



McVAY DRILLING COMPANY
 P.O. Box 2450
 Hobbs, New Mexico 88241
 (575) 397-3311
 FAX: 39-DRILL

RECEIVED

SEP 09 15

COG
 ARTESIA WEST

NM OIL CONSERVATION
 ARTESIA DISTRICT

OCT 13 2015

RECEIVED

15-43227

Well Name and Num: Solution Federal #3H
 Location: Sec 5, T20S, R30E
 Operator: COG
 Drilling Contractor: McVay Drilling Company

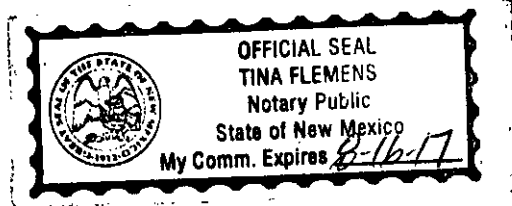
The undersigned certifies that he is an authorized representative of the drilling contractor who drilled the above described well and that he has conducted deviation tests and obtained the following results:

<u>Degrees @</u>	<u>Depth</u>	<u>Degrees @</u>	<u>Depth</u>	<u>Degrees @</u>	<u>Depth</u>	<u>Degrees @</u>	<u>Depth</u>
1.52	1.52	0.60	4949	89.00	11428		
1.00	296	0.30	5326	91.50	12561		
1.40	500	1.00	5704	87.60	12844		
0.40	875	0.40	6177	89.00	13533		
1.00	1158	0.40	6366	88.80	13386		
0.40	1442	1.10	6649	89.40	13760		
0.40	1606	0.30	6932	89.30	14047		
0.40	1725	0.60	7216	89.60	14235		
0.40	2039	0.40	7405	89.90	14610		
0.40	2332	90.50	8691	89.10	15085		
0.30	2606	88.60	8911	89.90	14610		
0.30	2934	87.90	9351	89.10	15085		
0.40	3278	89.50	9634				
0.40	3532	88.90	9918				
0.50	3721	89.00	10012				
1.20	4004	89.30	10484				
1.10	4572	89.50	10956				

By: *Mark A. Bann*

Subscribed and sworn to before me this 4th day of September, 2015

Tina Flemens
 Notary Public, Lea County, New Mexico





August 19, 2015

Concho Resources, Inc.
One Concho Center
600 W. Illinois Avenue
Midland, Texas 79701

NM OIL CONSERVATION
ARTESIA DISTRICT
OCT 13 2015
RECEIVED

Attn: Kanicia Castillo


RE: Solution Federal Com No 003H

Please find enclosed a copy of the survey from 0' to 7667' ran on the above referenced well.

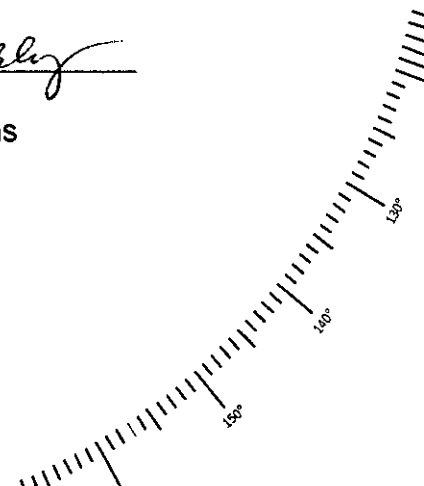
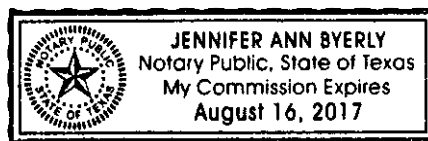
Sincerely 
Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 19 day of August, A.D., 2015, by Keith Havelka.


