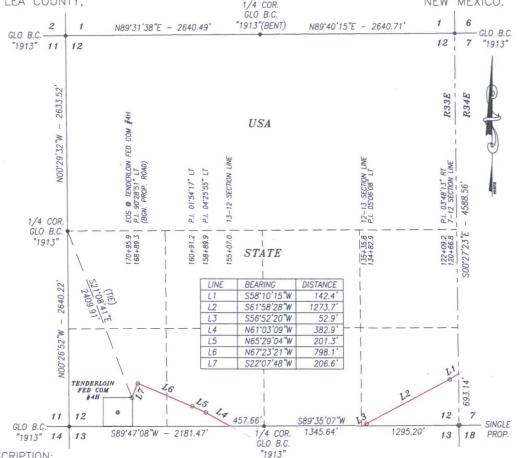


-							
11	12	07	08	09	10	176 11	12
14	13	18	17	16	15	14	13
23	1S 33E 24	19	20	21	22 21S 34E	23	24 21S 35E
26	25	30	29	28	27	26	25
35	36	31	31 32		34	35	36
02	01	06	05	04	03	02	01
TEND	12 POSED DERLOIN COM #4H	07	08	09	10	11	12
14	13	18	17	16	34E 15	14	22S 35E 13
	WELL WELLPAD EXISTING R PROPOSED	W.O. # 17	TWP: 22 S. W MEXICO CO -72 LEASE: TENDE	DUNTY: LEA 1 RLOIN FED COM 10,000 12,500 F	ELEVATION:3524.3 190' FSL & 660' FWL SURVEY: N.M.P.M	COG OI	PERATING, LLC.
PROPOSED POAD						PH: (575)	746-2158 FAX: (575) 746-2158 pw@harcrowsurveying.com

AN ACCESS ROAD SERVICING THE TENDERLOIN FEDERAL COM #4H IN SECTION 12, TOWNSHIP 22 SOUTH, RANGE 33 EAST, N.M.P.M., LEA COUNTY. NEW MEXICO.



TWO STRIPS OF LAND 30.0 FEET WIDE CROSSING STATE OF NEW MEXICO LAND IN SECTION 12, TOWNSHIP 22 SOUTH, RANGE 33 EAST, NMPM, LEA COUNTY, NEW MEXICO AND BEING 15.0 FEET RIGHT AND 15.0 FEET LEFT OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT ON THE EAST LINE OF SAID SECTION, WHICH LIES S00"27"23"E 4588.56 FEET FROM THE NORTHEAST CORNER; THEN S58'10'15"W 142.4 FEET; THEN S61'58'28"W 1273.7 FEET; THEN S56'52'20"W 52.9 FEET; TO A POINT ON THE SOUTH LINE OF SAID SECTION, WHICH LIES N89'35'07"E 1345.64 FEET FROM THE SOUTH QUARTER CORNER.

BEGINNING AT A POINT ON THE SOUTH LINE OF SAID SECTION, WHICH LIES S89'47'08"W 457.66 FEET FROM THE SOUTH QUARTER CORNER; THEN N61'03'09"W 382.9 FEET; THEN N65'29'04"W 201.3 FEET; THEN N67'23'21"W 798.1 FEET; THEN S22'07'48"W 206.6 FEET; TO A POINT IN THE SW/4 SW/4 OF SAID SECTION, WHICH LIES S21'08'41"E 2409.1 FEET FROM THE WEST QUARTER CORNER.

SAID STRIPS OF LAND BEING 3057.9 FEET OR 185.33 RODS IN LENGTH, CONTAINING 2.106 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS

SE/4 SE/4 89.03 RODS OR 1.012 ACRES

SE/4 SW/4 58.19 RODS OR 0.661 ACRES SW/4 SW/4 38.11 RODS OR 0.433 ACRES

BASIS OF BEARING:

CHAD HARCROW N.M.P.S.

BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.

I. CHAD HARCROW, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR THAT HARDOW, A NEW MEXICO REGISTERED PROFESSIONAL SONCEION CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS OL. HARCRO FOR SURVEYING IN NEW MEXICO.

