

Results of Directional Survey

API number:	30-025-40946		
OGRID:		Operator:	COG OPERATING LLC
		Property:	CORAZON STATE UNIT # 3H

surface	ULSTR:	N	03	T	21S	R	33E
				100	FSL	1980	FWL

7906

BH Loc	ULSTR:	C	03	T	21S	R	33E
18844	MD	11439.5	TVD	365	FNL	1915	FWL
				7541	FSL		

Top Perf/OH	ULSTR:	N	03	T	21S	R	33E
11762	MD	11579.3	TVD	464	FSL	1927	FWL

Bot Perf/OH	ULSTR:	C	03	T	21S	R	33E
18630	MD	11447.3	TVD	580	FNL	1915	FWL
				7327	FSL		

	MD	N/S	E/W	VD
	11731	334.18	-53.71	11571.69
TOP PERFS/OH	11762	364.06	-53.19	11579.33
	11762	364.06	-53.19	11579.33
	18610	7206.69	-65.42	11448.02
BOT PERFS/OH	18630	7226.68	-65.11	11447.32
	18703	7299.63	-63.96	11444.78

NEXT TO LAST	18794	7390.56	-64.12	11441.44
LAST READING	18839	7435.53	-64.67	11439.71
TD	18844	7440.53	-64.73	11439.52

Surface Location	100	FS	1980	FW
Projected BHL	7541	FS	1915	FW
Location of				
Top Perfs/OH	464	FS	1927	FW
Bottom Perfs/OH	7327	FS	1915	FW

SUMMARY of Subsurface Locations

Surface Location	N-03-21S-33E	100	FS	1980	FW	Vert. Depth
Top Perfs/OH	N-03-21S-33E	464	FS	1927	FW	11579.33
Bottom Perfs/OH	C-03-21S-33E	7327	FS	1915	FW	11447.32
Projected TD	C-03-21S-33E	7541	FS	1915	FW	11439.52

APR 07 2014



A GYRO TECHNOLOGIES INC. COMPANY

P.O. Box 261021
Corpus Christi, Texas 78426
(361) 767-0602 • (800) 606-GYRO • Fax (361) 767-0612

December 6, 2013

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

HOBBS OCD

MAR 05 2014

RECEIVED

Attn: Kanicia Castillo

RE: **Corazon State Unit No. 003H**

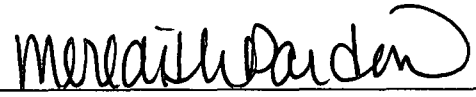
Please find enclosed a copy of the survey from 0.00' to 11032.00' ran on the above referenced well.

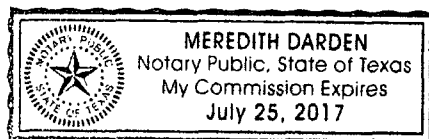
Sincerely,


Keith Havelka
Operations

STATE OF TEXAS §
 §
COUNTY OF NUECES §

This instrument was acknowledged before me on the 14th day of December A.D., 2013, by Keith Havelka.


Meredith Darden
Notary Public, State of Texas





Company: COG Operating, LLC (Concho)
Lease/Well: Corazon State Unit/No. 003H
Location: S3 T21s R33e
Rig Name: Precision 590
State/County: New Mexico/Lea
Latitude: 32.50, Longitude: -103.56
GRID North is 0.41 Degrees East of True North
VS-Azi: 0.00 Degrees



HOBBS OCD

MAR 05 2014

RECEIVED

RKB : 25 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: ...state unit #3h gyro survey.ut
Minimum Curvature Method
Report Date/Time: 12/5/2013 / 13:41

Vaughn Energy Services
Gardendale, TX 79758
(432) 563-5444
Surveyor: Dustin Wedel
Corazon State Unit No. 003H / API 30-025-40946

