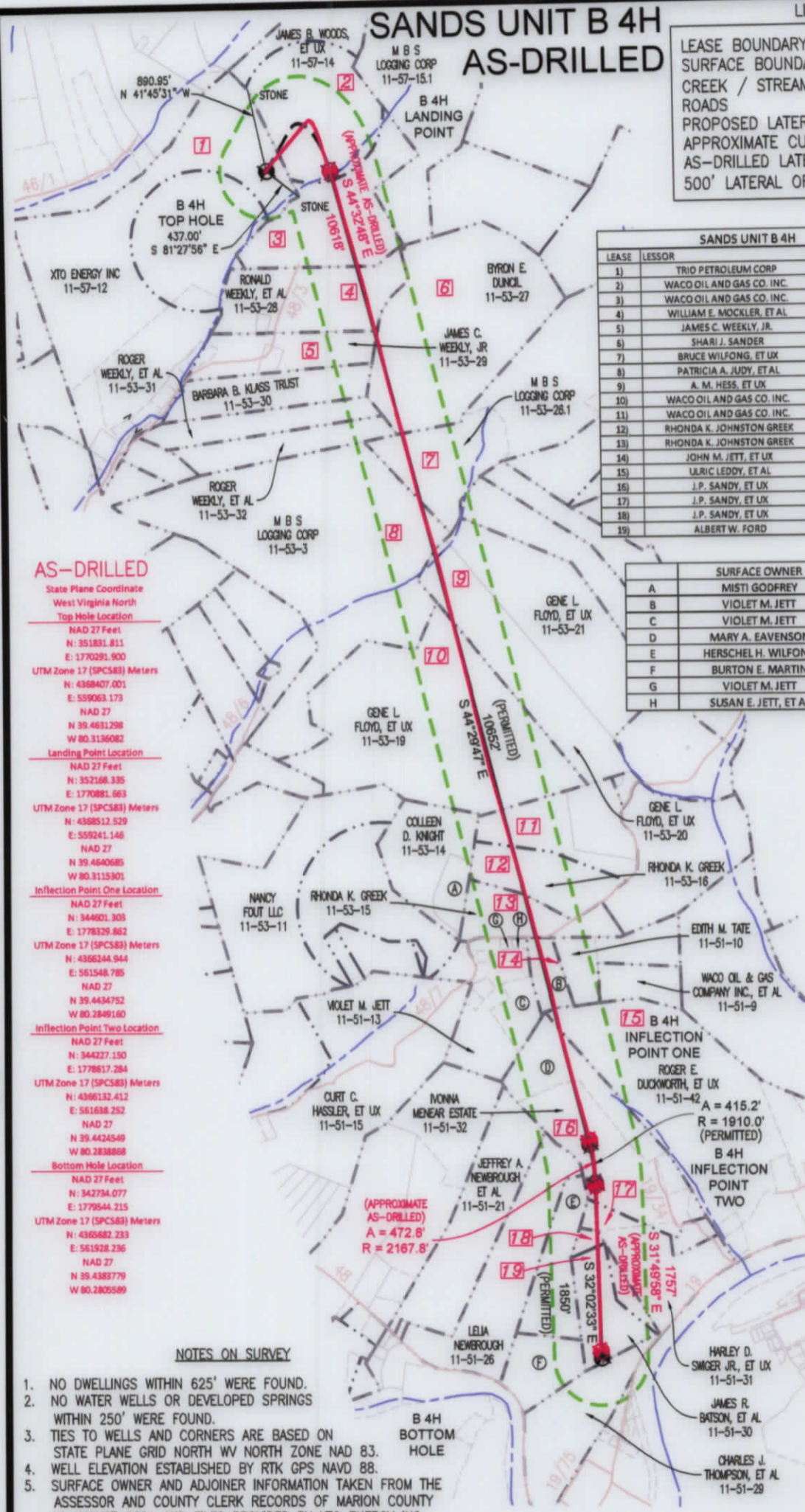
DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
 CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY): _____

