

State of New Mexico
Energy, Minerals & Natural Resources
Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

☐ **AMENDED REPORT**

¹ API Number 30-015-46443	² Pool Code 98220	³ Pool Name PURPLE SAGE; WOLFCAMP (GAS)
⁴ Property Code 326329	⁵ Property Name BOROS FEDERAL	
⁷ OGRID No. 228937	⁸ Operator Name MATADOR PRODUCTION COMPANY	⁶ Well Number 224H ⁹ Elevation 3216'

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	15	26-S	31-E	—	400'	NORTH	851'	EAST	EDDY

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	22	26-S	31-E	-	228'	SOUTH	859'	EAST	EDDY

KICK OFF POINT
NEW MEXICO EAST
NAD 1927
X=677615
Y=382325
LAT.: N 32.0498302
LONG.: W 103.7600669
NAD 1983
X=718801
Y=382382
LAT.: N 32.0499552
LONG.: W 103.7605412
MD = 11367'

PENETRATION POINT
NEW MEXICO EAST
NAD 1927
X=677615
Y=382321
LAT.: N 32.0498182
LONG.: W 103.7600665
NAD 1983
X=718801
Y=382378
LAT.: N 32.0499432
LONG.: W 103.7605407
MD = 11497'

FIRST PERF. POINT
NEW MEXICO EAST
NAD 1927
X=677595
Y=382051
LAT.: N 32.0490760
LONG.: W 103.7601338
NAD 1983
X=718782
Y=382108
LAT.: N 32.0492010
LONG.: W 103.7606081
MD = 12120'

SURFACE LOCATION
NEW MEXICO EAST
NAD 1927
X=677733
Y=381995
LAT.: N 32.0489203
LONG.: W 103.7596921
NAD 1983
X=718919
Y=382052
LAT.: N 32.0490453
LONG.: W 103.7601663
ELEV= 3216'

BOTTOM HOLE LOCATION
NEW MEXICO EAST
NAD 1927
X=677788
Y=371958
LAT.: N 32.0213294
LONG.: W 103.7596843
NAD 1983
X=718975
Y=372015
LAT.: N 32.0214547
LONG.: W 103.7601571
MD = 22284'

DETAIL VIEW
SCALE: 1" = 600'

LAST PERF. POINT
NEW MEXICO EAST
NAD 1927
X=677779
Y=372118
LAT.: N 32.0217695
LONG.: W 103.7597129
NAD 1983
X=718965
Y=372175
LAT.: N 32.0218948
LONG.: W 103.7601858
MD = 22120'

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 at 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.
Signature: Nicky Fitzgerald
Date: 02/18/2019

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 to the best of my belief.
02/18/2019
Date of Survey
Signature and Seal of Professional Surveyor
ANGEL M. BAEZA
NEW MEXICO
PROFESSIONAL SURVEYOR
25116
Certificate Number

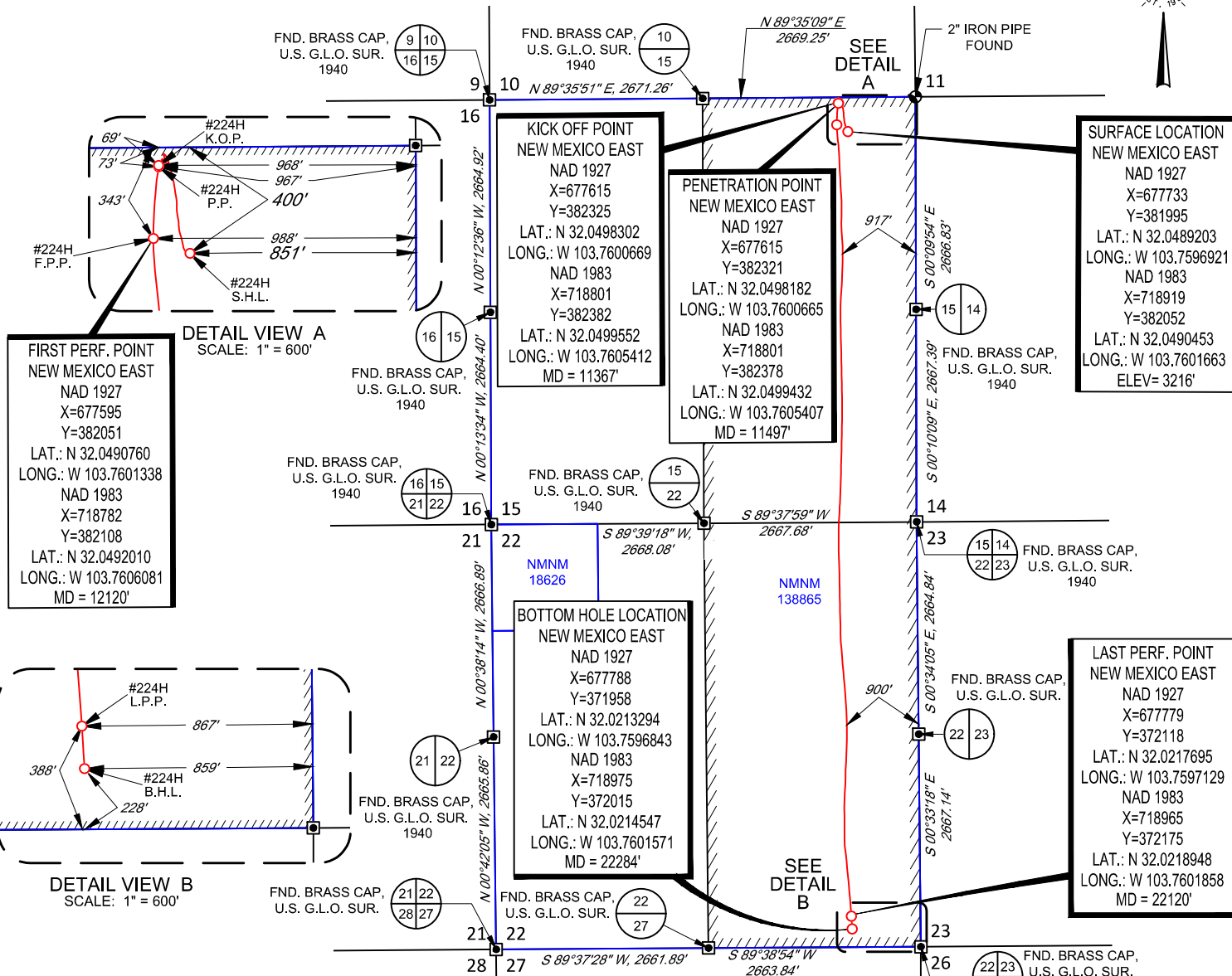
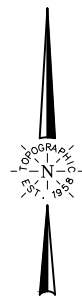
S:\SURVEY\MATADOR RESOURCES\BOROS 15&22-26S-31E\FINAL PRODUCTS\AD BOROS FEDERAL 224H DWG 10/16/2020 11:58:17 AM adisabella