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W 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	****
100.00	0.20	20.25	100.00	0.16	0.06	0.17	20.25	0.20
200.00	0.40	40.50	200.00	0.59	0.35	0.69	30.37	0.22
300.00	0.23	0.06	300.00	1.06	0.58	1.21	28.41	0.27
400.00	0.07	319.63	400.00	1.31	0.54	1.42	22.32	0.19
500.00	0.12	359.72	500.00	1.46	0.50	1.55	18.88	0.09
600.00	0.18	39.81	600.00	1.69	0.60	1.80	19.56	0.12
700.00	0.16	324.58	700.00	1.93	0.62	2.03	17.80	0.21
800.00	0.15	249.34	800.00	2.01	0.42	2.05	11.79	0.19
900.00	0.16	228.63	900.00	1.87	0.20	1.88	6.04	0.05
1000.00	0.16	213.93	999.99	1.66	0.02	1.66	0.56	0.04
1100.00	0.14	219.45	1099.99	1.45	-0.14	1.45	354.34	0.03
1200.00	0.12	220.96	1199.99	1.27	-0.29	1.30	346.98	0.02
1300.00	0.17	268.03	1299.99	1.18	-0.51	1.29	336.76	0.12
1400.00	0.21	315.10	1399.99	1.31	-0.78	1.52	329.17	0.15
1500.00	0.39	332.45	1499.99	1.74	-1.07	2.04	328.48	0.20
1600.00	0.58	349.81	1599.99	2.54	-1.31	2.86	332.64	0.23
1700.00	0.50	357.74	1699.98	3.47	-1.42	3.75	337.74	0.11
1800.00	0.42	5.67	1799.98	4.27	-1.40	4.49	341.83	0.10

