



15.4048

April 9, 2015

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

NM OIL CONSERVATION
ARTESIA DISTRICT

MAY 26 2015

RECEIVED

Attn: Kanicia Castillo

RE: **Ouimet State Com 23H**

Please find enclosed a copy of the survey from 0' to 4147' ran on the above referenced well.

Sincerely,

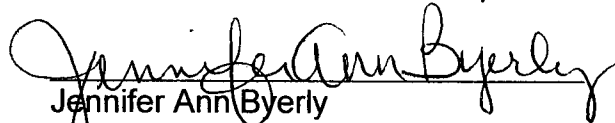

Keith Havelka
Operations

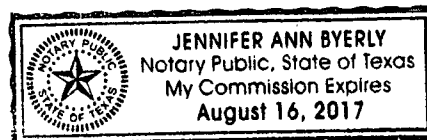
STATE OF TEXAS §

§

COUNTY OF NUECES §

This instrument was acknowledged before me on the 9 day of April, A.D., 2015, by Keith Havelka.


Jennifer Ann Byerly
Notary Public, State of Texas





Company: COG Operating
Lease/Well: Ouimet State Com/23H

Rig Name: UDI 43
State/County: New Mexico/Eddy
Latitude: 32.87, Longitude: -104.04
GRID North is 0.16 Degrees East of True North
VS-Azi: 0.00 Degrees



NM OIL CONSERVATION
ARTESIA DISTRICT
MAY 26 2015
RECEIVED

Depth Reference : RKB 12.5 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: ouimet state com 23h.ut
Minimum Curvature Method
Report Date/Time: 4/9/2015 / 14:59

VES Survey International
Fort Worth, Texas
817-741-3610

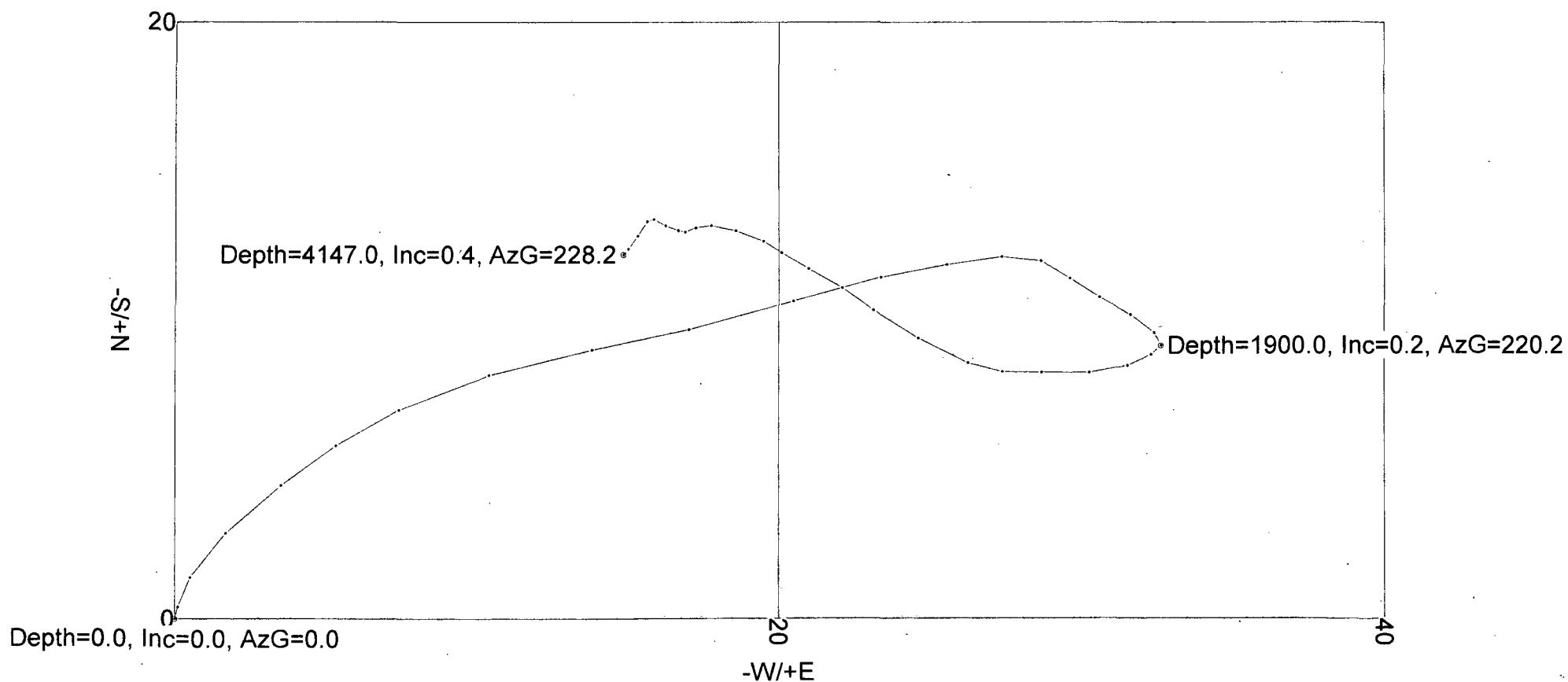
Surveyor: Eric Warner
Ouimet State Com 23H / API 30-015-40418

