

BOTTOM HOLE ← 8429' TOP HOLE ← 5923'

SCALE: 1" = 2400'

ICE EAST UNIT 11H

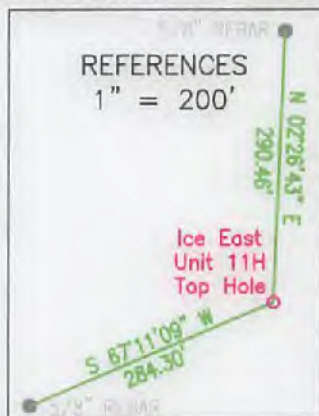
LATITUDE: 39°27'30" SCALE: 1" = 2000'
(USE FOR BOTH TOP AND BOTTOM HOLES)

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 HARRISON COUNTY IN OCTOBER 2017 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.

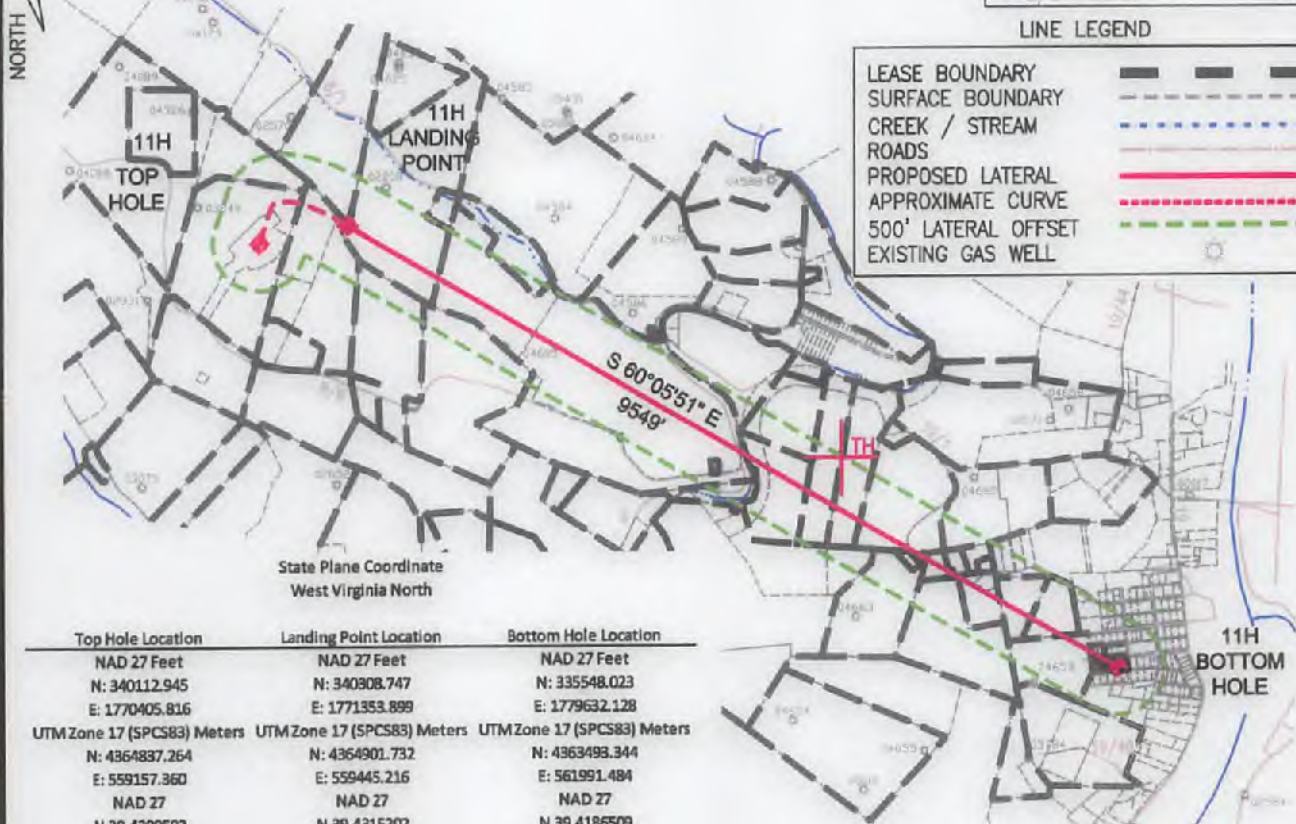
REFERENCES

1" = 200'



LINE LEGEND

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



State Plane Coordinate
West Virginia North

Top Hole Location	Landing Point Location	Bottom Hole Location
NAD 27 Feet	NAD 27 Feet	NAD 27 Feet
N: 340112.945	N: 340908.747	N: 335548.023
E: 1770405.816	E: 1771353.899	E: 1779632.128
UTM Zone 17 (SPCS83) Meters	UTM Zone 17 (SPCS83) Meters	UTM Zone 17 (SPCS83) Meters
N: 4364837.264	N: 4364901.732	N: 4363493.344
E: 559157.360	E: 559445.216	E: 561991.484
NAD 27	NAD 27	NAD 27
N 39.4309592	N 39.4315202	N 39.4186509
W 080.3128292	W 080.3094791	W 080.2800267