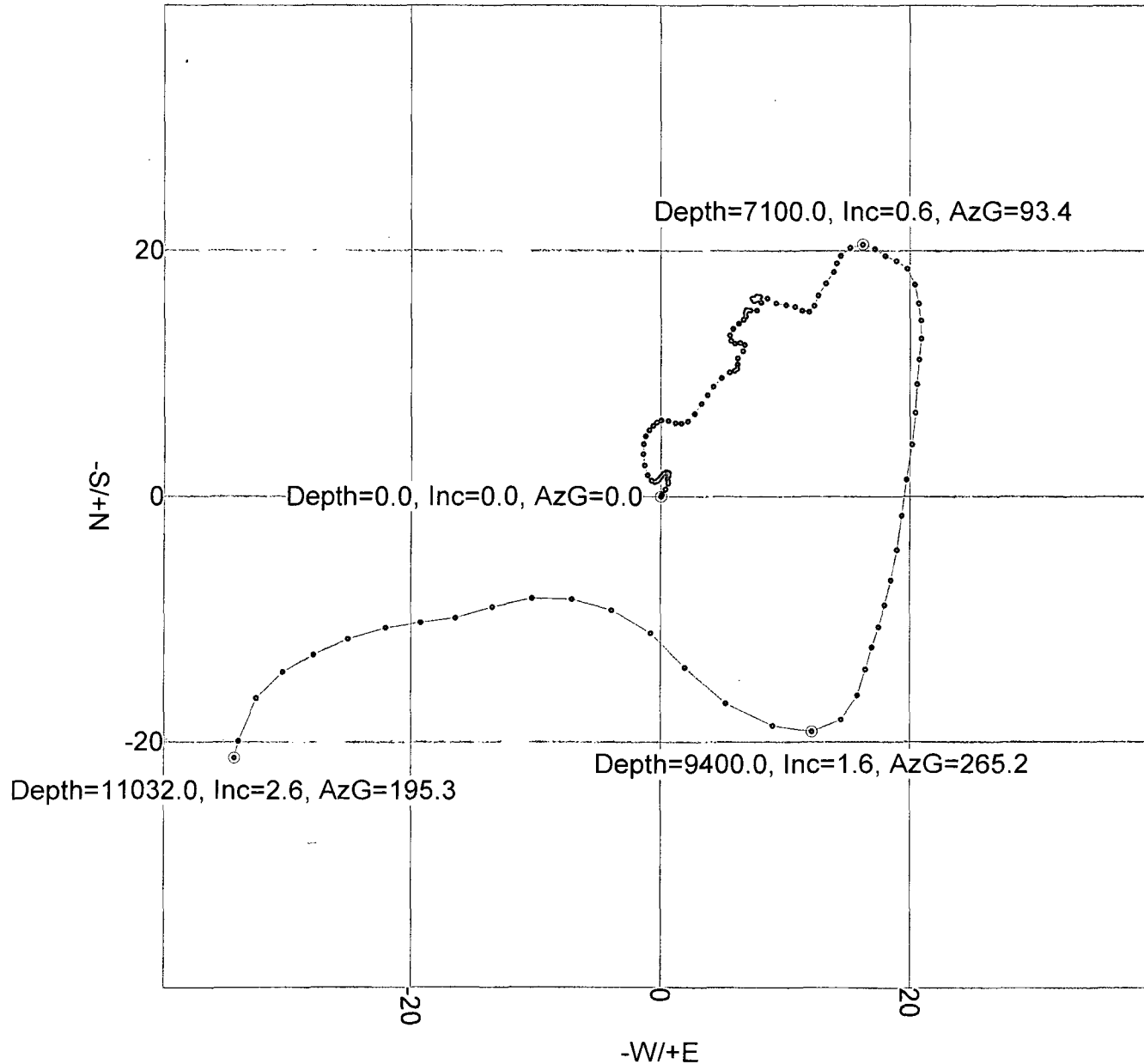
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1900.00	0.36	22.62	1899.98	4.92	-1.25	5.07	345.80	0.13
2000.00	0.29	39.57	1999.98	5.41	-0.96	5.49	349.91	0.11
2100.00	0.25	45.37	2099.98	5.75	-0.64	5.79	353.61	0.06
2200.00	0.20	43.16	2199.98	6.03	-0.37	6.04	356.46	0.05
2300.00	0.29	76.77	2299.97	6.22	-0.01	6.22	359.93	0.17
2400.00	0.39	110.38	2399.97	6.16	0.56	6.18	5.16	0.22
2500.00	0.31	100.36	2499.97	5.99	1.14	6.10	10.76	0.10
2600.00	0.24	90.34	2599.97	5.94	1.61	6.16	15.19	0.09
2700.00	0.42	60.64	2699.97	6.12	2.14	6.48	19.26	0.24
2800.00	0.60	30.94	2799.96	6.74	2.72	7.27	21.99	0.31
2900.00	0.52	36.55	2899.96	7.55	3.26	8.23	23.34	0.09
3000.00	0.44	30.15	2999.96	8.25	3.72	9.05	24.29	0.09
3100.00	0.51	38.38	3099.95	8.94	4.20	9.87	25.15	0.10
3200.00	0.58	46.61	3199.95	9.64	4.85	10.79	26.69	0.11
3300.00	0.36	66.37	3299.94	10.11	5.50	11.51	28.55	0.28
3400.00	0.13	86.13	3399.94	10.25	5.90	11.83	29.94	0.24
3500.00	0.19	33.43	3499.94	10.40	6.11	12.06	30.44	0.15
3600.00	0.25	340.73	3599.94	10.75	6.13	12.37	29.70	0.21
3700.00	0.37	16.17	3699.94	11.26	6.14	12.83	28.61	0.22