Jennifer Ann Byerly
Notary Public, State of Texas

VES Survey International
P.O. Box 261021, Corpus Christi, Texas 78426
T (361) 767-0602 F (361) 767-0612
www.vessurvey.com

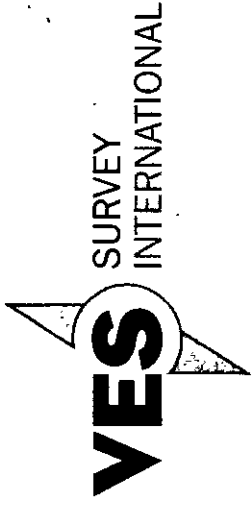




Company: Concho Oil & Gas
Well: Solution Federal Com No 003H

Rig Name: McVay 6
State/County: New Mexico/Eddy
VS-Azi: 181.98 Degrees

Latitude: 32.60902, Longitude: -103.99495
Grid North = True North -0.18 degs (NAD 27)
Grid Correction Applied = -0.18 degs



Depth Reference : RKB = 18 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: survey-de_01.ut

Minimum Curvature Method

Report Date/Time: 8/19/2015 / 16:36

VES Survey International
Midland, Texas
432-563-5444

Surveyor: Geof Davis

Solution Federal Com No 003H / API 30-015-43227

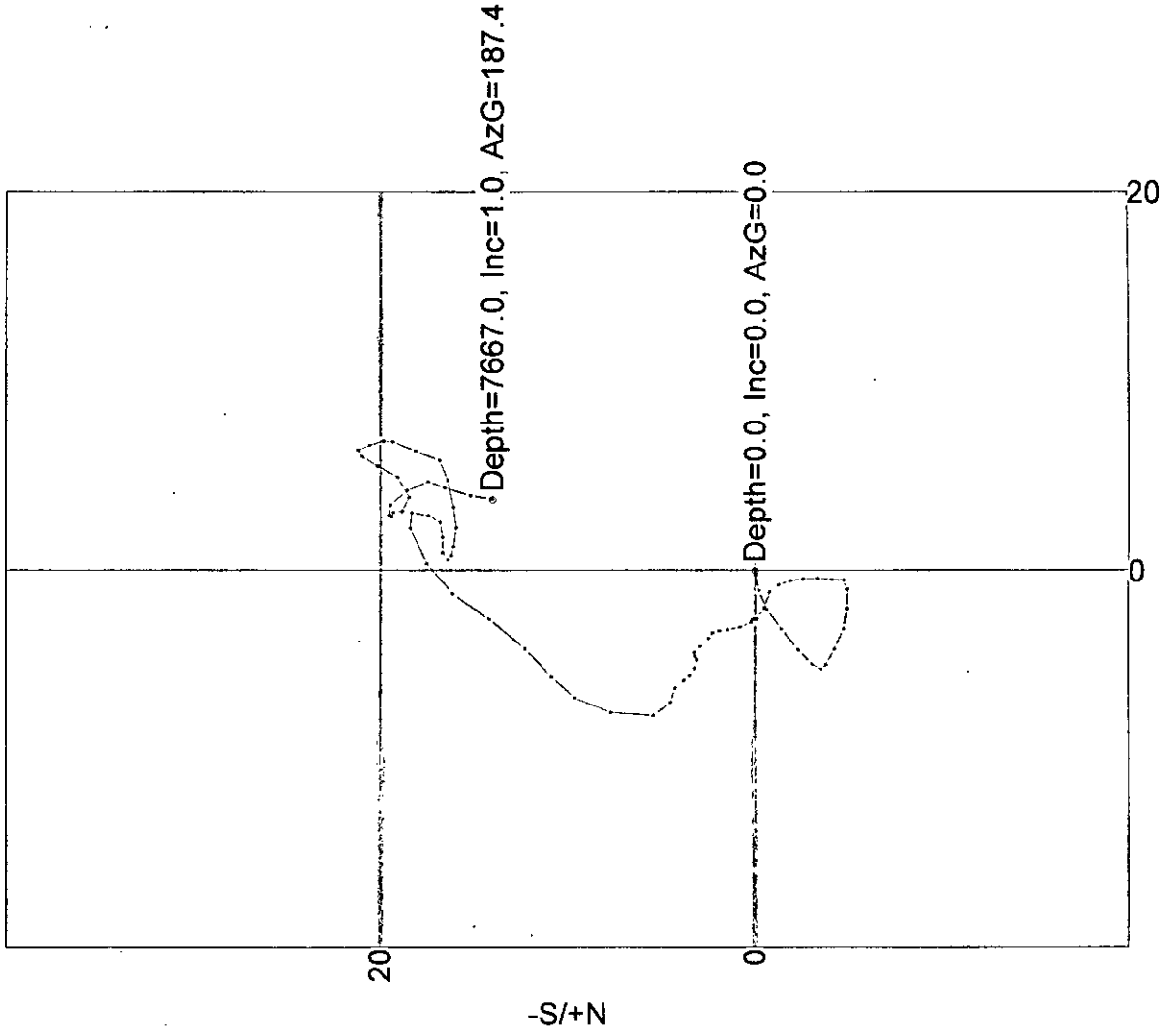
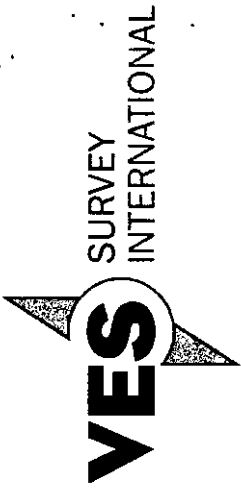
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.30	263.80	100.00	-0.03	-0.26	0.04	0.26	263.80	0.30
200.00	0.65	254.81	200.00	-0.21	-1.07	0.24	1.09	259.14	0.35
300.00	0.63	237.62	299.99	-0.65	-2.08	0.72	2.18	252.68	0.19
400.00	0.83	230.13	399.98	-1.41	-3.11	1.52	3.41	245.57	0.22
500.00	0.80	230.29	499.97	-2.32	-4.20	2.46	4.80	241.07	0.04
600.00	0.43	216.91	599.97	-3.06	-4.96	3.23	5.83	238.28	0.39
700.00	0.20	194.86	699.96	-3.54	-5.23	3.71	6.31	235.93	0.25
800.00	0.36	109.67	799.96	-3.81	-4.98	3.98	6.27	232.54	0.40
900.00	0.72	123.96	899.96	-4.27	-4.16	4.41	5.96	224.23	0.38
1000.00	0.64	103.85	999.95	-4.76	-3.09	4.86	5.67	213.03	0.25
1100.00	0.60	93.48	1099.95	-4.92	-2.03	4.99	5.32	202.38	0.12
1200.00	0.56	88.93	1199.94	-4.95	-1.01	4.98	5.05	191.57	0.06
1300.00	0.21	359.61	1299.94	-4.76	-0.52	4.77	4.79	186.26	0.60
1400.00	0.52	4.92	1399.94	-4.13	-0.48	4.14	4.16	186.69	0.31
1500.00	0.38	3.28	1499.93	-3.35	-0.43	3.36	3.38	187.26	0.14
1600.00	0.49	354.67	1599.93	-2.59	-0.45	2.60	2.62	189.82	0.13