NO. 17777

AE W

MEXIC

17777

POFESSIONA

SUPVEYOR

/19/17

HARCROW SURVEYING, LLC 2314 W. MAIN ST, ARTESIA, N.M. 88210 PH: (575) 746-2158 FAX: (575) 746-2158 c.harcrow@harcrowsurveying.com



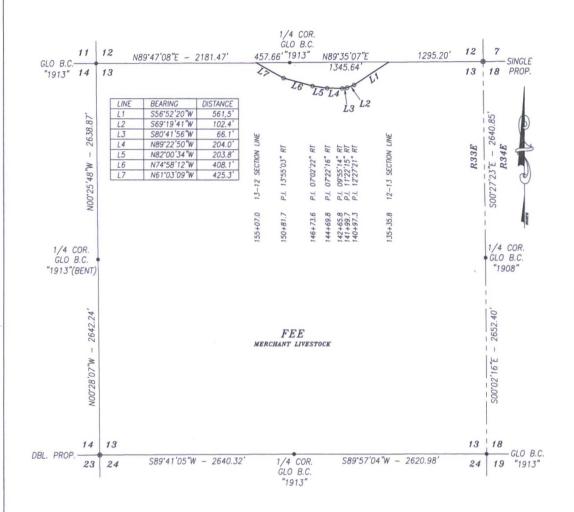
1000	0	1000	2000	FEET
= $=$ $=$	HH			j
	SCALE	1"=1000'		

COG OPERATING. LLC

AN ACCESS ROAD LOCATED IN 12. TOWNSHIP 22 SOUTH, RANGE 33 EAST. NMPM, LEA COUNTY, NEW MEXICO

I	SURVEY DATE:	JAN	UARY 17, 2017	EXHIBIT B
I	DRAFTING DATE:	JA	NUARY 19, 2017	PAGE 4 OF 4
I	APPROVED BY:	CH	DRAWN BY: SP	FILE: 17-72

AN ACCESS ROAD SERVICING THE TENDERLOIN FEDERAL COM #4H IN SECTION 13, TOWNSHIP 22 SOUTH, RANGE 33 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.



DESCRIPTION

A STRIP OF LAND 30.0 FEET WIDE AND 1971.2 FEET OR 119.47 RODS OR 0.373 MILES IN LENGTH CROSSING FEE LAND IN SECTION 13, TOWNSHIP 22 SOUTH, RANGE 33 EAST, LEA COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND 15.0 FEET RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

BASIS OF BEARING:

CHAD HARCROW N.M.P.S.

BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.

CERTIFICATION

I, CHAD HARCROW, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THIS SURVEY AND PLAT MEST THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

NO. 17777

MEXIC

1/19/17

DATE

2314 W. MAIN ST, ARTESIA, N.M. 88210 PH: (575) 746-2158 FAX: (575) 746-2158 c.harcrow@harcrowsurveying.com

HARCROW SURVEYING, LLC



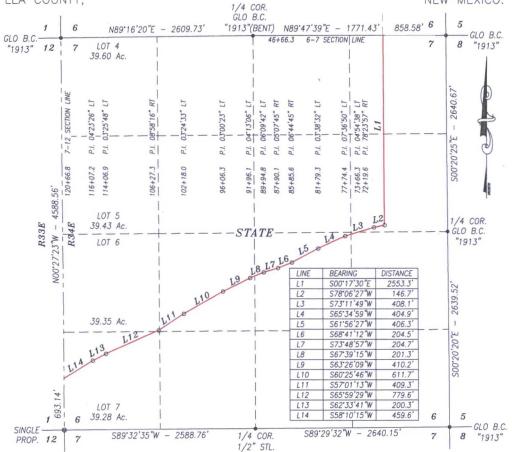
1000	0	1000	2000 FEET
HHH	SCALE:	1"=1000'	

COG OPERATING, LLC

AN ACCESS ROAD LOCATED IN SECTION 13, TOWNSHIP 22 SOUTH, RANGE 33 EAST, NMPM, LEA COUNTY, NEW MEXICO

SURVEY DATE: JAN	NUARY 17, 2017	EXHIBIT B
DRAFTING DATE: JA	NUARY 19, 2017	PAGE 3 OF 4
APPROVED BY: CH	DRAWN BY: SP	FILE: 17-72

AN ACCESS ROAD SERVICING THE TENDERLOIN FEDERAL COM #4H IN SECTION 7, TOWNSHIP 22 SOUTH, RANGE 34 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.