TARGET FORMATION: MARCELLUS
 ESTIMATED DEPTH: 7,586' (TVD), 20,771' (TMD) AS-DRILLED
 WELL OPERATOR: XTO ENERGY INC.
 Address: 190 THORN HILL ROAD
 City: WARRENDALE State: PA Zip Code: 15086
 DESIGNATED AGENT: GARY BEALL
 Address: P.O. BOX 1008
 City: JANE LEW State: WV Zip Code: 26378

SANDS UNIT B 4H AS-DRILLED

LINE LEGEND

LEASE BOUNDARY	
SURFACE BOUNDARY	
CREEK / STREAM	
ROADS	
PROPOSED LATERAL	
APPROXIMATE CURVE	
AS-DRILLED LATERAL	
500' LATERAL OFFSET	



SANDS UNIT B 4H		
LEASE	LESSOR	MINERAL ACREAGE
1)	TRIO PETROLEUM CORP	138.05
2)	WACO OIL AND GAS CO. INC.	35.441
3)	WACO OIL AND GAS CO. INC.	85.25
4)	WILLIAM E. MOCKLER, ET AL	30.25
5)	JAMES C. WEEKLY, JR.	18.41
6)	SHARI J. SANDER	65.00
7)	BRUCE WILFONG, ET UX	66.25
8)	PATRICIA A. JUDY, ET AL	130.00
9)	A. M. HESS, ET UX	85.00
10)	WACO OIL AND GAS CO. INC.	86.00
11)	WACO OIL AND GAS CO. INC.	23.00
12)	RHONDA K. JOHNSTON GREEK	17.89375
13)	RHONDA K. JOHNSTON GREEK	15.54
14)	JOHN M. JETT, ET UX	7.12
15)	ULRIC LEDDY, ET AL	106.36
16)	J.P. SANDY, ET UX	78.000
17)	J.P. SANDY, ET UX	SAME AS 16
18)	J.P. SANDY, ET UX	SAME AS 16
19)	ALBERT W. FORD	18.00000

SURFACE OWNER			TAX PARCEL		
LETTER	NAME	PARCEL NUMBER	LETTER	NAME	PARCEL NUMBER
A	MISTI GODFREY	11-53-14.1			
B	VIOLET M. JETT	11-51-11			
C	VIOLET M. JETT	11-51-12			
D	MARY A. EAVENSON	11-51-33			
E	HERSCHEL H. WILFONG	11-51-27			
F	BURTON E. MARTIN	11-51-28			
G	VIOLET M. JETT	11-51-13.2			
H	SUSAN E. JETT, ET AL	11-51-13.1			

PERMITTED

State Plane Coordinate
West Virginia North
Top Hole Location
NAD 27 Feet
N: 351831.811
E: 1770291.900

UTM Zone 17 (SPCS83) Meters
N: 4368407.001
E: 559063.173

NAD 27
N 39.4631298
W 80.3136082

Landing Point Location
NAD 27 Feet
N: 352168.315
E: 1770881.403

UTM Zone 17 (SPCS83) Meters
N: 4368512.515
E: 559241.067

NAD 27
N 39.4640683
W 80.3115311

Inflection Point One Location
NAD 27 Feet
N: 344570.343
E: 1778346.922

UTM Zone 17 (SPCS83) Meters
N: 4366235.598
E: 561554.140

NAD 27
N 39.4433906
W 80.2848547

Inflection Point Two Location
NAD 27 Feet
N: 344245.040
E: 1778608.544

UTM Zone 17 (SPCS83) Meters
N: 4366137.793
E: 561633.975

NAD 27
N 39.44250367
W 80.2839360

Bottom Hole Location
NAD 27 Feet
N: 342794.077
E: 1779544.215

UTM Zone 17 (SPCS83) Meters
N: 4365682.233
E: 561928.236

NAD 27
N 39.4383779
W 80.2805889

AS-DRILLED

State Plane Coordinate
West Virginia North
Top Hole Location
NAD 27 Feet
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Landing Point Location
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E: 1770881.403