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/S FT	+E/W FT	Vertical		Closure		Dogleg Severity Deg/100
						Section FT	Distance FT	Direction Deg	Distance FT	
1700.00	0.30	344.44	1699.93	-1.90	-0.56	1.92	1.98	196.38	0.20	
1800.00	0.47	337.69	1799.93	-1.27	-0.79	1.29	1.49	211.81	0.17	
1900.00	0.27	293.02	1899.92	-0.79	-1.16	0.83	1.41	235.60	0.34	
2000.00	0.73	288.08	1999.92	-0.50	-1.98	0.57	2.05	255.73	0.46	
2100.00	0.23	0.17	2099.92	-0.11	-2.59	0.20	2.59	267.80	0.69	
2200.00	0.04	328.72	2199.92	0.12	-2.60	-0.03	2.60	272.61	0.20	
2300.00	0.16	296.38	2299.92	0.21	-2.74	-0.11	2.75	274.35	0.13	
2400.00	0.64	344.52	2399.91	0.81	-3.02	-0.70	3.13	285.01	0.55	
2500.00	0.15	4.33	2499.91	1.48	-3.16	-1.37	3.49	295.12	0.50	
2600.00	0.36	348.70	2599.91	1.92	-3.21	-1.81	3.74	300.93	0.22	
2700.00	0.08	320.13	2699.91	2.29	-3.32	-2.17	4.03	304.59	0.30	
2800.00	0.34	300.95	2799.91	2.49	-3.61	-2.36	4.39	304.59	0.26	
2900.00	0.40	328.66	2899.91	2.94	-4.05	-2.80	5.00	306.00	0.19	
3000.00	0.16	287.36	2999.91	3.28	-4.36	-3.13	5.46	306.93	0.30	
3100.00	0.14	212.40	3099.90	3.22	-4.56	-3.06	5.58	305.23	0.18	
3200.00	0.14	263.18	3199.90	3.11	-4.75	-2.94	5.67	303.21	0.12	
3300.00	0.40	296.87	3299.90	3.25	-5.18	-3.07	6.12	302.10	0.29	
3400.00	0.15	316.03	3399.90	3.50	-5.59	-3.31	6.59	302.10	0.26	
3500.00	0.30	325.66	3499.90	3.82	-5.83	-3.62	6.97	303.24	0.16	
3600.00	0.39	315.39	3599.90	4.28	-6.22	-4.07	7.55	304.55	0.11	
3700.00	0.59	266.81	3699.90	4.50	-6.98	-4.25	8.30	302.81	0.45	
3800.00	1.13	349.72	3799.89	5.44	-7.67	-5.17	9.41	305.36	1.21	
3900.00	1.51	14.58	3899.86	7.70	-7.51	-7.43	10.76	315.68	0.68	
4000.00	0.90	34.11	3999.84	9.63	-6.74	-9.39	11.75	325.00	0.73	
4100.00	1.00	48.15	4099.83	10.86	-5.65	-10.66	12.24	332.53	0.25	
4200.00	1.37	45.32	4199.80	12.28	-4.15	-12.13	12.97	341.34	0.37	
4300.00	1.47	33.28	4299.77	14.20	-2.60	-14.10	14.43	349.64	0.32	
4400.00	1.23	36.28	4399.75	16.14	-1.25	-16.09	16.19	355.56	0.25	
4500.00	1.24	61.82	4499.72	17.52	0.33	-17.52	17.52	1.09	0.55	
4600.00	1.15	67.36	4599.70	18.41	2.21	-18.48	18.55	6.86	0.14	
4700.00	0.57	194.19	4699.69	18.32	3.02	-18.41	18.56	9.36	1.56	
4800.00	0.46	184.80	4799.69	17.43	2.86	-17.52	17.66	9.33	0.14	
4900.00	0.42	235.62	4899.69	16.82	2.52	-16.89	17.00	8.54	0.38	
5000.00	0.55	279.75	4999.68	16.69	1.75	-16.74	16.78	5.99	0.38	
5100.00	0.47	256.71	5099.68	16.67	0.89	-16.69	16.70	3.04	0.22	
5200.00	0.21	165.39	5199.68	16.41	0.53	-16.41	16.41	1.87	0.52	
5300.00	0.18	99.33	5299.68	16.20	0.74	-16.22	16.22	2.61	0.21	
5400.00	0.42	104.17	5399.68	16.09	1.25	-16.12	16.14	4.44	0.23	
5500.00	0.72	95.25	5499.67	15.94	2.23	-16.01	16.10	7.95	0.32	