DESCRIPTION

A STRIP OF LAND 30.0 FEET WIDE CROSSING STATE OF NEW MEXICO LAND IN SECTION 7, TOWNSHIP 22 SOUTH, RANGE 34 EAST, NMPM, LEA COUNTY, NEW MEXICO AND BEING 15.0 FEET RIGHT AND 15.0 FEET LEFT OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT ON THE NORTH LINE OF SAID SECTION, WHICH LIES S89'47'39"W 858.58 FEET FROM THE NORTHEAST CORNER; THEN S00'17'30"E 2553.3 FEET; THEN S78'06'27"W 146.7 FEET; THEN S73'11'49"W 408.1 FEET; THEN S65'34'59"W 404.9 FEET; THEN S61'56'27"W 406.3 FEET; THEN S68'41'12"W 204.5 FEET; THEN S73'48'57"W 204.7 FEET; THEN S67'39'15"W 201.3 FEET; THEN S63'26'09"W 410.2 FEET; THEN S60'25'46"W 611.7 FEET; THEN S57'01'13"W 409.3 FEET; THEN S65'59'29"W 779.6 FEET; THEN S62'33'41"W 200.3 FEET; THEN S58'10'15"W 459.6 FEET; TO A POINT ON THE WEST LINE OF SAID SECTION, WHICH LIES S00'27'23"W 4588.56 FEET FROM THE NORTHWEST CORNER.

SAID STRIP OF LAND BEING 7400.5 FEET OR 448.52 RODS IN LENGTH, CONTAINING 5.097 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

NE/4 NE/4 80.25 RODS OR 0.912 ACRES NE/4 SW/4 90.06 RODS OR 1.023 ACRES SE/4 NE/4 96.78 RODS OR 1.100 ACRES NW/4 SW/4 2.95 RODS OR 0.033 ACRES NE/4 SE/4 6.39 RODS OR 0.073 ACRES SW/4 SW/4 85.13 RODS OR 0.968 ACRES NW/4 SE/4 86.96 RODS OR 0.988 ACRES

EN MEXIC

POFESSIONAL

81/19/17

DATE

BASIS OF BEARING:

CHAD HARCROW N.M.P.S.

BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.

CERTIFICATION

I, CHAD HARCROW, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

NO. 17777

HARCROW SURVEYING, LLC 2314 W. MAIN ST, ARTESIA, N.M. 88210 PH: (575) 746-2158 FAX: (575) 746-2158 c.harcrow@harcrowsurveying.com



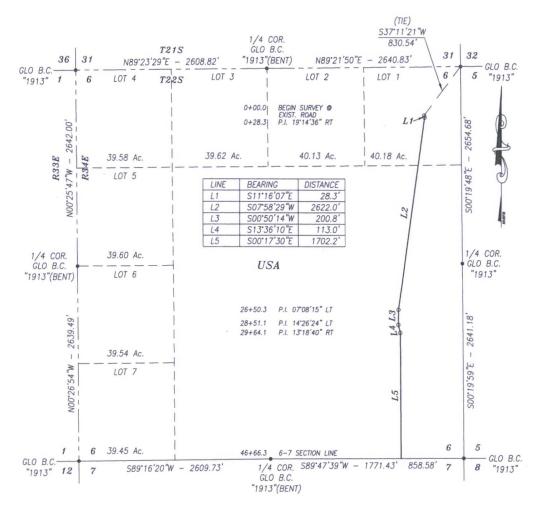
1000	0	1000	2000	FEET
HHH	SCALE:	1"=1000'		j

COG OPERATING, LLC

AN ACCESS ROAD LOCATED IN SECTION 7, TOWNSHIP 22 SOUTH, RANGE 34 EAST, NMPM, LEA COUNTY, NEW MEXICO

SURVEY DATE:	JANUARY	17, 2017	EXHIBIT B
DRAFTING DATE:	JANUAR'	Y 18, 2017	PAGE 2 OF 4
APPROVED BY:	CH DRAV	VN BY: SP	FILE: 17-72

AN ACCESS ROAD SERVICING THE TENDERLOIN FEDERAL COM #4H IN SECTION 6, TOWNSHIP 22 SOUTH, RANGE 34 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.



