

**BOPCO, L.P.**  
810 Houston St  
Fort Worth, Texas 76102  
817-885-2453

May 1, 2018

**FEDERAL EXPRESS**

Bureau of Land Management  
Carlsbad District Office  
620 E. Green St.  
Carlsbad, New Mexico 88220  
Attn: Mr. Chris Walls

New Mexico State Land Office  
Commissioner of Public Lands  
310 Old Santa Fe Trail  
Santa Fe, New Mexico 87501  
Attention: Mr. Anchor Holm



New Mexico Oil Conservation Division  
1220 St. Francis  
Santa Fe, New Mexico 87505  
Attention: Mr. William Jones

Re: Commercial Determination  
Big Eddy Unit D15 24H  
Bone Spring Formation  
Eddy County, New Mexico

Gentlemen:

Please find attached hereto one (1) copy of XTO's (as agent and attorney in fact for BOPCO, LP) commercial determination worksheets and exhibits which indicate that the subject well is a commercial well in the Delaware Formation. Please indicate your concurrence to the above Commercial Determination to the undersigned at the address above.

Thank you very much and should you have any questions or comments in regard to the attached commercial determination, please do not hesitate to contact the undersigned at the number or email address below.

Very truly yours,

Ty Eagle  
(817) 885-3008  
Ty\_Eagle@xtoenergy.com

Bureau of Land Management

New Mexico State Land Office

New Mexico Oil Conservation Division

By: \_\_\_\_\_

By: \_\_\_\_\_

By: \_\_\_\_\_

Its: \_\_\_\_\_

Its: \_\_\_\_\_

Its: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_



Date: April 24, 2018

To: Tracie Cherry

From: Trent Boneau

Re: **Commercial Determination: Big Eddy Unit DI5 24H**  
**API 3001543444**  
**20S 31E Sec 27**  
**Eddy County, New Mexico**

Attached is the economic worksheet and well forecast to be submitted for commercial determination. The Big Eddy Unit DI5 24H was drilled in 2017 as a horizontal producer to a measured depth of 21,406' in the 2<sup>nd</sup> Bone Spring. The well is producing from perforations from 9879'-21279'. By early 2018 the well has produced 132 kBO, and as of April 2018 was testing 585 bopd, 1369 kefd, and 1759 bwpd. This well is expected to recover approximately 1117 kBOE from the current completion. The 24H cost \$11.7M to drill and complete.

Historical data along with the most recent EIA future pricing estimates for oil and natural gas were utilized in the economic evaluation. Prices were adjusted downward by approximately 12% to account for local conditions. Operating costs were assumed to be \$10k/mo, declining to \$5k/mo plus a fixed \$0.75/bw cost for water disposal.

The Big Eddy Unit DI5 24H is expected to have a lifetime undiscounted cashflow of approximately \$29.2M and bring > 10% rate of return. **It is commercial.**

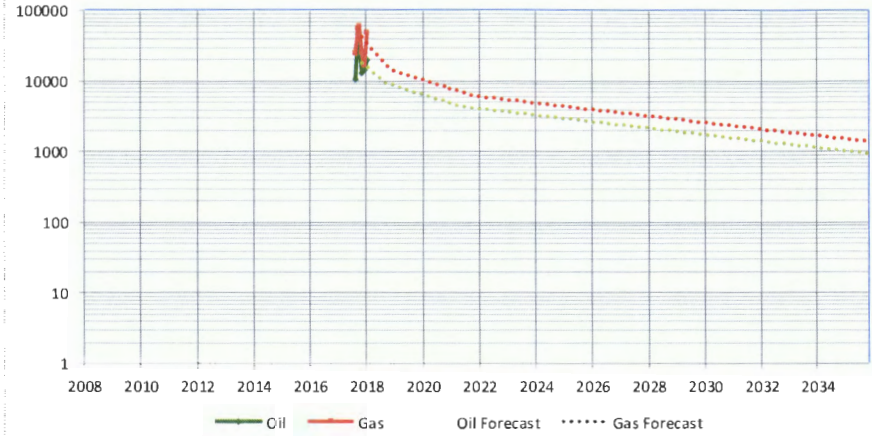
Trent Boneau  
Reservoir Engineering Advisor  
Delaware Basin Subsurface Team