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N-S FT	+E-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
5600.00	0.59	65.89	5599.67	16.09	3.32	-16.20	16.43	11.66	0.36
5700.00	1.10	84.04	5699.66	16.40	4.74	-16.56	17.07	16.12	0.57
5800.00	0.42	17.60	5799.65	16.85	5.80	-17.04	17.82	19.00	1.01
5900.00	1.15	22.47	5899.64	18.13	6.30	-18.34	19.19	19.16	0.73
6000.00	0.34	18.59	5999.63	19.35	6.78	-19.57	20.50	19.31	0.81
6100.00	0.26	344.49	6099.63	19.85	6.81	-20.07	20.99	18.95	0.19
6200.00	0.61	343.21	6199.62	20.58	6.60	-20.79	21.61	17.79	0.35
6300.00	0.14	309.65	6299.62	21.16	6.35	-21.37	22.10	16.70	0.49
6400.00	0.43	221.92	6399.62	20.96	6.00	-21.16	21.81	15.97	0.45
6500.00	0.68	206.10	6499.62	20.15	5.49	-20.33	20.89	15.24	0.28
6600.00	0.73	209.35	6599.61	19.07	4.92	-19.23	19.70	14.46	0.06
6700.00	0.88	265.69	6699.60	18.46	3.85	-18.58	18.86	11.77	0.77
6800.00	0.49	1.84	6799.60	18.83	3.10	-18.93	19.09	9.35	1.05
6900.00	0.09	305.56	6899.59	19.31	3.05	-19.40	19.54	8.97	0.44
7000.00	0.20	282.58	6999.59	19.39	2.81	-19.48	19.59	8.25	0.12
7100.00	0.30	72.10	7099.59	19.51	2.89	-19.60	19.72	8.42	0.48
7200.00	0.36	113.85	7199.59	19.46	3.42	-19.57	19.76	9.97	0.24
7300.00	1.05	146.61	7299.58	18.57	4.21	-18.70	19.04	12.78	0.77
7400.00	0.43	187.20	7399.58	17.44	4.67	-17.59	18.05	14.99	0.78
7500.00	0.64	208.72	7499.57	16.58	4.35	-16.72	17.14	14.72	0.29
7600.00	1.04	189.79	7599.56	15.19	3.93	-15.32	15.69	14.51	0.48
7667.00	0.99	187.36	7666.55	14.02	3.75	-14.14	14.51	14.99	0.10