3800.00	0.48	51.61	3799.94	11.83	6.56	13.53	29.02	0.28
3900.00	0.37	326.21	3899.94	12.37	6.71	14.07	28.50	0.59
4000.00	0.26	240.81	3999.94	12.52	6.33	14.03	26.82	0.44
4100.00	0.25	283.53	4099.93	12.46	5.92	13.80	25.40	0.19
4200.00	0.24	326.26	4199.93	12.69	5.59	13.87	23.76	0.18
4300.00	0.32	5.49	4299.93	13.14	5.50	14.24	22.70	0.20
4400.00	0.39	44.73	4399.93	13.65	5.76	14.82	22.88	0.25
4500.00	0.32	48.28	4499.93	14.08	6.21	15.39	23.80	0.07
4600.00	0.25	55.83	4599.93	14.39	6.60	15.83	24.63	0.08
4700.00	0.20	13.02	4699.93	14.68	6.82	16.19	24.90	0.17
4800.00	0.15	330.21	4799.93	14.97	6.79	16.44	24.40	0.14
4900.00	0.22	51.54	4899.93	15.21	6.87	16.69	24.32	0.25
5000.00	0.28	132.87	4999.93	15.16	7.21	16.78	25.43	0.33
5100.00	0.43	65.73	5099.92	15.14	7.73	17.00	27.04	0.41
5200.00	0.58	358.59	5199.92	15.80	8.06	17.73	27.03	0.57
5300.00	0.40	272.07	5299.92	16.31	7.70	18.04	25.27	0.68
5400.00	0.22	185.54	5399.92	16.13	7.33	17.72	24.44	0.45
5500.00	0.19	97.81	5499.92	15.91	7.48	17.58	25.17	0.29
5600.00	0.16	10.07	5599.92	16.03	7.67	17.77	25.57	0.25
5700.00	0.32	68.62	5699.92	16.27	7.96	18.11	26.06	0.27