SCALE: 1" = 2000'

0' 1000' 2000'



SECTION 15, TOWNSHIP 26-S, RANGE 31-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



LEASE NAME & WELL NO.: BOROS FEDERAL 224H

SECTION 15 TWP 26-S RGE 31-E SURVEY N.M.P.M.

COUNTY EDDY STATE NM

DESCRIPTION 400' FNL & 851' FEL



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

1400 EVERMAN PARKWAY, Ste. 146 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX (817) 744-7554
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM



Angel M. Baeza, P.S. No. 25116
October 13, 2020

BOROS FEDERAL 224H AS-DRILLED	REVISION:	NOTES: 1. ORIGINAL DOCUMENT SIZE: 8.5" X 11" 2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET. 3. THIS WELL LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.
DATE: 10/13/20		
AD_BOROS_FEDERAL_224H		
DRAWN BY: IMU		
SHEET: 2 OF 2		



MWD SURVEY CERTIFICATION
Gordon Technologies, LLC

State Of New Mexico
County Of Eddy

I, Bill Johnson certify that; I am employed by Gordon Technologies, LLC.;
that I did on the day(s) of January 2, 2020 through May 18, 2020 conduct
or supervise the taking of a MWD survey from a depth of 0 feet to a depth of
22,284 feet; that the data is true, correct, complete and within the limitations of the
tool set forth by Gordon Technologies, LLC.; that I am authorized and qualified to make this report;
that this survey was conducted at the request of Matador Production Co. for the
Boros Federal 224H Well, A.P.I. No. 30-015-46443 in
Wolfcamp B.1 Field and that I have reviewed this report and find that
it conforms to the principles and procedures set forth by Gordon Technologies, LLC.

Signature

MWD Coordinator
Title



Directional Survey Report

Company: Matador Production Company	Well Surface Location	Report Date:
Well: Boros Federal 224H	Latitude: 32.049046	Time:
County: Eddy County	Longitude: -103.760170	Mag Reference:
State: New Mexico	Reference: NAD 1927	Mag Correction:
Field: Avalon - Bone Spring, East	Y (Northing): 381995	Vert Sect. Azi:
API: 30-015-46443	X (Easting): 677733	Perm Datum:
Rig: Patterson 256	Field Engr: Coby Baxter	Depth Ref:
Service Co: Gordon Technologies, LLC.	Robert Gibbs	RKB Height:
Job #: 2010541		GL Elev:
Survey Calc: Minimum Curvature		