DESCRIPTION

A STRIP OF LAND 30.0 FEET WIDE AND 4666.3 FEET OR 282.81 RODS OR 0.884 MILES IN LENGTH CROSSING USA LAND IN SECTION 6, TOWNSHIP 22 SOUTH, RANGE 34 EAST, LEA COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND 15.0 FEET RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

BASIS OF BEARING:

CHAD HARCROW N.M.P.S. NO. 17777

BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.

CERTIFICATION

I, CHAD HARCROW, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THIS SURVEY AND PLAT MEET. THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

AE W

MEXIC

POFESSIONAL

SUPVEYOR

19/17

2314 W. MAIN ST, ARTESIA, N.M. 88210 PH: (575) 746-2158 FAX: (575) 746-2158 c.harcrow@harcrowsurveying.com

HARCROW SURVEYING, LLC



1000	0	1000	2000	FEET
HHH	SCALE:	1"=1000'		1

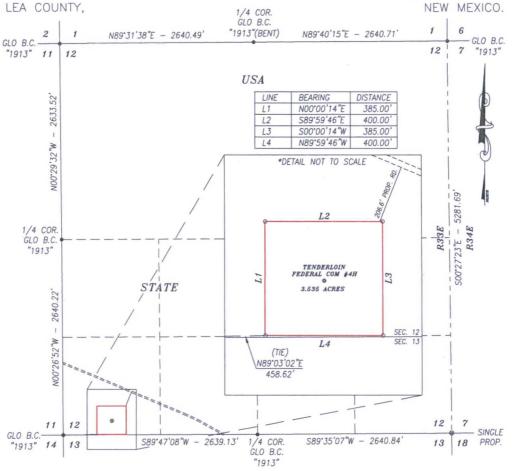
COG OPERATING, LLC

AN ACCESS ROAD LOCATED IN SECTION 6, TOWNSHIP 22 SOUTH, RANGE 34 EAST, NMPM, LEA COUNTY, NEW MEXICO

SURVEY DATE: JAN	UARY 17, 2017	EXHIBIT B
DRAFTING DATE: JA		
APPROVED BY: CH	DRAWN BY: SP	FILE: 17-72

EXHIBIT A STATE BUSINESS LEASE COG OPERATING, LLC

A STATE BUSINESS LEASE FOR THE TENDERLOIN FEDERAL COM #4H IN SECTION 12, TOWNSHIP 22 SOUTH, RANGE 33 EAST, N.M.P.M.,



DESCRIPTION

A PROPOSED WELLPAD LOCATED WITHIN STATE OF NEW MEXICO LAND IN SECTION 12, TOWNSHIP 22 SOUTH, RANGE 33 EAST, NMPM, LEA COUNTY, NEW MEXICO AND BEING DESCRIBED MORE PARTICULARLY AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF THE PROPOSED WELLPAD, WHICH LIES N89°03'02"E 458.62 FEET FROM THE SOUTHWEST CORNER OF SECTION 12; THEN N00°00'14"E 385.00 FEET; THEN S89°59'46"E 400.00 FEET; THEN S00°00'14"W 385.00 FEET; THEN N89°59'46"W 400.00 FEET TO THE POINT OF BEGINNING.

SAID PROPOSED WELLPAD CONTAINING 3.535 ACRES AND BEING ENTIRELY LOCATED WITHIN THE SW/4 SW/4 OF SAID SECTION.

19/17

BASIS OF BEARING:

CHAD HARCROW N.M.P.S.

BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.