UTM Zone 17 (SPCS83) Meters
N: 4368512.529
E: 559241.146

NAD 27
N 39.4640685
W 80.3115301

Inflection Point One Location
NAD 27 Feet
N: 344601.305
E: 1778329.862

UTM Zone 17 (SPCS83) Meters
N: 4366244.944
E: 561548.785

NAD 27
N 39.4434752
W 80.2849160

Inflection Point Two Location
NAD 27 Feet
N: 344227.150
E: 1778617.284

UTM Zone 17 (SPCS83) Meters
N: 4366132.412
E: 561638.252

NAD 27
N 39.4424549
W 80.2838868

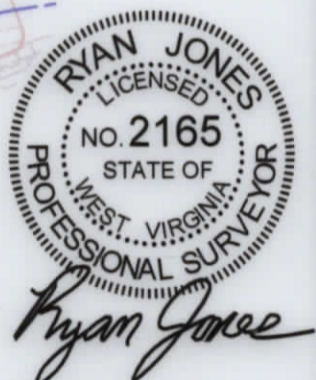
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N: 4365682.233
E: 561928.236

NAD 27
N 39.4383779
W 80.2805889

NOTES ON SURVEY

1. NO DWELLINGS WITHIN 625' WERE FOUND.
2. NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250' WERE FOUND.
3. TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV NORTH ZONE NAD 83.
4. WELL ELEVATION ESTABLISHED BY RTK GPS NAVD 88.
5. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF MARION COUNTY IN AUGUST 2021 AND FILES PROVIDED BY XTO ENERGY INC.
6. WELLS SHOWN ARE TAKEN FROM RECORDS OF WVDEP AND SURVEYED LOCATIONS OF WELLS WITHIN 500' OF WELL BORE.



JONES CONSULTANTS, LLC

SURVEYING • MAPPING • LAND • GAS WELL • PIPELINE
2402 PENNSYLVANIA 66 DELMONT, PA 16026
(724) 757 - 2417 www.jonesconsultant.com

SUPPLEMENTAL SURFACE AND LESSOR EXHIBIT SANDS UNIT B 4H

Drawn By: JRV	Date: 12/20/21	LINCOLN DISTRICT MARION COUNTY, WEST VIRGINIA
Scale: 1" = 1500'	Sheet: SHEET 2 OF 2	File No.: JC2018-74
APP # DD.2010.03384.CAP.CMP.01		



01/21/2022

01/21/2022

24C2 GRID NORTH
WV NORTH ZONE

XTO ENERGY
150 THORN HILL ROAD
WARRENDALE, PA 15086



Drawn By: JRV	Date: 12/20/21
LINCINN DISTRICT MARION COUNTY, WEST VIRGINIA	
SHEETS 2 OF 2 102018-74	
SURFACE AND LESSOR EXHIBIT	
SANDS UNIT B 4H	
SUPPLEMENTAL	

(724) 757 - 2417
www.jonesconsultants.com
2405 PENNSYLVANIA 66 DELMONT, PA 16828
SURVEYING • MAPPING • LAND • GAS WELL • PIPELINE

JONES CONSULTANTS, LLC



- NOTES ON SURVEY**
1. NO DWELLINGS WITHIN 65', WERE FOUND.
 2. NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250' WERE FOUND.
 3. TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV NORTH ZONE NAD 83.
 4. WELL ELEVATION ESTABLISHED BY RTK GPS NAD 88.
 5. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF MARION COUNTY IN AUGUST 2021 AND FILES PROVIDED BY XTO ENERGY INC.
 6. WELLS SHOWN ARE TAKEN FROM RECORDS OF WDEP AND SURVEYED LOCATIONS OF WELLS WITHIN 500' OF WELL BORE.