Survey	MD	Inc	Azimuth	TVD	VS	Rectangular Offsets		Course		Temp	Closure	
						NS	EW	Length	DLS		Distance	Azimuth
Tie In	0	0	0	0	0	0	0	0	0	0	0	0
1	243.00	0.44	337.35	243.00	-0.86	0.86	-0.36	243.00	0.18	0.00	0.93	337.35
2	428.00	0.52	339.49	427.99	-2.31	2.30	-0.93	185.00	0.04	0.00	2.48	338.07
3	520.00	0.61	335.91	519.99	-3.15	3.14	-1.27	92.00	0.11	0.00	3.39	337.94
4	610.00	0.53	340.24	609.98	-3.98	3.97	-1.61	90.00	0.10	0.00	4.28	337.93
5	702.00	0.57	337.05	701.98	-4.80	4.79	-1.93	92.00	0.05	0.00	5.17	338.04
6	793.00	0.79	302.34	792.97	-5.56	5.54	-2.64	91.00	0.50	0.00	6.14	334.55
7	884.00	1.05	296.88	883.96	-6.28	6.26	-3.91	91.00	0.30	0.00	7.38	327.99
8	975.00	1.50	281.32	974.94	-6.91	6.87	-5.82	91.00	0.62	0.00	9.00	319.70
9	1067.00	1.43	287.51	1066.91	-7.50	7.45	-8.10	92.00	0.19	0.00	11.00	312.61
10	1162.00	1.49	275.85	1161.88	-8.00	7.93	-10.46	95.00	0.32	0.00	13.13	307.18
11	1257.00	1.42	275.31	1256.85	-8.25	8.17	-12.86	95.00	0.08	0.00	15.23	302.42
12	1352.00	1.15	294.93	1351.82	-8.78	8.68	-14.90	95.00	0.54	0.00	17.24	300.22
13	1419.00	1.39	286.75	1418.81	-9.30	9.20	-16.28	67.00	0.45	0.00	18.70	299.45
14	1510.00	1.46	300.16	1509.78	-10.22	10.10	-18.34	91.00	0.37	0.00	20.94	298.83
15	1605.00	2.48	335.55	1604.72	-12.71	12.57	-20.24	95.00	1.62	0.00	23.83	301.85
16	1701.00	3.19	341.81	1700.61	-17.15	17.00	-21.93	96.00	0.81	0.00	27.75	307.78
17	1796.00	3.20	338.91	1795.46	-22.15	21.99	-23.71	95.00	0.17	0.00	32.34	312.84
18	1891.00	3.67	350.39	1890.29	-27.63	27.46	-25.17	95.00	0.87	0.00	37.25	317.49
19	1986.00	4.10	350.59	1985.07	-33.98	33.81	-26.24	95.00	0.45	0.00	42.79	322.19
20	2079.00	4.15	346.05	2077.83	-40.54	40.35	-27.59	93.00	0.36	0.00	48.89	325.64
21	2173.00	4.18	348.91	2171.58	-47.21	47.02	-29.07	94.00	0.22	0.00	55.28	328.27
22	2268.00	3.95	346.27	2266.34	-53.79	53.59	-30.51	95.00	0.31	0.00	61.67	330.34
23	2363.00	3.81	343.63	2361.12	-60.01	59.80	-32.18	95.00	0.24	0.00	67.91	331.71
24	2458.00	3.58	337.77	2455.93	-65.80	65.57	-34.19	95.00	0.47	0.00	73.95	332.46
25	2552.00	4.25	343.70	2549.71	-71.87	71.63	-36.28	94.00	0.83	0.00	80.30	333.14
26	2647.00	5.05	349.37	2644.40	-79.37	79.12	-38.04	95.00	0.97	0.00	87.79	334.32
27	2742.00	5.64	351.63	2738.98	-88.11	87.85	-39.49	95.00	0.66	0.00	96.32	335.80
28	2836.00	6.03	353.82	2832.49	-97.60	97.33	-40.69	94.00	0.48	0.00	105.49	337.31
29	2931.00	5.54	355.34	2927.01	-107.13	106.86	-41.60	95.00	0.54	0.00	114.67	338.73
30	3026.00	5.08	356.02	3021.60	-115.90	115.63	-42.27	95.00	0.49	0.00	123.11	339.92
31	3121.00	5.99	353.24	3116.16	-125.03	124.74	-43.14	95.00	1.00	0.00	131.99	340.92
32	3215.00	6.93	348.94	3209.56	-135.48	135.18	-44.81	94.00	1.12	0.00	142.41	341.66
33	3310.00	6.00	350.67	3303.96	-146.01	145.71	-46.71	95.00	1.00	0.00	153.01	342.22
34	3405.00	5.45	350.06	3398.48	-155.37	155.05	-48.30	95.00	0.58	0.00	162.40	342.70
35	3499.00	4.47	356.88	3492.13	-163.43	163.10	-49.27	94.00	1.21	0.00	170.38	343.19
36	3594.00	4.70	1.53	3586.83	-171.01	170.69	-49.36	95.00	0.46	0.00	177.69	343.87
37	3689.00	5.05	1.14	3681.48	-179.08	178.76	-49.18	95.00	0.37	0.00	185.40	344.62
38	3784.00	4.44	0.23	3776.16	-186.94	186.62	-49.08	95.00	0.65	0.00	192.97	345.27
39	3879.00	3.98	355.69	3870.90	-193.91	193.58	-49.31	95.00	0.60	0.00	199.77	345.71
40	3974.00	4.23	356.21	3965.66	-200.69	200.37	-49.79	95.00	0.27	0.00	206.46	346.04
41	4069.00	5.58	349.62	4060.31	-208.74	208.41	-50.86	95.00	1.54	0.00	214.52	346.29
42	4139.00	6.59	350.10	4129.91	-216.05	215.71	-52.16	70.00	1.44	0.00	221.93	346.41
43	4261.00	6.42	349.56	4251.13	-229.67	229.32	-54.60	122.00	0.15	0.00	235.73	346.61
44	4355.00	6.48	354.06	4344.53	-240.13	239.76	-56.10	94.00	0.54	0.00	246.24	346.83
45	4450.00	7.81	351.10	4438.79	-251.85	251.47	-57.65	95.00	1.45	0.00	257.99	347.09