Well Name BEU DIS 24H  
 API Number 3001543444  
 Formation 2nd Bspring  
 Actual CAPEX, K\$ 11739  
 First Production Date 10/1/2017  
 First Forecast Date 1/1/2018  
 Cum Oil to Date (kbo) 132.453  
 Cum Wet Gas to Date (Mcf) 226.934  
 Water to Date (kbw) 418.273  
 Assumed Shrink 0.6  
 NGL Yield Assumed 125  
 WTI Price % 0.9  
 HHub Price % 0.82  
 NGL Price % 0.8  
 Tax Gas 8.19  
 Tax Oil 7.09  
 W1 % 100  
 NR1 % 84.5  
 OPX/mo Yr 1-3 10000  
 OPX/mo Yr 4+ 5000  
 OPX/water (\$/bbl) 0.75  
 CAPEX, K\$ 11739

**COMMERCIAL**

TOTAL NCF 0% DISCOUNT 29,160 K\$  
 TOTAL NCF 5% DISCOUNT 16,853 K\$  
 EUR Oil 878622 bo  
 EUR Gas 1432394 kcf  
 1117354.539

**BEU DIS 24H**



**ECONOMICS MODULE**

Date	Oil	Wet Gas	Dry Gas	NGL				Total Gross		Total	Local	Net Oper	Total	BTax	Discounted	
	Volume	Volume	Volume	Volume,	Oil Price	Gas Price	NGL Price	Revenue	Net Revenue	Opcost	Taxes	Income	Capital	CFlow	Cash Flow	
	BO	kcf	kcf	gals	\$/BO	\$/kcf	\$/gal	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	
HISTORICAL	2017	86353	137350	82410	721088	46.07	2.70	0.25	3909.1	3303	304.5	253.96	2745	11739	-8994	-8994
FORECAST	2018	154159	318142	190885	1670247	49.37	2.89	0.27	7664.4	6476	485.1	493.90	5497	0	5497	5236
FORECAST	2019	93082	151445	90867	795088	52.90	3.10	0.29	4847.1	4096	340.5	313.98	3441	0	3441	3121
FORECAST	2020	69811	113584	68150	596316	56.68	3.32	0.31	3895.3	3292	225.3	252.04	2814	0	2814	2431
FORECAST	2021	53281	85188	51113	447237	60.73	3.56	0.33	3180.8	2688	186.2	205.70	2296	0	2296	1889
FORECAST	2022	46628	69254	41552	363583	65.08	3.81	0.36	2964.7	2505	170.4	191.93	2143	0	2143	1679
FORECAST	2023	41965	62329	37397	327225	69.73	4.09	0.38	2859.0	2416	159.4	184.93	2072	0	2072	1546
FORECAST	2024	37768	56096	33657	294502	74.71	4.38	0.41	2757.1	2330	149.5	178.20	2002	0	2002	1423
FORECAST	2025	33991	50486	30292	265052	80.06	4.51	0.44	2654.3	2243	140.5	171.73	1931	0	1931	1307
FORECAST	2026	30592	45437	27262	238547	81.58	4.61	0.45	2434.6	2057	132.5	157.46	1767	0	1767	1139
FORECAST	2027	27533	40894	24536	214692	83.13	4.71	0.46	2233.0	1887	125.2	144.38	1617	0	1617	993
FORECAST	2028	24780	36804	22083	193223	84.71	4.81	0.46	2048.2	1731	118.7	132.39	1480	0	1480	865
FORECAST	2029	22302	33124	19874	173901	86.32	4.92	0.47	1878.6	1587	112.8	121.39	1353	0	1353	754
REMAINDER		156378	232261	139356	1219369				15343	12965	2230	994	9741	0	9741	3466
<b>TOTAL</b>		<b>878622</b>	<b>1432394</b>	<b>859436</b>	<b>7520068</b>				<b>58669</b>	<b>49575</b>	<b>4881</b>	<b>3796</b>	<b>40899</b>	<b>11739</b>	<b>29160</b>	<b>16853</b>

**NM OIL CONSERVATION**  
 UNITED STATES DEPARTMENT OF THE INTERIOR  
 BUREAU OF LAND MANAGEMENT  
 ARTESIA DISTRICT  
 OGD Artesia  
**JAN 31 2018**