VES Survey International
Midland, Texas
432-563-5444
Surveyor: Geof Davis
Solution Federal Com No 003H / API 30-015-43227



-W/+E
VES Survey Date: 8/13/2015



9/8/15

State of New Mexico
County of Eddy

I, Donald D. Mason, certify that: I am employed by Terra Directional Services LLC; that I did on the day(s) of 08/04/2015 through 08/22/2015 conduct or supervise the taking of a MWD survey from a depth of 7758 feet to a depth of 15567 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Terra Directional Services LLC; that I am authorized and qualified to make this report; that this survey was conducted at the request of COG Operating, LLC for the Solution Federal Ccm #3H Well API 30-015-43227 in Eddy County, New Mexico; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Terra Directional Services LLC.

Donald D. Mason
President

State of Texas
County of Burnet

Before me, a notary public, on this day personally appeared Donald D. Mason, known to me to be the person whose name is subscribed to the foregoing document and, being by me first duly sworn, declared that the statements therein contained are true and correct.



Notary Public's Signature



Customer Name: COG Operating, LLC
 Well Name: Solution Federal Com #3H
 API Number: 30-015-43227
 County / Parish: Eddy County, NM

M.W.D. Operator: Jeremy Tepe
 Directional Driller: Irby Lejeune
 Total Magnetic Correction: 7.2
 Job #: NM-558

Vertical Section: 181.98

Tie In Survey(s) Provided By:

	Meas. Depth	Inc.	Azm.	T.V.D.	Ver. Sect.	+N / -S	+E / -W	Dist.	Angle	DLS
Tie - In										
0	7667.00	0.99	187.36	7666.55	-14.14	14.02	3.75	14.51	14.99	0.10
1	7758.00	1.60	146.00	7757.53	-12.33	12.19	4.36	12.94	19.68	1.18
2	7836.00	2.50	137.00	7835.48	-10.25	10.04	6.13	11.76	31.40	1.22
3	7863.00	3.10	157.90	7862.45	-9.16	8.93	6.81	11.23	37.30	4.35
4	7900.00	3.80	171.70	7899.38	-7.04	6.79	7.36	10.01	47.29	2.92
5	7931.00	6.60	181.90	7930.25	-4.25	4.00	7.45	8.45	61.79	9.48
6	7962.00	10.40	186.00	7960.90	0.32	-0.57	7.10	7.12	94.59	12.41
7	7994.00	14.10	188.10	7992.17	7.08	-7.30	6.24	9.61	139.47	11.64
8	8025.00	17.50	188.50	8021.99	15.47	-15.65	5.02	16.44	162.21	10.97
9	8057.00	20.40	187.30	8052.26	25.81	-25.95	3.60	26.20	172.09	9.14
10	8088.00	23.10	184.70	8081.05	37.26	-37.37	2.42	37.45	176.30	9.25
11	8120.00	26.20	182.60	8110.13	50.60	-50.69	1.58	50.71	178.21	10.07
12	8151.00	30.30	181.70	8137.43	65.27	-65.35	1.04	65.35	179.09	13.30
13	8183.00	34.70	181.70	8164.41	82.46	-82.53	0.53	82.53	179.63	13.75
14	8215.00	38.40	183.60	8190.12	101.51	-101.56	-0.36	101.56	180.21	12.09
15	8246.00	41.80	185.50	8213.83	121.45	-121.46	-1.96	121.47	180.92	11.66
16	8278.00	44.90	186.10	8237.09	143.37	-143.31	-4.18	143.37	181.67	9.77
17	8309.00	49.40	185.40	8258.17	166.04	-165.91	-6.45	166.04	182.23	14.61
18	8340.00	54.40	183.90	8277.29	190.40	-190.22	-8.42	190.41	182.53	16.57
19	8372.00	58.30	183.40	8295.02	217.02	-216.80	-10.11	217.04	182.67	12.26
20	8403.00	61.70	182.80	8310.52	243.86	-243.60	-11.56	243.88	182.72	11.10
21	8435.00	64.70	183.20	8324.95	272.41	-272.12	-13.06	272.44	182.75	9.44
22	8466.00	67.80	183.60	8337.43	300.77	-300.44	-14.74	300.81	182.81	10.07
23	8498.00	71.30	183.90	8348.61	330.74	-330.36	-16.70	330.78	182.89	10.97
24	8534.00	74.70	183.20	8359.13	365.15	-364.72	-18.83	365.20	182.96	9.63
25	8565.00	77.40	181.90	8366.60	395.23	-394.77	-20.17	395.28	182.92	9.61
26	8596.00	80.30	180.00	8372.60	425.63	-425.17	-20.67	425.68	182.78	11.12
27	8628.00	83.20	178.30	8377.19	457.26	-456.83	-20.20	457.28	182.53	10.48
28	8659.00	87.20	178.10	8379.78	488.08	-487.70	-19.23	488.08	182.26	12.92
29	8691.00	90.50	179.70	8380.43	520.02	-519.69	-18.61	520.02	182.05	11.46
30	8754.00	91.80	181.10	8379.16	582.98	-582.67	-19.05	582.98	181.87	3.03
31	8785.00	90.20	181.60	8378.62	613.97	-613.65	-19.78	613.97	181.85	5.41
32	8848.00	87.60	183.20	8379.83	676.95	-676.58	-22.42	676.95	181.90	4.85
33	8911.00	88.60	183.20	8381.92	739.90	-739.45	-25.94	739.90	182.01	1.59
34	8942.00	89.40	183.20	8382.46	770.89	-770.39	-27.67	770.89	182.06	2.58
35	9005.00	89.10	183.90	8383.28	833.86	-833.27	-31.57	833.86	182.17	1.21
36	9068.00	88.90	183.10	8384.38	896.83	-896.14	-35.41	896.84	182.26	1.31
37	9131.00	89.40	182.40	8385.32	959.81	-959.06	-38.43	959.83	182.29	1.37
38	9194.00	89.40	182.40	8385.98	1022.81	-1022.00	-41.07	1022.83	182.30	0.00
39	9257.00	89.50	182.00	8386.58	1085.81	-1084.95	-43.49	1085.82	182.30	0.65
40	9351.00	87.90	181.20	8388.72	1179.78	-1178.89	-46.12	1179.79	182.24	1.90
41	9446.00	88.40	181.80	8391.78	1274.72	-1273.80	-48.60	1274.73	182.19	0.82
42	9540.00	88.90	182.00	8394.00	1368.70	-1367.73	-51.72	1368.70	182.17	0.57
43	9634.00	89.50	182.50	8395.31	1462.68	-1461.64	-55.41	1462.69	182.17	0.83
44	9729.00	90.00	182.60	8395.72	1557.68	-1556.55	-59.63	1557.69	182.19	0.54