46	4545.00	8.31	347.30	4532.85	-264.94	264.54	-60.16	95.00	0.77	0.00	271.30	347.19
47	4640.00	8.18	347.26	4626.87	-278.25	277.83	-63.16	95.00	0.14	0.00	284.92	347.19
48	4735.00	8.24	347.54	4720.90	-291.51	291.07	-66.12	95.00	0.08	0.00	298.49	347.20
49	4830.00	8.62	346.85	4814.87	-305.11	304.65	-69.21	95.00	0.41	0.00	312.42	347.20
50	4925.00	9.06	344.57	4908.74	-319.27	318.80	-72.82	95.00	0.59	0.00	327.01	347.13
51	5019.00	8.95	344.82	5001.59	-333.49	332.99	-76.70	94.00	0.12	0.00	341.71	347.03
52	5114.00	7.09	342.38	5095.65	-346.23	345.71	-80.41	95.00	1.99	0.00	354.94	346.91
53	5209.00	6.67	337.74	5189.97	-356.95	356.40	-84.28	95.00	0.73	0.00	366.23	346.70
54	5305.00	5.57	330.38	5285.42	-366.19	365.61	-88.69	96.00	1.41	0.00	376.22	346.36
55	5399.00	2.82	313.14	5379.16	-371.77	371.16	-92.63	94.00	3.19	0.00	382.55	345.99
56	5495.00	2.52	301.79	5475.06	-374.52	373.89	-96.15	96.00	0.63	0.00	386.05	345.58
57	5589.00	0.67	264.85	5569.02	-375.57	374.93	-98.46	94.00	2.15	0.00	387.64	345.29
58	5684.00	0.65	208.70	5664.02	-375.05	374.40	-99.27	95.00	0.65	0.00	387.34	345.15
59	5779.00	1.93	157.94	5758.99	-373.10	372.45	-98.93	95.00	1.68	0.00	385.36	345.13
60	5874.00	2.26	163.72	5853.93	-369.81	369.17	-97.80	95.00	0.41	0.00	381.90	345.16
61	5970.00	2.42	166.48	5949.85	-366.01	365.38	-96.80	96.00	0.20	0.00	377.98	345.16
62	6065.00	2.56	163.91	6044.76	-362.02	361.39	-95.74	95.00	0.19	0.00	373.86	345.16
63	6160.00	2.55	168.19	6139.66	-357.90	357.28	-94.72	95.00	0.20	0.00	369.63	345.15
64	6255.00	2.44	158.45	6234.58	-353.95	353.33	-93.54	95.00	0.46	0.00	365.51	345.17
65	6350.00	2.58	167.90	6329.48	-349.97	349.36	-92.35	95.00	0.46	0.00	361.36	345.19
66	6445.00	0.31	211.91	6424.45	-347.66	347.05	-92.04	95.00	2.49	0.00	359.05	345.15
67	6540.00	0.34	1.92	6519.45	-347.72	347.12	-92.17	95.00	0.66	0.00	359.15	345.13
68	6635.00	0.31	237.79	6614.45	-347.87	347.26	-92.37	95.00	0.60	0.00	359.34	345.10
69	6729.00	0.42	263.44	6708.45	-347.70	347.09	-92.93	94.00	0.21	0.00	359.31	345.01
70	6825.00	0.14	133.03	6804.44	-347.58	346.97	-93.19	96.00	0.54	0.00	359.27	344.97
71	6920.00	0.38	216.86	6899.44	-347.25	346.64	-93.30	95.00	0.41	0.00	358.97	344.94
72	7014.00	0.46	178.00	6993.44	-346.62	346.01	-93.47	94.00	0.31	0.00	358.41	344.88
73	7107.00	0.38	179.15	7086.44	-345.94	345.33	-93.45	93.00	0.09	0.00	357.75	344.86
74	7201.00	0.50	149.55	7180.44	-345.27	344.66	-93.24	94.00	0.27	0.00	357.05	344.86
75	7296.00	0.78	124.23	7275.43	-344.55	343.94	-92.50	95.00	0.41	0.00	356.16	344.95
76	7391.00	0.79	137.16	7370.42	-343.70	343.10	-91.52	95.00	0.19	0.00	355.09	345.06
77	7486.00	1.12	125.05	7465.41	-342.68	342.08	-90.31	95.00	0.41	0.00	353.81	345.21
78	7581.00	1.23	136.19	7560.39	-341.40	340.82	-88.85	95.00	0.27	0.00	352.21	345.39
79	7675.00	1.19	118.09	7654.37	-340.20	339.63	-87.29	94.00	0.41	0.00	350.67	345.59
80	7770.00	0.78	108.20	7749.35	-339.52	338.96	-85.80	95.00	0.47	0.00	349.65	345.79
81	7865.00	1.12	109.37	7844.34	-339.00	338.45	-84.31	95.00	0.36	0.00	348.79	346.01
82	7959.00	0.85	137.03	7938.33	-338.18	337.64	-82.97	94.00	0.57	0.00	347.68	346.19
83	8054.00	1.03	152.27	8033.31	-336.90	336.37	-82.09	95.00	0.32	0.00	346.24	346.28
84	8148.00	1.18	143.81	8127.30	-335.37	334.84	-81.13	94.00	0.24	0.00	344.52	346.38
85	8242.00	1.17	181.13	8221.28	-333.62	333.10	-80.58	94.00	0.80	0.00	342.70	346.40
86	8337.00	1.41	201.01	8316.26	-331.56	331.03	-81.01	95.00	0.53	0.00	340.80	346.25
87	8432.00	0.80	246.15	8411.24	-330.21	329.68	-82.04	95.00	1.07	0.00	339.73	346.03
88	8526.00	0.53	285.76	8505.23	-330.07	329.53	-83.06	94.00	0.55	0.00	339.83	345.85
89	8621.00	2.45	301.42	8600.20	-331.26	330.71	-85.21	95.00	2.05	0.00	341.51	345.55
90	8716.00	2.25	288.02	8695.12	-332.92	332.34	-88.72	95.00	0.61	0.00	343.98	345.05
91	8811.00	2.75	287.74	8790.03	-334.22	333.61	-92.66	95.00	0.53	0.00	346.24	344.48
92	8906.00	3.38	308.99	8884.89	-336.71	336.07	-97.01	95.00	1.36	0.00	349.79	343.90
93	9001.00	3.34	296.74	8979.73	-339.74	339.08	-101.66	95.00	0.76	0.00	353.99	343.31
94	9096.00	3.56	317.65	9074.56	-343.20	342.50	-106.12	95.00	1.34	0.00	358.56	342.79
95	9190.00	2.97	10.94	9168.43	-347.76	347.05	-107.62	94.00	3.16	0.00	363.35	342.77
96	9285.00	3.40	26.78	9263.28	-352.68	351.98	-105.89	95.00	1.03	0.00	367.56	343.26
97	9381.00	0.86	79.34	9359.22	-355.34	354.66	-103.89	96.00	3.08	0.00	369.56	343.67
98	9475.00	0.72	115.08	9453.21	-355.21	354.54	-102.67	94.00	0.53	0.00	369.10	343.85
99	9570.00	0.65	63.94	9548.20	-355.19	354.52	-101.64	95.00	0.63	0.00	368.80	344.00
100	9665.00	0.48	195.76	9643.20	-355.04	354.37	-101.27	95.00	1.09	0.00	368.56	344.05
101	9760.00	1.16	211.24	9738.19	-353.84	353.17	-101.87	95.00	0.75	0.00	367.57	343.91
102	9855.00	1.74	212.98	9833.16	-351.81	351.14	-103.16	95.00	0.61	0.00	365.98	343.63
103	9948.00	1.83	206.16	9926.11	-349.31	348.62	-104.58	93.00	0.25	0.00	363.97	343.30
104	10043.00	0.92	305.06	10021.09	-348.39	347.70	-105.87	95.00	2.29	0.00	363.46	343.06
105	10138.00	1.00	307.46	10116.08	-349.34	348.64	-107.16	95.00	0.09	0.00	364.73	342.92
106	10233.00	0.57	255.82	10211.07	-349.74	349.03	-108.27	95.00	0.83	0.00	365.44	342.77
107	10328.00	0.88	229.00	10306.07	-349.15	348.43	-109.28	95.00	0.48	0.00	365.17	342.59
108	10423.00	1.40	238.20	10401.05	-348.07	347.34	-110.82	95.00	0.58	0.00	364.59	342.31
109	10518.00	0.65	170.10	10496.03	-346.93	346.20	-111.71	95.00	1.37	0.00	363.78	342.12
110	10612.00	0.48	165.28	10590.03	-346.03	345.29	-111.52	94.00	0.19	0.00	362.86	342.10