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
5800.00	0.48	127.17	5799.91	16.12	8.55	18.25	27.94	0.41
5900.00	0.47	107.02	5899.91	15.75	9.27	18.28	30.50	0.17
6000.00	0.46	92.87	5999.91	15.61	10.07	18.58	32.84	0.12
6100.00	0.41	111.57	6099.90	15.46	10.81	18.86	34.97	0.15
6200.00	0.35	130.27	6199.90	15.13	11.37	18.93	36.93	0.14
6300.00	0.40	71.52	6299.90	15.04	11.94	19.20	38.43	0.37
6400.00	0.44	12.76	6399.90	15.53	12.35	19.84	38.49	0.42
6500.00	0.59	25.62	6499.89	16.37	12.66	20.70	37.71	0.19
6600.00	0.74	38.47	6599.89	17.35	13.29	21.85	37.45	0.21
6700.00	0.53	24.61	6699.88	18.28	13.88	22.95	37.22	0.26
6800.00	0.33	10.75	6799.88	18.98	14.13	23.66	36.66	0.23
6900.00	0.49	37.68	6899.88	19.60	14.45	24.35	36.39	0.25
7000.00	0.66	58.60	6999.87	20.24	15.20	25.31	36.90	0.27
7100.00	0.63	93.40	7099.86	20.51	16.24	26.16	38.37	0.39
7200.00	0.60	128.20	7199.86	20.15	17.20	26.49	40.48	0.37
7300.00	0.57	119.30	7299.85	19.58	18.05	26.63	42.67	0.10
7400.00	0.55	110.39	7399.85	19.17	18.93	26.94	44.64	0.09
7500.00	0.74	138.55	7499.84	18.52	19.80	27.11	46.92	0.36
7600.00	0.93	166.71	7599.83	17.25	20.42	26.73	49.81	0.45
7700.00	0.85	171.17	7699.82	15.73	20.72	26.01	52.79	0.11
7800.00	0.76	175.63	7799.81	14.34	20.88	25.33	55.53	0.10
7900.00	0.91	181.82	7899.80	12.88	20.91	24.55	58.37	0.18
8000.00	1.07	188.01	7999.79	11.16	20.75	23.56	61.74	0.19
8100.00	1.24	181.95	8099.76	9.15	20.58	22.53	66.04	0.21
8200.00	1.42	183.89	8199.74	6.83	20.46	21.57	71.54	0.18
8300.00	1.58	189.13	8299.70	4.24	20.16	20.60	78.13	0.21
8400.00	1.73	188.36	8399.66	1.38	19.72	19.77	85.98	0.16
8500.00	1.65	185.89	8499.62	-1.54	19.36	19.42	94.56	0.11
8600.00	1.57	189.41	8599.58	-4.33	18.98	19.47	102.85	0.13
8700.00	1.32	192.19	8699.55	-6.81	18.52	19.73	110.19	0.26
8800.00	1.08	194.97	8799.52	-8.85	18.03	20.08	116.13	0.25
8900.00	1.02	196.97	8899.51	-10.61	17.53	20.49	121.18	0.07
9000.00	0.97	198.98	8999.49	-12.26	16.99	20.95	125.81	0.06
9100.00	1.17	192.65	9099.48	-14.05	16.49	21.67	130.43	0.23
9200.00	1.37	200.33	9199.45	-16.17	15.85	22.65	135.57	0.26
9300.00	1.48	227.78	9299.42	-18.16	14.48	23.23	141.43	0.68
9400.00	1.59	265.22	9399.39	-19.15	12.14	22.67	147.62	0.99
9500.00	2.14	288.67	9499.34	-18.66	8.99	20.72	154.27	0.93
9600.00	2.68	302.12	9599.25	-16.82	5.25	17.62	162.68	0.78