FORM APPROVED  
 OMB No. 1004-0137  
 Expires: July 31, 2010

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

5. Lease Serial No.  
 NMLC065914A

1a. Type of Well  Oil Well  Gas Well  Dry  Other  
 b. Type of Completion  New Well  Work Over  Deepen  Plug Back  Diff. Resvr.  
 Other \_\_\_\_\_

**RECEIVED**

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.  
 891000326X

2. Name of Operator  
 BOPCO LP  
 Contact: TRACIE J CHERRY  
 E-Mail: tracie\_cherry@xtoenergy.com

8. Lease Name and Well No.  
 BIG EDDY UNIT DI 5 24H

3. Address 6401 HOLIDAY HILL RD BLDG 5 SUITE 200  
 MIDLAND, TX 79707  
 3a. Phone No. (include area code)  
 Ph: 432.683.2277

9. API Well No.  
 30-015-43444-00-S1

4. Location of Well (Report location clearly and in accordance with Federal requirements)\*  
 At surface Sec 27 T20S R31E Mer NMP  
 SWNE 2000FNL 1873FEL 32.324529 N Lat, 103.511447 W Lon  
 At top prod interval reported below Sec 27 T20S R31E Mer NMP  
 SENE 1983FNL 1044FEL  
 At total depth Sec 25 T20S R31E Mer NMP  
 SENE 1968FNL 161FEL

10. Field and Pool, or Exploratory  
 WC WILLIAMS SINK-BONE SPRING

11. Sec., T., R., M., or Block and Survey  
 or Area Sec 27 T20S R31E Mer NMP

12. County or Parish  
 EDDY  
 13. State  
 NM

14. Date Spudded  
 05/23/2017  
 15. Date T.D. Reached  
 07/17/2017  
 16. Date Completed  
 D & A  Ready to Prod.  
 09/17/2017

17. Elevations (DF, KB, RT, GL)\*  
 3524 GL

18. Total Depth: MD 21406 TVD 9599  
 19. Plug Back T.D.: MD TVD  
 20. Depth Bridge Plug Set: MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)  
 CNL SONIC HRLA CBL  
 22. Was well cored?  No  Yes (Submit analysis)  
 Was DST run?  No  Yes (Submit analysis)  
 Directional Survey?  No  Yes (Submit analysis)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17.500	16.000 J55	84.0		859		445	124	0	
14.750	13.375 P110	68.0		2810		615	192	0	
12.750	9.625 J55	40.0		3502	2930	800	241	0	
8.500	5.500 P-110	17.0		21406		3065		0	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.875	8826							

25. Producing Intervals

26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) BONE SPRING 2ND	9206	21406	9879 TO 21281		2736	OPEN
B)						
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
9879 TO 21281	FRAC INTERVAL USING 27627002# PROPANT, 72472 GAL ACID, 27181686 GAL SLICK WTR ACROSS 58 STAGES

**ACCEPTED FOR RECORD**

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
10/11/2017	10/17/2017	24	→	826.0	878.0	5018.0			ELECTRIC PUMP SUB-SURFACE
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→	826	878	5018	1063	POW	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

BUREAU OF LAND MANAGEMENT  
 CARLSBAD FIELD OFFICE

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #393419 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\*

Reclamation due 03/17/2018

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

29. Disposition of Gas(Sold, used for fuel, vented, etc.)  
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
BELL CANYON	3932	4684	SANDSTONE, SHALE, LIMESTONE	RUSTLER	665
CHERRY CANYON	4684	5887	SANDSTONE, SHALE, LIMESTONE	SALADO	941
BRUSHY CANYON	5887	7510	SANDSTONE, SHALE, LIMESTONE	BELL CANYON	3932
BONE SPRING	7510	8738	LIMESTONE, SHALE, SANDSTONE	CHERRY CANYON	4684
BONE SPRING 1ST	8738	9206	SANDSTONE, LIMESTONE, SHALE	BRUSHY CANYON	5887
BONE SPRING 2ND	9206		SANDSTONE, LIMESTONE, SHALE	BONE SPRING	7510

32. Additional remarks (include plugging procedure):

Pilot hole drilled to 9812' MD. Set KO plug to 8590' w/535 sx cmt.

Well flowing when completion sundry filed. Converted to pump prior to testing.