111	10707.00	0.37	230.45	10685.03	-345.45	344.71	-111.65	95.00	0.49	0.00	362.35	342.05
112	10802.00	0.85	233.13	10780.02	-344.83	344.10	-112.45	95.00	0.51	0.00	362.01	341.90
113	10896.00	1.65	241.66	10874.00	-343.79	343.04	-114.20	94.00	0.87	0.00	361.55	341.59
114	10991.00	1.52	213.86	10968.96	-342.10	341.34	-116.11	95.00	0.81	0.00	360.55	341.21
115	11086.00	2.20	206.36	11063.91	-339.43	338.66	-117.62	95.00	0.76	0.00	358.50	340.85
116	11181.00	1.69	182.04	11158.86	-336.40	335.63	-118.48	95.00	1.01	0.00	355.92	340.56
117	11276.00	1.46	166.68	11253.82	-333.83	333.05	-118.25	95.00	0.50	0.00	353.42	340.45
118	11347.00	1.82	175.09	11324.79	-331.82	331.04	-117.95	71.00	0.61	0.00	351.43	340.39
119	11441.00	1.88	178.00	11418.75	-328.79	328.02	-117.77	94.00	0.12	167.00	348.52	340.25
120	11504.00	2.22	180.44	11481.71	-326.54	325.76	-117.74	63.00	0.56	174.20	346.39	340.13
121	11599.00	9.00	184.98	11576.20	-317.29	316.51	-118.40	95.00	7.15	179.60	337.93	339.49
122	11693.00	11.37	189.65	11668.71	-300.84	300.05	-120.59	94.00	2.67	170.60	323.37	338.10
123	11789.00	19.41	188.53	11761.19	-275.72	274.90	-124.55	96.00	8.38	177.80	301.80	335.63
124	11820.00	28.47	185.26	11789.50	-263.25	262.42	-125.99	31.00	29.53	179.60	291.10	334.35
125	11884.00	41.43	184.85	11841.84	-226.83	225.98	-129.20	64.00	20.25	183.20	260.30	330.24
126	11931.00	41.77	185.07	11876.99	-195.76	194.89	-131.89	47.00	0.79	186.80	235.33	325.91
127	11979.00	44.13	183.20	11912.12	-163.16	162.28	-134.24	48.00	5.59	186.80	210.60	320.40
128	12074.00	49.07	181.99	11977.38	-94.25	93.35	-137.33	95.00	5.28	190.40	166.05	304.20
129	12169.00	58.26	177.79	12033.62	-17.84	16.93	-137.02	95.00	10.30	192.20	138.06	277.04
130	12265.00	61.14	173.71	12082.06	64.82	-65.69	-130.84	96.00	4.74	194.00	146.40	243.34
131	12359.00	62.06	173.87	12126.77	147.08	-147.89	-121.89	94.00	0.99	194.00	191.65	219.50
132	12402.00	66.95	174.46	12145.28	185.71	-186.49	-117.95	43.00	11.43	195.80	220.66	212.31
133	12454.00	71.80	175.47	12163.59	234.20	-234.96	-113.69	52.00	9.51	195.80	261.02	205.82
134	12549.00	80.49	175.72	12186.32	326.12	-326.83	-106.61	95.00	9.15	197.60	343.78	198.07
135	12644.00	94.18	178.63	12190.73	420.69	-421.38	-101.96	95.00	14.73	201.20	433.54	193.60
136	12740.00	89.66	177.74	12187.52	516.58	-517.25	-98.92	96.00	4.80	204.80	526.62	190.83
137	12835.00	89.41	177.19	12188.29	611.51	-612.15	-94.72	95.00	0.64	204.80	619.44	188.80
138	12930.00	87.53	176.98	12190.82	706.38	-706.99	-89.89	95.00	1.99	208.40	712.68	187.25
139	13025.00	90.06	176.58	12192.82	801.23	-801.81	-84.56	95.00	2.70	212.00	806.26	186.02
140	13120.00	90.53	175.59	12192.33	896.05	-896.59	-78.07	95.00	1.15	215.60	899.98	184.98
141	13216.00	95.33	181.99	12187.42	991.84	-992.36	-76.04	96.00	8.32	213.80	995.27	184.38
142	13311.00	93.28	180.52	12180.29	1086.52	-1087.07	-78.11	95.00	2.66	210.20	1089.87	184.11
143	13406.00	89.83	180.29	12177.71	1181.47	-1182.01	-78.77	95.00	3.64	204.80	1184.64	183.81