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
9700.00	2.42	321.52	9699.15	-13.93	1.95	14.06	172.03	0.90
9800.00	2.15	308.92	9799.07	-11.10	-0.82	11.13	184.24	0.57
9900.00	1.99	292.69	9899.01	-9.25	-3.88	10.03	202.78	0.61
10000.00	1.83	278.46	9998.95	-8.34	-7.06	10.93	220.25	0.50
10100.00	1.86	264.19	10098.90	-8.27	-10.25	13.18	231.10	0.46
10200.00	1.89	249.92	10198.85	-9.00	-13.41	16.15	236.13	0.47
10300.00	1.72	258.18	10298.80	-9.87	-16.42	19.16	238.99	0.31
10400.00	1.55	266.44	10398.76	-10.26	-19.24	21.81	241.92	0.29
10500.00	1.71	257.47	10498.72	-10.67	-22.05	24.49	244.17	0.30
10600.00	1.88	248.51	10598.67	-11.60	-25.03	27.59	245.14	0.32
10700.00	1.71	242.95	10698.62	-12.88	-27.89	30.72	245.21	0.24
10800.00	1.55	237.39	10798.58	-14.29	-30.36	33.55	244.80	0.23
10900.00	1.99	214.80	10898.53	-16.45	-32.49	36.42	243.15	0.82
11000.00	2.44	192.21	10998.46	-19.95	-33.94	39.37	239.55	0.97
11032.00	2.56	195.27	11030.43	-21.31	-34.27	40.35	238.13	0.56



Vaughn Energy Services
Gardendale, TX 79758
(432) 563-5444
Surveyor: Dustin Wedel
Corazon State Unit No. 003H / API 30-025-40946



VES Survey Date: 11/26/2013



HOBBS OCD

MAR 05 2014

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Customer Name: COG Operating LLC
 Well Name: Corazon State Unit #3
 API Number: 30-025-40946
 County / Parish: Lea County

M.W.D. Operator: Richard Page
 Directional Driller: Brett Nichols
 Total Magnetic Correction: 7.32
 Job #: NM-338

Vertical Section: 359.57

Tie In Survey(s) Provided By:

VES

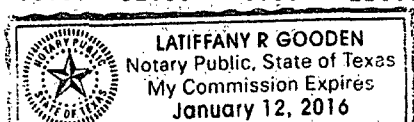
	Meas. Depth	Inc.	Azm.	T.V.D.	Ver. Sect.	+N / -S	+E / -W	Dist.	Angle	DLS
Tie - In										
0	11032.00	2.56	195.27	11030.40	-21.04	-21.30	-34.30	40.38	238.16	0.00
1	11117.00	2.90	307.60	11115.35	-21.55	-21.82	-36.50	42.53	239.13	5.34
2	11147.00	6.40	331.80	11145.25	-19.60	-19.88	-37.90	42.80	242.32	13.13
3	11178.00	10.60	339.40	11175.90	-15.39	-15.69	-39.72	42.70	248.45	14.00
4	11209.00	14.50	346.80	11206.16	-8.93	-9.24	-41.61	42.62	257.48	13.58
5	11239.00	17.40	351.50	11235.00	-0.82	-1.14	-43.13	43.14	268.48	10.57
6	11270.00	21.20	355.70	11264.25	9.37	9.03	-44.23	45.15	281.54	13.04
7	11301.00	25.40	357.10	11292.72	21.61	21.27	-44.99	49.77	295.30	13.66
8	11332.00	29.50	355.40	11320.22	35.87	35.52	-45.94	58.07	307.71	13.46
9	11362.00	33.90	355.20	11345.74	51.58	51.23	-47.23	69.68	317.32	14.67
10	11393.00	36.50	356.60	11371.07	69.41	69.05	-48.50	84.38	324.92	8.78
11	11424.00	39.50	359.40	11395.50	88.49	88.12	-49.15	100.90	330.85	11.16
12	11454.00	42.50	1.00	11418.14	108.16	107.80	-49.08	118.44	335.52	10.59
13	11485.00	45.10	1.20	11440.51	129.61	129.25	-48.66	138.11	339.37	8.40
14	11516.00	47.70	0.30	11461.89	152.05	151.69	-48.37	159.22	342.31	8.65
15	11547.00	50.00	358.00	11482.29	175.39	175.03	-48.73	181.69	344.44	9.29
16	11577.00	52.90	356.20	11500.98	198.83	198.46	-49.92	204.64	345.88	10.74
17	11608.00	56.10	356.20	11518.98	224.02	223.64	-51.60	229.51	347.01	10.32
18	11639.00	60.00	357.50	11535.38	250.28	249.89	-53.03	255.46	348.02	13.07
19	11669.00	64.40	358.70	11549.37	276.81	276.41	-53.91	281.62	348.96	15.09
20	11700.00	69.00	0.50	11561.63	305.27	304.87	-54.10	309.63	349.94	15.77
21	11731.00	73.10	1.00	11571.69	334.58	334.18	-53.71	338.47	350.87	13.31
22	11762.00	76.10	1.00	11579.93	364.45	364.06	-53.19	367.93	351.69	9.68
23	11792.00	78.40	0.60	11586.55	393.70	393.32	-52.78	396.84	352.36	7.78
24	11823.00	81.50	0.50	11591.96	424.22	423.84	-52.49	427.07	352.94	10.01
25	11854.00	85.20	0.30	11595.55	455.00	454.62	-52.28	457.62	353.44	11.95
26	11884.00	89.00	0.10	11597.06	484.96	484.58	-52.17	487.38	353.85	12.68
27	11916.00	92.00	0.40	11596.78	516.95	516.57	-52.03	519.19	354.25	9.42
28	11977.00	93.10	0.20	11594.07	577.88	577.51	-51.71	579.82	354.88	1.83
29	12069.00	93.90	359.80	11588.45	669.71	669.34	-51.71	671.33	355.58	0.97
30	12162.00	92.50	359.70	11583.26	762.56	762.19	-52.12	763.97	356.09	1.51
31	12254.00	91.40	359.10	11580.13	854.50	854.13	-53.08	855.78	356.44	1.36
32	12346.00	91.70	358.50	11577.64	946.46	946.07	-55.01	947.67	356.67	0.73
33	12438.00	90.50	358.60	11575.88	1038.43	1038.03	-57.33	1039.61	356.84	1.31
34	12530.00	91.40	358.30	11574.35	1130.40	1129.98	-59.82	1131.56	356.97	1.03
35	12622.00	91.50	357.50	11572.02	1222.33	1221.89	-63.19	1223.52	357.04	0.88
36	12714.00	91.80	358.10	11569.37	1314.24	1313.78	-66.72	1315.47	357.09	0.73
37	12806.00	91.30	359.10	11566.89	1406.20	1405.72	-68.97	1407.41	357.19	1.21
38	12899.00	91.50	358.40	11564.61	1499.16	1498.67	-71.00	1500.35	357.29	0.78
39	12991.00	91.40	359.60	11562.29	1591.12	1590.62	-72.60	1592.28	357.39	1.31
40	13083.00	91.30	2.00	11560.12	1683.07	1682.58	-71.32	1684.09	357.57	2.61
41	13175.00	92.00	2.10	11557.47	1774.94	1774.48	-68.03	1775.79	357.80	0.77
42	13267.00	92.50	1.80	11553.86	1866.79	1866.36	-64.90	1867.49	358.01	0.63
43	13359.00	92.50	1.90	11549.84	1958.63	1958.22	-61.93	1959.20	358.19	0.11