CERTIFICATION

I, CHAD HARCROW, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

NO. 17777

EN MEXIC

HARCROW SURVEYING, LLC 2314 W. MAIN ST, ARTESIA, N.M. 88210 PH: (575) 746-2158 FAX: (575) 746-2158 c.harcrow@harcrowsurveying.com

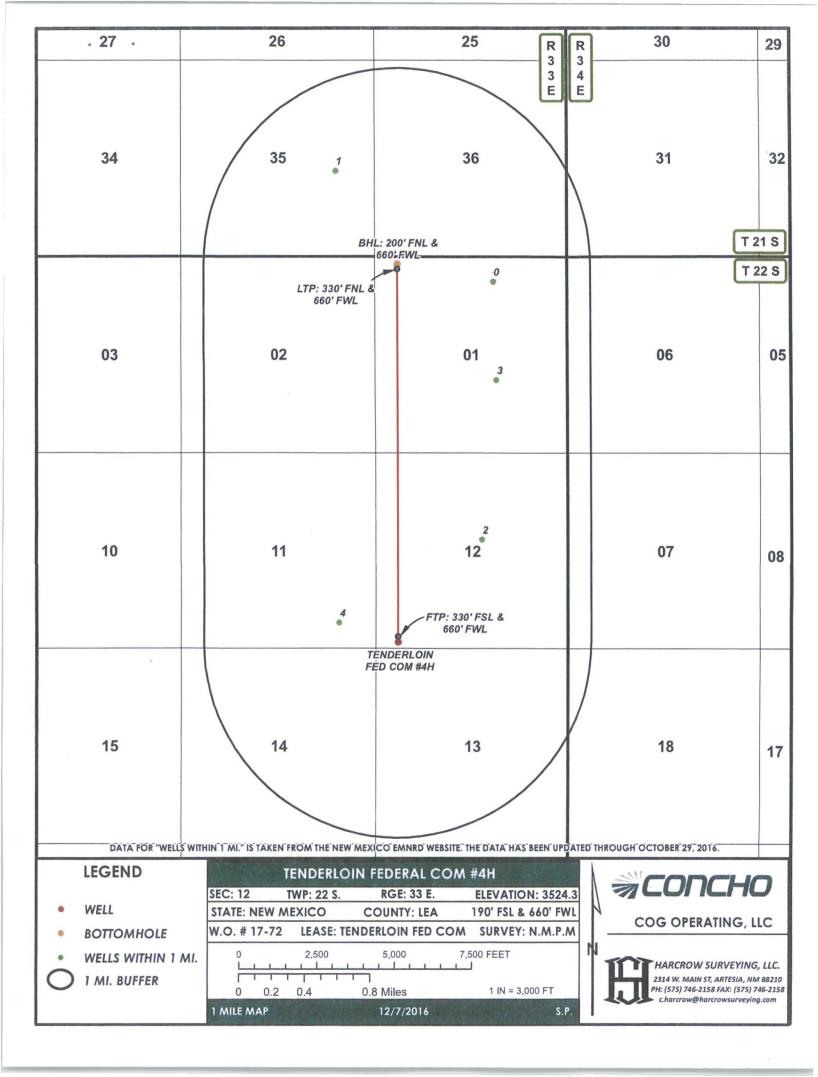


1000	0	1000	2000	FEET
BBBBB	SCALE:	1"=1000'		1

COG OPERATING, LLC

A STATE BUSINESS LEASE LOCATED IN SECTION 12, TOWNSHIP 22 SOUTH, RANGE 33 EAST, NMPM, LEA COUNTY, NEW MEXICO

SURVEY DATE: JA	NUARY 17, 2017	EXHIBIT A
DRAFTING DATE: J	ANUARY 18, 2017	PAGE 1 OF 1
APPROVED BY: CH	DRAWN BY: SP	FILE: 17-72



TENDERLOIN FEDERAL COM #4H 1 MILE WELLS (16-972

	A. A. A. A. C. M. C. A. C. A. C. A. C.							The same beauty of the contract of the contrac	Committee of the State of the S
FID OPERATOR	WELL_NAME	LATITUDE	LONGITUDE	API	SECTION TOWNSHIP	RANGE	FTG_NS_NS_CD	FTG_EW_EW_	CD COMPL_STAT
0 ROBERT N ENFIELD	COTTER FEDERAL 001	32.426173	-103.523977	3002524805	1 22.05	33E	660 N	1980 E	Plugged
1 AMTEX ENERGY INC	MERCHANT STATE UNIT 001	32.43437	-103.537968	3002529991	35 21.05	33E	2309 S	990 E	Plugged
2 YATES PETROLEUM CORPORATION	CHERWIN AIW FEDERAL 001	32.407138	-103.525042	3002533435	12 22.05	33E	2310 N	2310 E	Plugged
3 COG OPERATING LLC	MESA VERDE FEDERAL 001	32.418921	-103.523707	3002537701	1 22.05	33E	1980 S	1980 E	Active
4 COG OPERATING LLC	BEVO 11 FEDERAL 004H	32.400945	-103.537702	3002541804	11 22.05	33E	700 S	890 E	New (Not drilled or compl)