33. Circle enclosed attachments:

- 1. Electrical/Mechanical Logs (1 full set req'd.)
- 2. Geologic Report
- 3. DST Report
- 4. Directional Survey
- 5. Sundry Notice for plugging and cement verification
- 6. Core Analysis
- 7. Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

**Electronic Submission #393419 Verified by the BLM Well Information System.  
For BOPCO LP, sent to the Carlsbad  
Committed to AFMSS for processing by DUNCAN WHITLOCK on 11/03/2017 (18DW0021SE)**

Name (please print) TRACIE J CHERRY

Title REGULATORY ANALYST

Signature \_\_\_\_\_ (Electronic Submission)

Date 10/30/2017

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**\*\* REVISED \*\* REVISED \*\* REVISED \*\* REVISED \*\* REVISED \*\* REVISED \*\* REVISED \*\* REVISED \*\***

**Revisions to Operator-Submitted EC Data for Well Completion #393419**

	<b>Operator Submitted</b>	<b>BLM Revised (AFMSS)</b>
Lease:	NMLC065914A	NMLC065914A
Agreement:	NMNM68294X	891000326X (NMNM68294X)
Operator:	BOPCO LP 6401 HOLIDAY HILL RD BLDG 5 SUITE 200 MIDLAND, TX 79701 Ph: 432-683-2277	BOPCO LP 6401 HOLIDAY HILL RD BLDG 5 SUITE 200 MIDLAND, TX 79707 Ph: 432.683.2277
Admin Contact:	TRACIE J CHERRY REGULATORY ANALYST E-Mail: tracie_cherry@xtoenergy.com  Ph: 432-221-7379	TRACIE J CHERRY REGULATORY ANALYST E-Mail: tracie_cherry@xtoenergy.com Cell: 432.221.7379 Ph: 432.683.2277
Tech Contact:	TRACIE J CHERRY REGULATORY ANALYST E-Mail: tracie_cherry@xtoenergy.com  Ph: 432-221-7379	TRACIE J CHERRY REGULATORY ANALYST E-Mail: tracie_cherry@xtoenergy.com Cell: 432.221.7379 Ph: 432.683.2277
Well Name: Number:	BIG EDDY UNIT DI5 024H	BIG EDDY UNIT DI 5 24H
Location:		
State:	NM	NM
County:	EDDY	EDDY
S/T/R:	Sec 27 T20S R31E Mer NMP	Sec 27 T20S R31E Mer NMP
Surf Loc:	SWNE 2000FNL 1873FEL	SWNE 2000FNL 1873FEL 32.324529 N Lat, 103.511447 W Lon
Field/Pool:	WC G-06 S203127G;B.S.	WC WILLIAMS SINK-BONE SPRING
Logs Run:	CNL, SONIC, HRLA, CBL	CNL SONIC HRLA CBL
Producing Intervals - Formations:	2ND BONE SPRING	BONE SPRING 2ND
Porous Zones:	BELL CANYON CHERRY CANYON BRUSHY CANYON BONE SPRING 1ST BONE SPRING 2ND BONE SPRING	BELL CANYON CHERRY CANYON BRUSHY CANYON BONE SPRING BONE SPRING 1ST BONE SPRING 2ND
Markers:	RUSTLER SALADO BELL CANYON CHERRY CANYON BRUSHY CANYON BONE SPRING	RUSTLER SALADO BELL CANYON CHERRY CANYON BRUSHY CANYON BONE SPRING

NM OIL CONSERVATION  
ARTESIA DISTRICT

State of New Mexico NOV 02 2017

Form C-102

Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION

Revised August 1, 2011

Submit one copy to appropriate  
District Office

1220 South St. Francis Dr.  
Santa Fe, NM 87505

AMENDED REPORT  
*As Drilled*

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720  
**District III**  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
**District IV**  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-015-43444		<sup>2</sup> Pool Code 98232		<sup>3</sup> Pool Name WC-015 G-06 S203127G; Bone Spring	
<sup>4</sup> Property Code 313958		<sup>5</sup> Property Name BIG EDDY UNIT D15			<sup>6</sup> Well Number 24H
<sup>7</sup> OGRID No. 260737		<sup>8</sup> Operator Name BOPCO, L.P.			<sup>9</sup> Elevation 3524'