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44	13451.00	91.30	1.60	11546.79	2050.51	2050.13	-59.13	2050.98	358.35	1.34
45	13543.00	91.90	1.30	11544.22	2142.43	2142.06	-56.80	2142.82	358.48	0.73
46	13635.00	90.90	1.30	11541.98	2234.36	2234.01	-54.71	2234.68	358.60	1.09
47	13727.00	91.10	0.80	11540.37	2326.31	2325.98	-53.03	2326.59	358.69	0.59
48	13819.00	89.30	0.30	11540.05	2418.30	2417.97	-52.14	2418.53	358.76	2.03
49	13911.00	89.80	359.90	11540.77	2510.29	2509.97	-51.98	2510.51	358.81	0.70
50	14003.00	90.40	359.60	11540.61	2602.29	2601.97	-52.38	2602.49	358.85	0.73
51	14096.00	91.10	359.60	11539.39	2695.28	2694.96	-53.03	2695.48	358.87	0.75
52	14188.00	91.70	359.70	11537.15	2787.25	2786.93	-53.60	2787.44	358.90	0.66
53	14280.00	91.30	0.20	11534.74	2879.22	2878.89	-53.68	2879.39	358.93	0.70
54	14372.00	91.70	359.80	11532.33	2971.18	2970.86	-53.68	2971.35	358.96	0.61
55	14464.00	91.20	359.80	11530.00	3063.15	3062.83	-54.00	3063.31	358.99	0.54
56	14556.00	91.70	359.60	11527.67	3155.12	3154.80	-54.48	3155.27	359.01	0.59
57	14648.00	90.20	359.10	11526.15	3247.10	3246.78	-55.52	3247.25	359.02	1.72
58	14740.00	90.50	358.80	11525.59	3339.10	3338.76	-57.21	3339.25	359.02	0.46
59	14833.00	91.10	358.60	11524.29	3432.08	3431.73	-59.32	3432.24	359.01	0.68
60	14925.00	91.60	358.40	11522.12	3524.04	3523.67	-61.73	3524.21	359.00	0.59
61	15017.00	91.20	358.10	11519.87	3615.98	3615.60	-64.53	3616.18	358.98	0.54
62	15109.00	91.50	357.70	11517.71	3707.92	3707.51	-67.90	3708.13	358.95	0.54
63	15201.00	91.20	357.00	11515.54	3799.82	3799.39	-72.16	3800.07	358.91	0.83
64	15293.00	91.10	357.60	11513.69	3891.73	3891.27	-76.49	3892.02	358.87	0.66
65	15387.00	91.50	358.00	11511.56	3985.66	3985.17	-80.10	3985.98	358.85	0.60
66	15479.00	92.00	359.20	11508.75	4077.60	4077.10	-82.34	4077.93	358.84	1.41
67	15571.00	90.90	359.80	11506.42	4169.57	4169.07	-83.15	4169.90	358.86	1.36
68	15663.00	92.10	359.40	11504.01	4261.54	4261.03	-83.79	4261.85	358.87	1.37
69	15755.00	91.10	0.20	11501.44	4353.50	4352.99	-84.11	4353.81	358.89	1.39
70	15847.00	90.80	1.10	11499.92	4445.47	4444.97	-83.07	4445.75	358.93	1.03
71	15939.00	92.30	1.00	11497.43	4537.40	4536.92	-81.38	4537.65	358.97	1.63
72	16031.00	91.40	1.40	11494.46	4629.32	4628.85	-79.45	4629.53	359.02	1.07
73	16123.00	90.90	1.30	11492.61	4721.25	4720.81	-77.29	4721.44	359.06	0.55
74	16215.00	89.90	1.40	11491.97	4813.21	4812.78	-75.12	4813.36	359.11	1.09
75	16307.00	90.40	1.20	11491.73	4905.16	4904.75	-73.03	4905.30	359.15	0.59
76	16399.00	90.90	0.60	11490.69	4997.13	4996.74	-71.59	4997.25	359.18	0.85
77	16491.00	89.50	0.60	11490.37	5089.12	5088.73	-70.62	5089.22	359.20	1.52
78	16584.00	89.60	1.30	11491.10	5182.08	5181.71	-69.08	5182.17	359.24	0.76
79	16676.00	89.60	0.60	11491.74	5274.06	5273.70	-67.56	5274.13	359.27	0.76
80	16768.00	89.70	359.90	11492.30	5366.05	5365.69	-67.16	5366.11	359.28	0.77
81	16860.00	89.90	359.40	11492.62	5458.05	5457.69	-67.72	5458.11	359.29	0.59
82	16952.00	90.00	0.50	11492.70	5550.04	5549.69	-67.80	5550.10	359.30	1.20
83	17044.00	90.80	359.80	11492.06	5642.03	5641.69	-67.56	5642.09	359.31	1.16
84	17136.00	91.30	359.00	11490.37	5734.02	5733.66	-68.52	5734.07	359.32	1.03
85	17229.00	91.50	358.30	11488.10	5826.98	5826.61	-70.71	5827.04	359.30	0.78
86	17321.00	92.00	358.20	11485.29	5918.91	5918.52	-73.52	5918.98	359.29	0.55
87	17413.00	91.20	358.30	11482.72	6010.85	6010.44	-76.33	6010.93	359.27	0.88
88	17505.00	91.30	359.30	11480.72	6102.82	6102.40	-78.25	6102.90	359.27	1.09
89	17597.00	91.00	359.30	11478.87	6194.80	6194.38	-79.38	6194.88	359.27	0.33
90	17689.00	91.30	359.80	11477.02	6286.78	6286.35	-80.10	6286.86	359.27	0.63
91	17782.00	91.50	359.50	11474.75	6379.75	6379.32	-80.67	6379.83	359.28	0.39
92	17874.00	92.10	0.30	11471.86	6471.70	6471.28	-80.83	6471.78	359.28	1.09
93	17966.00	92.00	1.00	11468.57	6563.63	6563.21	-79.79	6563.70	359.30	0.77
94	18058.00	91.90	1.80	11465.44	6655.52	6655.13	-77.54	6655.58	359.33	0.88
95	18150.00	92.10	0.70	11462.23	6747.43	6747.05	-75.53	6747.47	359.36	1.21
96	18242.00	91.90	0.60	11459.02	6839.36	6838.99	-74.49	6839.39	359.38	0.24
97	18334.00	91.70	0.70	11456.13	6931.29	6930.94	-73.45	6931.33	359.39	0.24
98	18426.00	91.40	1.90	11453.64	7023.22	7022.88	-71.36	7023.24	359.42	1.34
99	18518.00	91.80	2.10	11451.07	7115.10	7114.79	-68.15	7115.11	359.45	0.49
100	18610.00	92.00	1.30	11448.02	7206.98	7206.69	-65.42	7206.99	359.48	0.90
101	18703.00	92.00	0.50	11444.78	7299.90	7299.63	-63.96	7299.91	359.50	0.86



102	18794.00	92.20	359.30	11441.44	7390.84	7390.56	-64.12	7390.84	359.50	1.34
PTB	18839.00	92.20	359.30	11439.71	7435.80	7435.53	-64.67	7435.81	359.50	0.00