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	0.47	15.28	100.00	0.40	0.11	0.40	0.41	15.28	0.47
200.00	0.76	25.55	199.99	1.40	0.50	1.40	1.48	19.83	0.30
300.00	1.43	44.72	299.97	2.88	1.67	2.88	3.33	30.08	0.76
400.00	1.34	52.60	399.95	4.48	3.48	4.48	5.67	37.82	0.21
500.00	1.27	55.41	499.92	5.82	5.32	5.82	7.88	42.43	0.09
600.00	1.51	64.53	599.89	7.01	7.42	7.01	10.21	46.60	0.32
700.00	2.22	72.11	699.84	8.17	10.44	8.17	13.26	51.95	0.75
800.00	1.81	80.72	799.78	9.02	13.84	9.02	16.52	56.90	0.51
900.00	1.97	75.26	899.72	9.71	17.06	9.71	19.63	60.34	0.25
1000.00	2.09	73.62	999.66	10.67	20.48	10.67	23.09	62.48	0.13
1100.00	1.34	75.59	1099.61	11.47	23.36	11.47	26.02	63.84	0.75
1200.00	1.23	82.65	1199.59	11.90	25.55	11.90	28.19	65.03	0.19
1300.00	0.87	80.79	1299.57	12.16	27.37	12.16	29.95	66.05	0.36
1400.00	0.69	115.73	1399.56	12.02	28.66	12.02	31.08	67.25	0.50
1500.00	0.60	128.32	1499.56	11.43	29.61	11.43	31.74	68.89	0.17
1600.00	0.73	119.18	1599.55	10.80	30.58	10.80	32.43	70.55	0.17
1700.00	0.63	120.32	1699.54	10.21	31.61	10.21	33.22	72.09	0.11
1800.00	0.52	135.87	1799.54	9.61	32.39	9.61	33.79	73.47	0.19