144	13501.00	89.66	177.54	12178.13	1276.45	-1276.99	-76.97	95.00	2.90	195.80	1279.30	183.45
145	13596.00	87.81	175.48	12180.23	1371.28	-1371.78	-71.19	95.00	2.92	210.20	1373.62	182.97
146	13692.00	89.72	176.51	12182.30	1467.06	-1467.52	-64.48	96.00	2.26	212.00	1468.93	182.52
147	13787.00	88.77	180.78	12183.55	1562.01	-1562.46	-62.24	95.00	4.60	213.80	1563.70	182.28
148	13882.00	87.95	181.35	12186.27	1656.94	-1657.40	-64.00	95.00	1.05	215.60	1658.64	182.21
149	13978.00	89.02	181.64	12188.81	1752.85	-1753.33	-66.50	96.00	1.15	194.00	1754.59	182.17
150	14073.00	86.64	182.36	12192.40	1847.70	-1848.20	-69.81	95.00	2.62	197.60	1849.52	182.16
151	14168.00	86.19	182.90	12198.34	1942.38	-1942.91	-74.17	95.00	0.74	203.00	1944.33	182.19
152	14263.00	86.05	183.79	12204.77	2036.96	-2037.53	-79.70	95.00	0.95	203.00	2039.09	182.24
153	14358.00	85.99	184.00	12211.37	2131.47	-2132.08	-86.14	95.00	0.22	204.80	2133.82	182.31
154	14454.00	86.11	180.10	12217.98	2227.13	-2227.78	-89.56	96.00	4.05	197.60	2229.58	182.30
155	14549.00	85.32	180.39	12225.09	2321.86	-2322.51	-89.96	95.00	0.88	208.40	2324.25	182.22
156	14644.00	86.55	179.32	12231.82	2416.62	-2417.27	-89.72	95.00	1.72	208.40	2418.93	182.13
157	14739.00	86.66	178.67	12237.44	2511.45	-2512.09	-88.06	95.00	0.68	210.20	2513.63	182.01
158	14834.00	85.91	177.97	12243.60	2606.22	-2606.84	-85.28	95.00	1.09	217.40	2608.24	181.87
159	14929.00	88.01	179.29	12248.64	2701.07	-2701.68	-83.02	95.00	2.62	219.20	2702.95	181.76
160	15024.00	87.08	178.11	12252.70	2795.96	-2796.56	-80.87	95.00	1.59	221.00	2797.73	181.66
161	15119.00	88.35	179.15	12256.49	2890.87	-2891.46	-78.59	95.00	1.72	221.00	2892.52	181.56
162	15214.00	90.08	179.45	12257.79	2985.86	-2986.44	-77.43	95.00	1.86	221.00	2987.44	181.49
163	15309.00	89.41	178.77	12258.21	3080.85	-3081.42	-75.95	95.00	1.01	222.80	3082.36	181.41
164	15404.00	89.08	178.74	12259.46	3175.83	-3176.39	-73.89	95.00	0.36	226.40	3177.25	181.33
165	15499.00	88.32	178.99	12261.62	3270.80	-3271.35	-72.00	95.00	0.84	224.60	3272.14	181.26
166	15594.00	90.42	179.80	12262.67	3365.79	-3366.33	-71.00	95.00	2.37	217.40	3367.08	181.21
167	15690.00	90.73	180.05	12261.71	3461.78	-3462.32	-70.88	96.00	0.42	224.60	3463.05	181.17
168	15785.00	90.31	180.27	12260.85	3556.77	-3557.32	-71.15	95.00	0.50	228.20	3558.03	181.15
169	15880.00	90.00	179.53	12260.59	3651.77	-3652.32	-71.00	95.00	0.84	230.00	3653.01	181.11
170	15975.00	90.59	181.24	12260.11	3746.75	-3747.31	-71.63	95.00	1.90	228.20	3748.00	181.10
171	16070.00	91.49	181.08	12258.39	3841.70	-3842.28	-73.55	95.00	0.96	224.60	3842.98	181.10
172	16165.00	92.10	181.53	12255.42	3936.62	-3937.20	-75.72	95.00	0.80	224.60	3937.93	181.10
173	16260.00	92.41	181.38	12251.68	4031.49	-4032.10	-78.12	95.00	0.36	224.60	4032.86	181.11
174	16355.00	91.76	181.25	12248.22	4126.39	-4127.01	-80.30	95.00	0.69	226.40	4127.79	181.11
175	16450.00	92.04	181.09	12245.06	4221.30	-4221.94	-82.24	95.00	0.34	222.80	4222.74	181.12