35 36 31 32 529 33 34 36 31 32 33 34 35 36 31 32 33 34
1 3 2 4 6 5 3 2 5 Salty Dog Brine 2 5 6 4 3 2
3 A JO. 11 12 7 8 9 10 41 12 7 8 9 10 A1 12 7 8 9 10 A1 12 7
16 15 14 13 18 17 16 15 14 13 18 17 16 15 14 13 18 17 16 15 14 13 18 17 16 15 14 13 20 21 22 23 24 18 20 21 22 23 24 18 20 21 22 23 24 18 20 21 22 23 24 1
28 27 25 30 29 28 27 26 25 30 29 28 27 26 25 3
32 34 35 36 31 32 33 34 35 36 31 32 33 34 35 36 31 32 33 34 35 36
1 6 5 4 3 2 1 6 5 4 8 2 3 6 5 4 3 2 1 6 5 4 3 2 3 2 3 6 5 4 3 2 3 2 3 3 2 3 3 2 3 3 2 3 3 3 2 3
9 10 11 12 7 8 9 10 11 12 7 8 19 10 11 12 7 8 19 10 11 12
16 15 14 13 18 17 16 15 14 13 18 17 16 15 $\begin{array}{cccccccccccccccccccccccccccccccccccc$
21 22 23 24 19 20 21 22 23 24 19 20 21 22 R36 E 19 20 21 22 R36 E
28 27 26 25 30 29 28 27 26 25 29 28 27 26 25 30 29 28 27 26 25 30 29 28 27 26 25 36 34 35 36 31 32 33 34 35 36 30 32 33 34 35 36 36 31 32 33 34 35 36 36 31 32 33 34 35 36 36 31 32 33 34 35 36 36 31 32 33 34 35 36 36 31 32 33 34 35 36 36 31 32 33 34 35 36 36 36 36 36 36 36 36 36 36 36 36 36
2 1 6 5 4 3 2 1 6 5 4 3 T21 S 6 5 4 3 T21 S 1 6
R35 E R36 E
10 11 12 7 8 9 10 11 12 7 8 9 10 11 12 7 8 9 10 11 12 7 8 9 10 11 12 7 15 14 13 18 17 16 15 14 14 13 18 18 17 16 15 14 14 13 18 18 17 18 18 18 18 18 18 18 18 18 18 18 18 18
22. 23, 24 19 20 21 22 23 24 19 20 21 22 23 24 19 20 21 22 23 24 19 20 21 22 23 24 19
27. 26 25 30 29 28 27 26 25 30 29 28 27 26 25 30 29 28 27 26 25
34 35 36 31 32 33 34 35 36 31 32 33 34 35 36 31 32 33 34 35 36 31 32
3 2 1 6 5 4 3 2 1 6 5 4 3 2 1 6 5 4 3 2 1 6 7 7
10 11 12 7 8 10 11 12 7 8 9 10 11 12 7 $\frac{12}{12}$ S 9 10 11 $\frac{12}{12}$ 2 $\frac{1}{15}$ Tenderloin Fed #8H 17 16: 15 14 43 18 17 46 15 14 13 18 $R36$ E 15 14 $R37$ I
15 lengerion 3 ed #81 17 16: 15 14 43 18 17 46 15 14 13 18 K3 V E 15 14 K3 V E 15 14 K3 V E 15 14 K3 V E 13 18 K3 V E 17 16 17 16 17 16 17 16 17 17 16 17 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18



Tenderloin Fed #4H To Salty Dog Brine

Date: 1716/2017
Author: Why/nic McDonald
State: New Mexico
County: Eddy
Bibciolas an This is net a logo? survey de

Map Legend

Route