2402 PENNSYLVANIA 66 DELMONT, PA 15626
(724) 757 - 2417 www.jonesconsultant.com

SHEET 1 OF 2

FILE #: JC2017-27
DRAWING #: ICE EAST UNIT 11H
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: 5/3/2018
OPERATOR'S WELL #: ICE EAST UNIT 11H
API WELL #: 47 033
STATE COUNTY PERMIT

Well Type: Oil Waste Disposal Production Deep
 Gas Liquid Injection Storage Shallow

WATERSHED: LOWER WEST FORK RIVER (0502000206)
COUNTY/DISTRICT: HARRISON / CLAY
SURFACE OWNER: XTO ENERGY INC
OIL & GAS ROYALTY OWNER: JANICE M. BRENNAN, ET AL

ELEVATION: 1,364' (PROPOSED PAD FINISH GRADE)
QUADRANGLE: SHINNSTON 7.5
ACREAGE: 7.23±
ACREAGE: 334.1±

05/18/2018

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: 7,498' (TVD), 17,659' (TMD)

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

ICE EAST UNIT 11H

ICE EAST UNIT 11H		
LEASE	LESSOR	MINERAL ACREAGE
1)	JANICE M. BRENNAN, ET AL	39.50
2)	ROBERT T. JOSEPH, ET AL	27.81
3)	FARIS W. COFFINDAFFER, ET AL	37.375
4)	XTO ENERGY INC	46.00
5)	CNX GAS COMPANY LLC	95.16
6)	XTO ENERGY INC	8.30
7)	LOUISE J. MICHAELS	13.50
8)	ROBERT W. ORR, ET AL	12.88
9)	JARVISVILLE HOLDINGS, LLC, ET AL	21.260
10)	JASON L. STARSICK, ET UX	0.37557
11)	HEATHER STARSICK	0.02
12)	JIMMIE F. ASH, ET UX	1.69
13)	MARK A. ASH, ET UX	1.23
14)	DANIEL WULPERT, ET AL	5.08
15)	JAMES HYDE, ET UX	5.8000
16)	JAMES HYDE, ET UX	5.8300
17)	CHARLES G. ROCKWELL, ET UX	11.00
18)	ROY D. SANDY, ET UX	0.4650
19)	TRACI M. BOYD, ET AL	0.2060
20)	JAMES E. SANDY	0.2060
21)	RONALD E. NUTTER, ET AL	0.4320

	SURFACE OWNER	TAX PARCEL
A	XTO ENERGY INC	5-148-27
B	XTO ENERGY INC	5-148-27.1
C	BELL SHAREHOLDERS LLC	5-148-32
D	BELL SHAREHOLDERS LLC	5-148-33
E	BELL SHAREHOLDERS LLC	5-148-37
F	BERNARD WILSON JR., ET UX	5-148-37.1
G	BELL SHAREHOLDERS LLC	5-148-55
H	BELL SHAREHOLDERS LLC	5-168-38
I	LAWRENCE B. BITTINGER, ET UX	5-168-13
J	BETTY L. MATHENY	5-168-42
K	HEATHER L. STARSICK	5-168-41.1
L	LAWRENCE B. BITTINGER, ET UX	5-168-13.1
M	HEATHER STARSICK	5-168-43.3
N	JIMMIE F. ASH, ET UX	5-168-43
O	MARK A. ASH, ET UX	5-168-43.2
P	JAMES E. HYDE, ET UX	5-168-46
Q	RUSSELL E. HALL	5-168-45.1
R	JAMES HYDE	5-168-49
S	ALICE J. MATHENY	5-168-43.1
T	ALICE J. MATHENY	5-168-44
U	ROY D. SANDY, ET UX	5-0907-102
V	LESTER W. ASH, ET UX	5-0907-115
W	ABANDONED RAILROAD	
X	JAMES E. SANDY	5-0907-117
Y	LLOYD L. PARRISH, ET AL	5-0907-118
Z	ROY D. SANDY, ET UX	5-0907-101