45	9823.00	88.80	181.10	8396.71	1651.67	-1650.49	-62.67	1651.68	182.17	2.04
46	9918.00	88.90	181.50	8398.62	1746.64	-1745.45	-64.82	1746.65	182.13	0.43
47	10012.00	89.00	181.90	8400.34	1840.63	-1839.39	-67.61	1840.63	182.11	0.44
48	10106.00	88.80	182.30	8402.14	1934.61	-1933.31	-71.05	1934.61	182.10	0.48
49	10170.00	88.70	182.90	8403.54	1998.59	-1997.23	-73.96	1998.59	182.12	0.95
50	10233.00	88.50	182.30	8405.08	2061.57	-2060.14	-76.81	2061.57	182.14	1.00
51	10295.00	88.60	181.50	8406.65	2123.55	-2122.09	-78.87	2123.55	182.13	1.30
52	10389.00	89.50	180.50	8408.21	2217.52	-2216.06	-80.51	2217.52	182.08	1.43
53	10484.00	89.30	180.70	8409.20	2312.48	-2311.05	-81.50	2312.48	182.02	0.30
54	10578.00	88.90	180.70	8410.68	2406.45	-2405.03	-82.65	2406.45	181.97	0.43
55	10673.00	88.80	180.80	8412.58	2501.41	-2500.00	-83.90	2501.41	181.92	0.15
56	10767.00	88.40	180.60	8414.88	2595.36	-2593.97	-85.04	2595.36	181.88	0.48
57	10861.00	89.70	182.00	8416.44	2689.33	-2687.92	-87.18	2689.34	181.86	2.03
58	10956.00	89.50	182.10	8417.10	2784.33	-2782.86	-90.57	2784.34	181.86	0.24
59	11050.00	89.30	182.10	8418.09	2878.32	-2876.79	-94.02	2878.33	181.87	0.21
60	11145.00	89.50	182.30	8419.08	2973.32	-2971.72	-97.67	2973.32	181.88	0.30
61	11239.00	89.50	182.50	8419.90	3067.31	-3065.63	-101.60	3067.31	181.90	0.21
62	11334.00	89.30	182.60	8420.90	3162.30	-3160.53	-105.83	3162.30	181.92	0.24
63	11428.00	89.00	182.80	8422.29	3256.28	-3254.42	-110.26	3256.28	181.94	0.38
64	11522.00	88.80	183.10	8424.09	3350.25	-3348.28	-115.09	3350.25	181.97	0.38
65	11586.00	86.90	181.60	8426.50	3414.20	-3412.17	-117.71	3414.20	181.98	3.78
66	11617.00	86.50	181.50	8428.28	3445.15	-3443.11	-118.55	3445.15	181.97	1.33
67	11711.00	86.10	181.60	8434.35	3538.95	-3536.88	-121.09	3538.95	181.96	0.44
68	11806.00	88.00	181.30	8439.24	3633.82	-3631.72	-123.49	3633.82	181.95	2.02
69	11900.00	91.90	182.50	8439.32	3727.80	-3725.65	-126.61	3727.80	181.95	4.34
70	11994.00	90.00	182.10	8437.76	3821.78	-3819.55	-130.38	3821.78	181.95	2.07
71	12089.00	90.40	182.10	8437.43	3916.78	-3914.49	-133.86	3916.78	181.96	0.42
72	12183.00	88.90	182.10	8438.00	4010.77	-4008.42	-137.30	4010.77	181.96	1.60
73	12277.00	88.80	182.10	8439.89	4104.75	-4102.34	-140.75	4104.75	181.96	0.11
74	12371.00	88.60	182.50	8442.02	4198.73	-4196.24	-144.52	4198.73	181.97	0.48
75	12466.00	90.40	182.20	8442.85	4293.72	-4291.15	-148.41	4293.72	181.98	1.92
76	12561.00	91.50	182.20	8441.27	4388.70	-4386.07	-152.06	4388.70	181.99	1.16
77	12655.00	90.20	181.30	8439.88	4482.69	-4480.31	-154.93	4482.69	181.98	1.68