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
1900.00	0.16	220.20	1899.54	9.18	32.62	9.18	33.88	74.28	0.53
2000.00	0.36	230.51	1999.53	8.87	32.28	8.87	33.48	74.63	0.20
2100.00	0.65	252.53	2099.53	8.51	31.50	8.51	32.63	74.89	0.35
2200.00	0.82	264.91	2199.52	8.27	30.25	8.27	31.37	74.71	0.23
2300.00	0.98	274.64	2299.51	8.28	28.69	8.28	29.86	73.90	0.22
2400.00	0.51	263.84	2399.50	8.30	27.39	8.30	28.62	73.14	0.49
2500.00	0.88	296.55	2499.49	8.60	26.26	8.60	27.63	71.87	0.53
2600.00	1.23	297.14	2599.48	9.43	24.62	9.43	26.36	69.04	0.34
2700.00	0.80	309.80	2699.46	10.36	23.13	10.36	25.34	65.86	0.48
2800.00	0.67	301.18	2799.45	11.11	22.09	11.11	24.73	63.30	0.17
2900.00	0.80	299.04	2899.44	11.76	20.98	11.76	24.05	60.73	0.13
3000.00	0.39	305.17	2999.44	12.29	20.09	12.29	23.55	58.54	0.41
3100.00	0.43	299.48	3099.44	12.67	19.49	12.67	23.24	56.96	0.05
3200.00	0.69	286.35	3199.43	13.02	18.58	13.02	22.69	54.97	0.30
3300.00	0.26	270.70	3299.43	13.20	17.78	13.20	22.14	53.41	0.45
3400.00	0.34	255.69	3399.43	13.13	17.26	13.13	21.69	52.75	0.11
3500.00	0.11	224.86	3499.43	12.99	16.91	12.99	21.32	52.48	0.25
3600.00	0.22	305.48	3599.43	13.03	16.69	13.03	21.17	52.01	0.23
3700.00	0.30	280.31	3699.42	13.19	16.27	13.19	20.95	50.97	0.14
3800.00	0.24	320.57	3799.42	13.40	15.88	13.40	20.78	49.84	0.20
3900.00	0.28	201.58	3899.42	13.33	15.65	13.33	20.56	49.58	0.45
4000.00	0.38	222.09	3999.42	12.85	15.34	12.85	20.01	50.04	0.15
4100.00	0.25	205.19	4099.42	12.41	15.03	12.41	19.49	50.44	0.16
4147.00	0.37	228.21	4146.42	12.22	14.87	12.22	19.24	50.59	0.37



VES Survey International
Fort Worth, Texas
817-741-3610
Surveyor: Eric Warner
Ouimet State Com 23H / API 30-015-40418



WELL NAME AND NUMBER Ouimet State Com No. 23H
 LOCATION Section 2, T17S, R29E, Unit H, 1800 FNL, 150 FEL, Eddy County
 OPERATOR COG Operating LLC
 DRILLING CONTRACTOR United Drilling, Inc.

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

Degrees @ Depth	Degrees @ Depth	Degrees @ Depth
.5° @ 337'	28.1° @ 4500'	81.5° @ 5128'
1.4° @ 488'	30.7° @ 4531'	83.3° @ 5160'
2.0° @ 732'	32.8° @ 4562'	85.1° @ 5191'
1.5° @ 988'	39.9° @ 4657'	87.4° @ 5223'
1.1° @ 1138'	43.3° @ 4688'	88.7° @ 5253'
.4° @ 1548'	47.4° @ 4720'	89.8° @ 5284'
.1° @ 1925'	51.6° @ 4751'	90.2° @ 5448'
.7° @ 2334'	54.9° @ 4783'	90.7° @ 5473'
.5° @ 2746'	57.3° @ 4814'	90.5° @ 5568'
.3° @ 3090'	59.8° @ 4845'	92.0° @ 5662'
.3° @ 3877'	62.3° @ 4877'	92.1° @ 5757'
.5° @ 4229'	65.3° @ 4908'	92.1° @ 5852'
.4° @ 4185'	67.7° @ 4940'	92.7° @ 5946'
.3° @ 4216'	70.6° @ 4971'	91.5° @ 6040'
1.3° @ 4247'	74.0° @ 5002'	91.0° @ 6136'
19.9° @ 4405'	77.4° @ 5034'	90.8° @ 6230'
23.0° @ 4437'	79.1° @ 5065'	91.3° @ 6325'
25.6° @ 4468'	80.6° @ 5067'	92.2° @ 6419'

Drilling Contractor- UNITED DRILLING, INC.

NM OIL CONSERVATION
 ARTESIA DISTRICT
 MAY 26 2015

By: Angel Salazar
 (Angel Salazar)

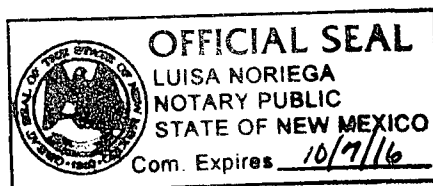
Title: Vice President

RECEIVED

Subscribed and sworn to before me this 14th day of April 2015.

Luisa Noriega
 Notary Public

My Commission Expires:



Chaves NM
 County State

WELL NAME AND NUMBER Quimet State Com No. 23H
 LOCATION Section 2, T17S, R29E, Unit H, 1800 FNL, 150 FEL, Eddy County
 OPERATOR COG Operating LLC
 DRILLING CONTRACTOR United Drilling, Inc.