LINE	BEARING	DISTANCE	LINE	BEARING	DISTANCE
L1	S 53°48'07" E	1280.85	L25	S 41°35'28" W	593.57
L2	N 60°27'12" E	43.56	L26	N 87°47'26" W	729.45
L3	S 82°32'48" E	40.92	L27	S 71°14'56" W	702.01
L4	S 52°32'48" E	86.00	L28	S 07°52'37" E	147.85
L5	S 28°27'12" W	64.90	L29	S 10°37'07" E	188.88
L6	S 52°38'14" E	685.76	L30	S 08°45'00" E	84.33
L7	N 29°21'59" E	2048.51	L31	N 88°11'32" E	575.69
L8	S 63°53'31" E	294.52	L32	S 84°24'01" E	88.04
L9	S 49°24'04" E	1287.00	L33	S 87°58'42" E	189.59
L10	S 52°58'12" E	359.40	L34	S 09°17'27" E	338.83
L11	S 55°27'00" E	103.99	L35	N 84°51'44" E	98.78
L12	N 25°34'45" E	13.26	L36	S 05°32'13" E	141.54
L13	N 89°23'02" E	1013.49	L37	N 84°27'47" E	150.00
L14	S 07°18'04" W	197.99	L38	S 05°32'13" E	15.00
L15	S 60°38'55" E	949.20	L39	N 84°27'47" E	225.00
L16	S 17°31'14" W	110.03	L40	S 05°32'13" E	120.00
L17	S 13°40'19" W	162.34	L41	N 84°27'47" W	375.00
L18	S 15°10'19" W	152.16	L42	S 05°32'13" E	30.00
L19	S 19°45'03" W	150.06	L43	N 84°27'47" E	375.00
L20	S 03°44'29" W	86.19	L44	S 05°50'40" E	126.01
L21	S 76°09'19" E	185.34	L45	S 85°22'47" W	375.72
L22	S 71°19'30" E	151.35	L46	S 24°48'12" W	348.83
L23	S 49°41'09" E	108.43	L47	S 67°07'13" E	740.09
L24	S 38°16'06" E	88.48	L48	S 18°15'00" W	108.31
L49	S 22°28'38" W	417.18	L49	S 22°28'38" W	417.18
L50	N 13°34'02" E	1083.08	L50	N 13°34'02" E	1083.08
L51	N 89°27'40" W	597.18	L51	N 89°27'40" W	597.18
L52	N 89°37'58" W	774.75	L52	N 89°37'58" W	774.75
L53	N 89°12'52" W	1120.57	L53	N 89°12'52" W	1120.57
L54	S 30°14'53" W	152.31	L54	S 30°14'53" W	152.31
L55	S 68°57'38" E	1887.50	L55	S 68°57'38" E	1887.50
L56	S 43°02'28" W	1213.87	L56	S 43°02'28" W	1213.87
L57	N 35°15'44" E	245.28	L57	N 35°15'44" E	245.28
L58	S 68°44'29" E	204.20	L58	S 68°44'29" E	204.20
L59	S 70°09'39" E	155.88	L59	S 70°09'39" E	155.88
L60	S 20°29'09" W	705.26	L60	S 20°29'09" W	705.26

LINE	BEARING	DISTANCE
L61	N 73°30'21" W	427.87
L62	N 28°18'04" E	132.23
L63	S 74°19'00" E	197.83
L64	S 14°33'37" W	388.48
L65	N 61°18'48" W	285.43
L66	N 88°35'26" E	180.00
L67	S 03°24'34" E	136.00
L68	S 86°35'26" W	180.00
L69	N 03°24'34" W	136.00
L70	S 89°39'12" W	264.39
L71	N 87°46'44" W	116.70
L72	N 83°29'38" W	68.88
L73	N 87°04'38" W	101.83
L74	N 00°18'46" E	1738.61
L75	S 89°41'14" E	845.89
L76	S 53°48'07" E	171.09
L77	S 00°12'26" E	852.42
L80	N 28°44'01" E	813.06
L81	N 70°17'27" W	264.00
L82	N 28°43'55" E	518.02
L83	S 57°07'15" E	289.07
L84	N 02°55'20" W	507.15
L85	N 70°44'34" W	318.78
L86	N 71°24'00" W	16.50
L87	N 86°39'00" W	827.00
L88	N 79°39'00" W	286.37
L89	N 52°54'00" W	112.82
L90	S 17°18'13" W	35.33
L91	S 13°14'17" W	22.25
L92	S 61°19'18" E	17.46
L93	S 14°50'40" W	800.26

LINE LEGEND

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

NOTES ON SURVEY

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State Plane Coordinate
West Virginia North
Top Hole Location
NAD 27 Feet
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E: 1770405.816
UTM Zone 17 (SPCS83) Meters
N: 4364837.264
E: 599157.360
NAD 27
N 39.4309592
W 080.3128292

Landing Point Location
NAD 27 Feet
N: 340308.747
E: 1771353.899
UTM Zone 17 (SPCS83) Meters
N: 4364901.732
E: 599445.216
NAD 27
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W 080.3094791

Bottom Hole Location
NAD 27 Feet
N: 335548.023
E: 1779632.128
UTM Zone 17 (SPCS83) Meters
N: 4363493.344
E: 561991.484
NAD 27
N 39.4188505
W 080.2800267

JONES CONSULTANTS, LLC

SURVEYING • MAPPING • LAND • GAS WELL • PIPELINE
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05/18/2018

XTO ENERGY
190 THORN HILL ROAD
WARRENDALE, PA 15086

0' 1200'



SUPPLEMENTAL SURFACE AND LESSOR EXHIBIT

ICE EAST UNIT 11H

Drawn By:	JRV	Date:	5/3/18	CLAY DISTRICT
Scale:	1" = 1200'	Sheet:	SHEET 2 OF 2	HARRISON COUNTY, WEST VIRGINIA
File No.:	1702326	File No.:	JC2017-27	