176	16545.00	91.63	181.62	12242.02	4316.21	-4316.86	-84.48	95.00	0.71	228.20	4317.69	181.12
177	16640.00	91.65	181.68	12239.30	4411.11	-4411.78	-87.22	95.00	0.07	228.20	4412.65	181.13
178	16735.00	91.26	181.74	12236.89	4506.02	-4506.71	-90.05	95.00	0.42	228.20	4507.61	181.14
179	16830.00	91.51	182.46	12234.59	4600.90	-4601.62	-93.54	95.00	0.80	228.20	4602.57	181.16
180	16925.00	92.13	182.83	12231.57	4695.72	-4696.47	-97.92	95.00	0.75	230.00	4697.49	181.19
181	16952.00	91.99	183.07	12230.60	4722.65	-4723.42	-99.30	27.00	1.04	212.00	4724.46	181.20
182	17047.00	91.77	182.84	12227.48	4817.44	-4818.24	-104.20	95.00	0.33	217.40	4819.37	181.24
183	17142.00	92.83	182.21	12223.67	4912.24	-4913.07	-108.38	95.00	1.30	222.80	4914.26	181.26
184	17237.00	95.36	182.31	12216.88	5006.89	-5007.74	-112.11	95.00	2.66	221.00	5009.00	181.28
185	17332.00	95.90	180.51	12207.56	5101.38	-5102.25	-114.43	95.00	1.97	224.60	5103.54	181.28
186	17427.00	96.09	179.33	12197.64	5195.86	-5196.73	-114.30	95.00	1.25	226.40	5197.99	181.26
187	17523.00	97.08	178.78	12186.63	5291.22	-5292.08	-112.72	96.00	1.17	228.20	5293.28	181.22
188	17618.00	96.51	178.45	12175.39	5385.54	-5386.39	-110.44	95.00	0.69	228.20	5387.52	181.17
189	17713.00	95.39	177.95	12165.54	5479.99	-5480.83	-107.47	95.00	1.29	224.60	5481.88	181.12
190	17808.00	90.84	178.12	12160.38	5574.79	-5575.61	-104.22	95.00	4.79	226.40	5576.58	181.07
191	17903.00	90.31	179.10	12159.42	5669.77	-5670.57	-101.91	95.00	1.17	226.40	5671.49	181.03
192	17998.00	89.72	178.78	12159.40	5764.76	-5765.56	-100.15	95.00	0.71	224.60	5766.43	181.00
193	18094.00	88.93	179.16	12160.53	5860.75	-5861.53	-98.42	96.00	0.91	230.00	5862.36	180.96
194	18189.00	89.33	179.26	12161.97	5955.74	-5956.51	-97.10	95.00	0.43	226.40	5957.30	180.93
195	18284.00	87.03	178.40	12164.99	6050.67	-6051.44	-95.17	95.00	2.58	230.00	6052.19	180.90
196	18379.00	88.18	178.54	12168.96	6145.57	-6146.32	-92.63	95.00	1.22	231.80	6147.02	180.86
197	18474.00	90.03	179.47	12170.44	6240.55	-6241.29	-90.98	95.00	2.18	231.80	6241.95	180.84
198	18569.00	91.88	179.00	12168.86	6335.53	-6336.26	-89.72	95.00	2.01	226.40	6336.90	180.81
199	18665.00	85.74	175.25	12170.85	6431.35	-6432.06	-84.91	96.00	7.49	230.00	6432.62	180.76
200	18760.00	85.01	175.55	12178.52	6525.79	-6526.44	-77.32	95.00	0.84	230.00	6526.90	180.68
201	18855.00	86.05	175.56	12185.93	6620.26	-6620.87	-69.97	95.00	1.10	231.80	6621.24	180.61
202	18950.00	86.89	175.55	12191.78	6714.84	-6715.40	-62.63	95.00	0.89	233.60	6715.69	180.53
203	19046.00	87.00	174.87	12196.90	6810.42	-6810.93	-54.62	96.00	0.72	233.60	6811.15	180.46
204	19141.00	87.92	173.83	12201.11	6904.92	-6905.37	-45.27	95.00	1.46	233.60	6905.52	180.38
205	19236.00	89.02	175.77	12203.64	6999.54	-6999.94	-36.66	95.00	2.34	231.80	7000.04	180.30
206	19331.00	89.52	175.11	12204.85	7094.28	-7094.63	-29.11	95.00	0.87	233.60	7094.69	180.24