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

Degrees @ Depth	Degrees @ Depth	Degrees @ Depth
92.2° @ 6514'	91.1° @ 8402'	
92.1° @ 6608'	91.1° @ 8497'	
91.9° @ 6702'	91.1° @ 8591'	
91.7° @ 6797'	91.2° @ 8686'	
91.6° @ 6892'	90.9° @ 8780'	
91.4° @ 6987'	90.4° @ 8875'	
91.4° @ 7081'	89.8° @ 8969'	
91.3° @ 7175'	90.1° @ 9064'	
92.0° @ 7363'	90.3° @ 9158'	
92.0° @ 7457'	89.8° @ 9252'	
92.1° @ 7552'		
92.4° @ 7646'		
92.3° @ 7835'		
92.1° @ 7930'		
92.4° @ 8024'		
91.5° @ 8118'		
91.3° @ 8213'		
91.4° @ 8308'		

NM OIL CONSERVATION
 ARTESTA DISTRICT

MAY 26 2015

RECEIVED

Drilling Contractor- UNITED DRILLING, INC.

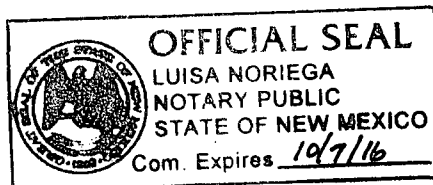
By: *Angel Salazar*
 (Angel Salazar)

Title: Vice President

Subscribed and sworn to before me this 14th day of April 2015.

Luis Noriega
 Notary Public

My Commission Expires:



Chaves NM
 County State



State of New Mexico
County of Eddy

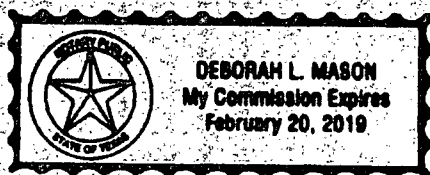
I, Donald D. Mason, certify that: I am employed by Terra Directional Services LLC; that I did on the day(s) of 04/04/2015 through 04/11/2015 conduct or supervise the taking of a MWD survey from a depth of 4185 feet to a depth of 9386 feet; that the data is true, correct, complete and within the limitations 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 Concho Oil & Gas for the Ouimet State Com #23H Well API 30-015-40418 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
Well Name: Ouimet State Com #23H
API Number: 30-015-40418
County / Parish: Eddy Co

M.W.D. Operator: Justin Campos
Directional Driller: John Overton
Total Magnetic Correction: 7.23
Job #: NM-526

Vertical Section: 271.55

Tie In Survey(s) Provided By:

VES

	Meas. Depth	Inc.	Azm.	T.V.D.	Ver. Sect.	+N / -S	+E / -W	Dist.	Angle	DLS
Tie - In										
0	4147.00	0.37	228.21	4146.42	-14.53	12.22	14.87	19.24	50.59	0.37
1	4185.00	0.40	264.20	4184.42	-14.31	12.12	14.65	19.01	50.38	0.63
2	4216.00	0.30	213.20	4215.42	-14.16	12.05	14.49	18.85	50.27	1.01
3	4247.00	1.30	267.50	4246.42	-13.77	11.96	14.10	18.49	49.69	3.71
4	4279.00	4.30	279.10	4278.37	-12.22	12.14	12.55	17.46	45.96	9.49
5	4311.00	8.00	280.80	4310.18	-8.83	12.74	9.18	15.70	35.76	11.58
6	4342.00	12.20	283.80	4340.70	-3.50	13.93	3.88	14.46	15.55	13.65
7	4374.00	16.00	286.90	4371.73	4.06	16.02	-3.63	16.43	347.23	12.10
8	4405.00	19.90	288.00	4401.21	13.25	18.89	-12.74	22.79	326.01	12.63
9	4437.00	23.00	288.20	4430.99	24.46	22.53	-23.86	32.82	313.36	9.69
10	4468.00	25.60	287.30	4459.24	36.71	26.41	-36.01	44.66	306.26	8.47
11	4500.00	28.10	286.80	4487.79	50.64	30.65	-49.83	58.50	301.59	7.84
12	4531.00	30.70	286.50	4514.80	65.33	35.01	-64.41	73.31	298.52	8.40
13	4562.00	32.80	285.90	4541.16	81.11	39.55	-80.07	89.31	296.29	6.85
14	4594.00	34.90	285.70	4567.73	98.39	44.41	-97.22	106.88	294.55	6.57
15	4625.00	37.10	284.90	4592.81	116.09	49.21	-114.80	124.90	293.20	7.26
16	4657.00	39.90	284.90	4617.85	135.47	54.33	-134.05	144.64	292.06	8.75
17	4688.00	43.30	284.70	4641.03	155.50	59.59	-153.94	165.07	291.16	10.98
18	4720.00	47.40	284.60	4663.51	177.67	65.34	-175.96	187.70	290.37	12.81
19	4751.00	51.60	283.60	4683.64	200.67	71.08	-198.82	211.14	289.67	13.77
20	4783.00	54.90	283.30	4702.79	225.76	77.04	-223.75	236.65	289.00	10.34
21	4814.00	57.30	282.20	4720.07	251.00	82.72	-248.85	262.24	288.39	8.28
22	4845.00	59.80	281.30	4736.25	277.02	88.10	-274.74	288.52	287.78	8.44
23	4877.00	62.30	280.50	4751.74	304.65	93.39	-302.23	316.33	287.17	8.11
24	4908.00	65.30	279.80	4765.42	332.15	98.29	-329.61	343.95	286.60	9.89
25	4940.00	67.70	279.50	4778.18	361.20	103.21	-358.54	373.10	286.06	7.55
26	4971.00	70.60	276.70	4789.22	389.97	107.28	-387.21	401.80	285.49	12.60
27	5002.00	74.00	274.30	4798.64	419.43	110.11	-416.60	430.91	284.80	13.22
28	5034.00	77.30	273.50	4806.57	450.40	112.21	-447.53	461.38	284.08	10.59
29	5065.00	79.10	272.70	4812.91	480.73	113.85	-477.83	491.20	283.40	6.33
30	5097.00	80.60	272.70	4818.55	512.22	115.34	-509.29	522.19	282.76	4.69
31	5128.00	81.50	273.50	4823.37	542.84	116.99	-539.87	552.40	282.23	3.86
32	5160.00	83.30	272.70	4827.60	574.54	118.71	-571.54	583.74	281.73	6.15
33	5191.00	85.10	270.70	4830.74	605.38	119.62	-602.36	614.13	281.23	8.66
34	5223.00	87.40	268.50	4832.83	637.29	119.40	-634.29	645.43	280.66	9.94
35	5253.00	88.70	267.60	4833.85	667.21	118.38	-664.26	674.72	280.10	5.27
36	5284.00	89.80	267.60	4834.26	698.14	117.08	-695.23	705.01	279.56	3.55
37	5379.00	90.20	269.80	4834.26	793.01	114.92	-790.19	798.51	278.27	2.35
38	5473.00	90.70	271.40	4833.52	886.99	115.91	-884.18	891.75	277.47	1.78
39	5568.00	90.50	271.30	4832.52	981.99	118.15	-979.15	986.25	276.88	0.24
40	5662.00	92.00	272.10	4830.47	1075.96	120.93	-1073.08	1079.88	276.43	1.81