78	12749.00	90.30	180.70	8439.47	4576.67	-4573.99	-156.57	4576.67	181.96	0.65
79	12844.00	87.60	181.00	8441.21	4671.63	-4668.96	-157.98	4671.63	181.94	2.86
80	12913.00	87.90	181.20	8443.92	4740.57	-4737.89	-159.30	4740.57	181.93	0.52
81	12977.00	88.20	181.40	8446.10	4804.53	-4801.84	-160.75	4804.53	181.92	0.56
82	13039.00	89.00	181.70	8447.61	4866.51	-4863.80	-162.43	4866.51	181.91	1.38
83	13102.00	89.00	182.20	8448.71	4929.50	-4926.75	-164.57	4929.50	181.91	0.79
84	13197.00	89.50	182.60	8449.96	5024.48	-5021.66	-168.55	5024.49	181.92	0.67
85	13291.00	88.10	181.90	8451.92	5118.46	-5115.56	-172.24	5118.46	181.93	1.67
86	13386.00	88.80	182.30	8454.49	5213.42	-5210.46	-175.72	5213.43	181.93	0.85
87	13480.00	89.20	182.60	8456.13	5307.41	-5304.36	-179.74	5307.41	181.94	0.53
88	13575.00	89.70	183.00	8457.05	5402.39	-5399.24	-184.38	5402.39	181.96	0.67
89	13669.00	90.00	182.60	8457.29	5496.38	-5493.13	-188.97	5496.38	181.97	0.53
90	13763.00	89.40	181.00	8457.78	5590.38	-5587.08	-191.92	5590.38	181.97	1.82
91	13858.00	89.90	181.70	8458.36	5685.37	-5682.05	-194.16	5685.37	181.96	0.91
92	13952.00	89.80	181.40	8458.61	5779.36	-5776.02	-196.70	5779.37	181.95	0.34
93	14047.00	89.30	181.20	8459.36	5874.35	-5870.99	-198.86	5874.36	181.94	0.57
94	14141.00	89.70	181.60	8460.18	5968.35	-5964.96	-201.16	5968.35	181.93	0.60
95	14235.00	89.60	181.90	8460.75	6062.34	-6058.91	-204.03	6062.35	181.93	0.34
96	14330.00	89.60	182.20	8461.41	6157.34	-6153.85	-207.42	6157.34	181.93	0.32
97	14424.00	89.60	182.60	8462.07	6251.34	-6247.76	-211.36	6251.34	181.94	0.43
98	14519.00	89.70	182.20	8462.65	6346.33	-6342.68	-215.34	6346.33	181.94	0.43
99	14613.00	89.80	182.70	8463.06	6440.33	-6436.59	-219.36	6440.33	181.95	0.54
100	14707.00	89.80	181.80	8463.39	6534.32	-6530.52	-223.05	6534.32	181.96	0.96
101	14802.00	89.10	181.40	8464.30	6629.32	-6625.47	-225.70	6629.32	181.95	0.85
102	14897.00	89.00	181.80	8465.88	6724.30	-6720.42	-228.35	6724.30	181.95	0.43

103	14991.00	89.10	182.00	8467.43	6818.29	-6814.36	-231.47	6818.29	181.95	0.24
104	15085.00	89.10	182.60	8468.91	6912.28	-6908.27	-235.24	6912.28	181.95	0.64
105	15148.00	89.00	182.60	8469.96	6975.26	-6971.20	-238.10	6975.26	181.96	0.16
106	15274.00	88.90	183.10	8472.26	7101.23	-7097.02	-244.36	7101.23	181.97	0.40
107	15369.00	89.00	183.40	8474.01	7196.19	-7191.85	-249.75	7196.19	181.99	0.33
108	15463.00	89.00	183.50	8475.65	7290.14	-7285.67	-255.40	7290.14	182.01	0.11
109	15514.00	89.00	183.80	8476.54	7341.11	-7336.56	-258.65	7341.11	182.02	0.59
PTB	15567.00	89.00	183.80	8477.46	7394.08	-7389.43	-262.16	7394.08	182.03	0.00