207	19426.00	90.53	175.82	12204.80	7189.03	-7189.33	-21.60	95.00	1.30	230.00	7189.36	180.17
208	19521.00	90.45	177.27	12203.99	7283.89	-7284.15	-15.88	95.00	1.53	231.80	7284.17	180.12
209	19617.00	91.68	178.23	12202.20	7379.82	-7380.06	-12.11	96.00	1.63	233.60	7380.07	180.09
210	19712.00	92.66	178.57	12198.61	7474.73	-7474.95	-9.46	95.00	1.09	231.80	7474.96	180.07
211	19807.00	93.34	180.41	12193.63	7569.59	-7569.81	-8.62	95.00	2.06	231.80	7569.82	180.07
212	19902.00	91.63	181.17	12189.52	7664.48	-7664.71	-9.93	95.00	1.97	228.20	7664.72	180.07
213	19997.00	90.81	182.20	12187.50	7759.39	-7759.65	-12.72	95.00	1.38	233.60	7759.66	180.09
214	20093.00	92.55	182.59	12184.68	7855.23	-7855.52	-16.74	96.00	1.86	233.60	7855.54	180.12
215	20188.00	91.65	182.88	12181.19	7950.03	-7950.34	-21.27	95.00	1.00	228.20	7950.37	180.15
216	20283.00	90.03	181.85	12179.80	8044.90	-8045.25	-25.20	95.00	2.02	231.80	8045.29	180.18
217	20378.00	90.03	181.43	12179.75	8139.85	-8140.21	-27.92	95.00	0.45	231.80	8140.26	180.20
218	20473.00	90.70	182.59	12179.15	8234.76	-8235.15	-31.25	95.00	1.41	233.60	8235.21	180.22
219	20568.00	92.66	182.93	12176.36	8329.57	-8329.99	-35.82	95.00	2.09	230.00	8330.07	180.25
220	20663.00	92.10	182.67	12172.42	8424.34	-8424.80	-40.46	95.00	0.65	231.80	8424.89	180.28
221	20759.00	91.35	179.59	12169.53	8520.25	-8520.72	-42.34	96.00	3.30	231.80	8520.83	180.28
222	20854.00	90.84	179.13	12167.72	8615.23	-8615.70	-41.28	95.00	0.72	237.20	8615.80	180.27
223	20949.00	92.52	179.78	12164.93	8710.19	-8710.65	-40.38	95.00	1.90	235.40	8710.74	180.27
224	21044.00	92.80	180.60	12160.51	8805.08	-8805.54	-40.69	95.00	0.91	230.00	8805.64	180.26
225	21139.00	91.21	179.55	12157.19	8900.02	-8900.48	-40.82	95.00	2.01	228.20	8900.58	180.26
226	21234.00	85.51	173.66	12159.91	8994.76	-8995.20	-35.21	95.00	8.62	233.60	8995.26	180.22
227	21330.00	86.05	173.81	12166.98	9090.00	-9090.36	-24.76	96.00	0.58	235.40	9090.40	180.16
228	21425.00	87.06	174.04	12172.69	9184.36	-9184.66	-14.73	95.00	1.09	235.40	9184.67	180.09
229	21520.00	88.29	174.11	12176.55	9278.83	-9279.07	-4.93	95.00	1.30	237.20	9279.07	180.03
230	21615.00	89.75	174.86	12178.18	9373.43	-9373.61	4.21	95.00	1.73	237.20	9373.61	179.97
231	21710.00	91.18	174.62	12177.41	9468.08	-9468.21	12.92	95.00	1.53	237.20	9468.22	179.92
232	21806.00	92.55	174.82	12174.29	9563.68	-9563.75	21.74	96.00	1.44	237.20	9563.77	179.87
233	21901.00	94.15	175.13	12168.74	9658.20	-9658.22	30.05	95.00	1.72	237.20	9658.26	179.82
234	21996.00	95.70	175.56	12160.58	9752.59	-9752.55	37.73	95.00	1.69	237.20	9752.62	179.78
235	22091.00	97.53	176.27	12149.64	9846.75	-9846.67	44.46	95.00	2.07	237.20	9846.77	179.74
236	22186.00	99.26	176.49	12135.77	9940.58	-9940.46	50.40	95.00	1.83	237.20	9940.59	179.71
237	22224.00	100.00	176.65	12129.41	9977.99	-9977.86	52.64	38.00	1.99	237.20	9978.00	179.70
PTB	22284.00	100.00	176.65	12118.99	10037.00	-10036.85	56.09	60.00	0.00	0.00	10037.01	179.68