41	5757.00	92.10	272.00	4827.07	1170.90	124.33	-1167.96	1174.56	276.08	0.15
42	5852.00	92.10	272.10	4823.59	1265.83	127.73	-1262.84	1269.28	275.78	0.11
43	5946.00	92.70	271.40	4819.66	1359.75	130.59	-1356.71	1362.98	275.50	0.98
44	6040.00	91.50	269.80	4816.21	1453.67	131.58	-1450.64	1456.59	275.18	2.13
45	6136.00	91.00	269.80	4814.12	1549.60	131.24	-1546.61	1552.17	274.85	0.52
46	6230.00	90.80	269.20	4812.64	1643.53	130.42	-1640.60	1645.77	274.55	0.67
47	6325.00	91.30	269.30	4810.90	1738.43	129.18	-1735.57	1740.37	274.26	0.54
48	6419.00	92.20	271.70	4808.03	1832.37	130.00	-1829.52	1834.13	274.06	2.73
49	6514.00	92.20	271.20	4804.38	1927.30	132.40	-1924.42	1928.97	273.94	0.53
50	6608.00	92.10	270.80	4800.86	2021.22	134.04	-2018.34	2022.78	273.80	0.44
51	6702.00	91.90	270.80	4797.58	2115.16	135.35	-2112.27	2116.60	273.67	0.21
52	6797.00	91.70	270.70	4794.59	2210.10	136.59	-2207.22	2211.44	273.54	0.24
53	6892.00	91.60	271.30	4791.86	2305.06	138.25	-2302.16	2306.31	273.44	0.64
54	6987.00	91.40	268.40	4789.37	2399.97	138.00	-2397.12	2401.09	273.29	3.06
55	7081.00	91.40	267.80	4787.07	2493.78	134.89	-2491.04	2494.69	273.10	0.64
56	7175.00	91.30	269.50	4784.86	2587.63	132.67	-2584.98	2588.39	272.94	1.81
57	7268.00	91.90	269.40	4782.26	2680.53	131.78	-2677.94	2681.18	272.82	0.65
58	7363.00	92.00	270.40	4779.03	2775.43	131.62	-2772.89	2776.01	272.72	1.06
59	7457.00	92.00	269.90	4775.75	2869.35	131.86	-2866.83	2869.86	272.63	0.53
60	7552.00	92.10	269.80	4772.35	2964.24	131.61	-2961.77	2964.69	272.54	0.15
61	7646.00	92.40	269.90	4768.66	3058.13	131.37	-3055.69	3058.52	272.46	0.34
62	7741.00	92.40	269.70	4764.68	3153.00	131.04	-3150.61	3153.33	272.38	0.21
63	7835.00	92.30	269.80	4760.83	3246.88	130.63	-3244.53	3247.16	272.31	0.15
64	7930.00	92.10	269.70	4757.18	3341.76	130.21	-3339.46	3342.00	272.23	0.24
65	8024.00	92.40	269.60	4753.49	3435.63	129.64	-3433.38	3435.83	272.16	0.34
66	8118.00	91.50	270.10	4750.29	3529.54	129.39	-3527.33	3529.70	272.10	1.10
67	8213.00	91.30	269.90	4747.97	3624.47	129.39	-3622.30	3624.61	272.05	0.30
68	8308.00	91.40	270.50	4745.73	3719.42	129.72	-3717.27	3719.54	272.00	0.64
69	8402.00	91.10	270.20	4743.68	3813.38	130.30	-3811.25	3813.47	271.96	0.45
70	8497.00	91.10	269.90	4741.86	3908.33	130.38	-3906.23	3908.41	271.91	0.32
71	8591.00	91.10	270.20	4740.05	4002.28	130.46	-4000.21	4002.34	271.87	0.32
72	8686.00	91.20	270.20	4738.15	4097.23	130.79	-4095.19	4097.28	271.83	0.11
73	8780.00	90.90	270.40	4736.42	4191.19	131.29	-4189.18	4191.23	271.80	0.38
74	8875.00	90.40	270.30	4735.34	4286.17	131.87	-4284.17	4286.20	271.76	0.54
75	8969.00	89.80	270.60	4735.18	4380.15	132.60	-4378.16	4380.17	271.73	0.71
76	9064.00	90.10	269.60	4735.26	4475.12	132.77	-4473.16	4475.13	271.70	1.10
77	9158.00	90.30	268.70	4734.94	4569.03	131.38	-4567.15	4569.04	271.65	0.98
78	9252.00	89.80	268.60	4734.85	4662.91	129.16	-4661.12	4662.91	271.59	0.54
79	9315.00	89.70	268.60	4735.13	4725.83	127.62	-4724.10	4725.83	271.55	0.16
PTB	9386.00	89.70	268.60	4735.50	4796.73	125.89	-4795.08	4796.73	271.50	0.00