<sup>10</sup> Surface Location

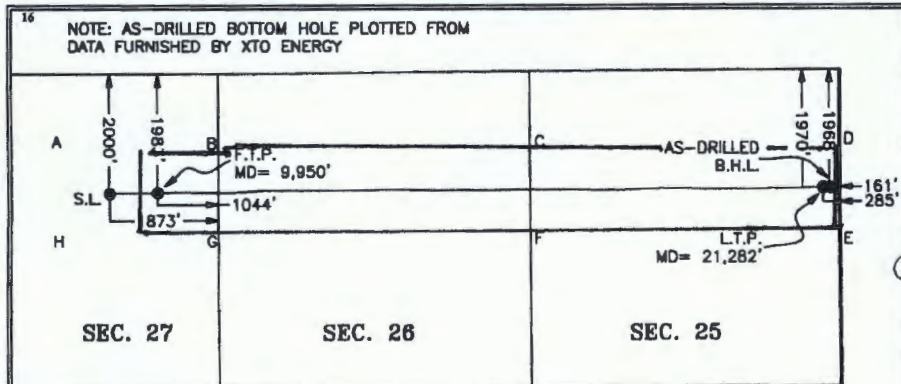
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	27	29 S	30 E		2,000	NORTH	1,873	EAST	EDDY

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	25	29 S	30 E		1,968	NORTH	161	EAST	EDDY

<sup>12</sup> Dedicated Acres 360	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
--------------------------------------	-------------------------------	----------------------------------	-------------------------

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



**<sup>17</sup> OPERATOR CERTIFICATION**  
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well as this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

*Tracie J. Cherry* 10/30/17  
Signature Date

Tracie J. Cherry  
Printed Name

tracie\_cherry@xtoenergy.com  
E-mail Address

GEODETIC COORDINATES SURFACE LOCATION	LAST TAKE POINT NAD 27 NME	GEODETIC COORDINATES SURFACE LOCATION	LAST TAKE POINT NAD 83 NME
NAD 27 NME Y= 562,648.7 X= 647,698.4 LAT.= 32.545916°N LONG.= 103.954020°W	Y= 562,745.4 X= 659,850.7 LAT.= 32.546025°N LONG.= 103.814583°W	NAD 83 NME Y= 562,710.3 X= 688,878.3 LAT.= 32.546036°N LONG.= 103.854520°W	Y= 562,807.0 X= 701,030.6 LAT.= 32.546146°N LONG.= 103.815082°W
FIRST TAKE POINT NAD 27 NME	AS-DRILLED BOTTOM HOLE LOCATION NAD 27 NME	FIRST TAKE POINT NAD 83 NME	AS-DRILLED BOTTOM HOLE LOCATION NAD 83 NME
Y= 562,664.8 X= 648,526.8 LAT.= 32.545950°N LONG.= 103.851331°W	Y= 562,747.6 X= 659,974.5 LAT.= 32.546030°N LONG.= 103.814181°W	Y= 562,726.4 X= 689,706.7 LAT.= 32.546070°N LONG.= 103.851832°W	Y= 562,809.2 X= 701,154.4 LAT.= 32.546150°N LONG.= 103.814680°W
CORNER COORDINATES TABLE NAD 27 NME		CORNER COORDINATES TABLE NAD 83 NME	
A - Y= 563,326.0 N, X= 646,933.4 E	B - Y= 563,326.0 N, X= 649,587.6 E	A - Y= 563,387.8 N, X= 688,114.0 E	B - Y= 563,387.8 N, X= 690,748.2 E
C - Y= 563,365.3 N, X= 654,844.5 E	D - Y= 563,391.4 N, X= 660,131.4 E	C - Y= 563,427.4 N, X= 696,025.1 E	D - Y= 563,453.3 N, X= 701,312.0 E
E - Y= 562,066.5 N, X= 680,138.6 E	F - Y= 562,041.0 N, X= 654,851.9 E	E - Y= 562,128.3 N, X= 701,319.2 E	F - Y= 562,102.8 N, X= 696,032.5 E
G - Y= 562,003.9 N, X= 649,572.9 E	H - Y= 562,004.0 N, X= 646,936.8 E	G - Y= 562,085.7 N, X= 690,753.5 E	H - Y= 562,085.8 N, X= 688,117.5 E

**<sup>18</sup> SURVEYOR CERTIFICATION**  
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

07-24-2017  
Date of Survey

Signature and Seal of Professional Surveyor:  
*Mark Dillon Harp*

MARK DILLON HARP 23786  
Certificate Number

AI 2017071104