

30-025-42896



7821 Will Rogers Blvd.
Fort Worth, Texas 76140

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State of Texas

County of Tarrant

I, JEFFREY S. BALSER, certify that; I am employed by MS Energy Services;
that I did on the day(s) of 11/19/15 through 11/26/15 conduct or supervise
the taking of MWD survey(s) from a depth of 106 feet to a depth of 4,419
feet; that the data is true, correct, complete and within the limitations of the tool set forth by MS Energy
Services; that I am authorized and qualified to make this report; that this survey(s) was / were
conducted at the request of CONOCO PHILLIPS COMPANY,
for the BATTLE AXE 27 FEDERAL COM^{2H}, API No. 30.025.42896
in LEA County / Parish, NEW MEXICO; and that I have
reviewed this report and find that it conforms to the principles and procedures as set forth by
MS Energy Services.

Signature: Jeffrey Balsa
Title: MWD FIELD SPECIALIST

MS Directional

MS Guidance

MS Survey

MS Wireline

Company:		ConocoPhillips Company												
Well Name:		Battle Axe Federal COM 2H												
Location:		Lea County, NM												
Rig:		H&P #486				Magnetic Declination:		6.79		REFERENCED TO GRID NORTH				
Job Number:		DDMO-160046												
API #:		30-025-42896												
Vertical Section Azimuth:				179.70		Proposed Direction:		179.70						
Survey Calculation Method:				Minimum Curvature										
PTB:	MD		INC		AZM		TVD		N/S		E/W		VS	
	18,930		90.9		171.3		7594.74		-7083.95		-181.15		7082.9	
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Closure Distance Azm		DLS/ 100	BUR/ 100'			
TIE IN	4,432	3.10	293.00				#VALUE!	0.00						
1	4,545	2.00	284.00	112.49	1.67	-4.71	-1.69	4.99	289.47	1.04	-0.98			
2	4,639	4.10	313.20	206.35	4.36	-8.75	-4.41	9.78	296.50	2.71	2.23			
3	4,734	7.70	314.50	300.84	11.15	-15.77	-11.23	19.31	305.27	3.79	3.79			
4	4,829	8.10	314.20	394.93	20.28	-25.11	-20.41	32.27	308.93	0.42	0.42			
5	4,923	8.00	315.00	488.01	29.52	-34.48	-29.70	45.39	310.57	0.16	-0.11			
6	5,017	7.60	312.50	581.14	38.34	-43.69	-38.57	58.13	311.27	0.56	-0.43			
7	5,112	7.20	311.20	675.35	46.51	-52.80	-46.79	70.36	311.38	0.46	-0.42			
8	5,206	7.30	311.30	768.59	54.33	-61.72	-54.65	82.22	311.36	0.11	0.11			
9	5,301	7.60	311.40	862.79	62.47	-70.96	-62.84	94.54	311.36	0.32	0.32			
10	5,395	5.90	302.70	956.14	69.19	-79.69	-69.61	105.54	310.97	2.11	-1.81			
11	5,490	5.80	299.60	1050.65	74.20	-87.98	-74.66	115.09	310.14	0.35	-0.11			
12	5,584	5.60	300.50	1144.18	78.87	-96.06	-79.38	124.29	309.39	0.23	-0.21			
13	5,679	5.50	299.10	1238.74	83.44	-104.03	-83.98	133.36	308.73	0.18	-0.11			
14	5,773	5.70	298.90	1332.29	87.89	-112.05	-88.47	142.41	308.11	0.21	0.21			
15	5,868	5.60	297.40	1426.83	92.30	-120.30	-92.93	151.63	307.50	0.19	-0.11			
16	5,962	5.70	296.10	1520.37	96.46	-128.56	-97.14	160.73	306.88	0.17	0.11			
17	6,057	5.50	293.20	1614.92	100.33	-136.98	-101.05	169.80	306.22	0.36	-0.21			
18	6,151	4.30	289.50	1708.57	103.28	-144.44	-104.04	177.57	305.57	1.32	-1.28			
19	6,246	2.50	287.30	1803.40	105.09	-149.78	-105.87	182.97	305.05	1.90	-1.89			
20	6,340	2.60	282.90	1897.31	106.18	-153.82	-106.98	186.90	304.62	0.23	0.11			
21	6,434	2.20	278.90	1991.22	106.93	-157.68	-107.75	190.52	304.14	0.46	-0.43			
22	6,529	2.10	276.00	2086.16	107.39	-161.21	-108.24	193.71	303.67	0.16	-0.11			
23	6,623	2.00	275.70	2180.10	107.74	-164.55	-108.60	196.69	303.21	0.11	-0.11			
24	6,718	1.80	279.20	2275.04	108.14	-167.68	-109.02	199.52	302.82	0.24	-0.21			
25	6,812	1.80	284.50	2369.00	108.75	-170.56	-109.64	202.28	302.52	0.18	0.00			
26	6,907	1.70	281.50	2463.95	109.40	-173.39	-110.31	205.02	302.25	0.14	-0.11			
27	7,001	1.60	277.10	2557.91	109.84	-176.06	-110.76	207.51	301.96	0.17	-0.11			
28	7,095	1.50	274.20	2651.88	110.09	-178.59	-111.03	209.79	301.65	0.14	-0.11			
29	7,190	1.60	272.30	2746.85	110.24	-181.15	-111.18	212.06	301.32	0.12	0.11			
30	7,284	1.50	274.70	2840.81	110.39	-183.69	-111.35	214.31	301.00	0.13	-0.11			
31	7,379	1.50	269.40	2935.78	110.48	-186.17	-111.45	216.49	300.69	0.15	0.00			

Company:	ConocoPhillips Company		
Well Name:	Battle Axe Federal COM 2H		
Location:	Lea County, NM		
Rig:	H&P #486	Magnetic Declination:	6.79
Job Number:	DDMO-160046		
API #:	30-025-42896		

REFERENCED TO GRID NORTH

Vertical Section Azimuth:	179.70	Proposed Direction:	179.70
Survey Calculation Method:	Minimum Curvature		

PTB:	MD	INC	AZM	TVD	N/S	E/W	VS
	18,930	90.9	171.3	7594.74	-7083.95	-181.15	7082.9

#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Closure Distance	Azm	DLS/ 100	BUR/ 100'
32	7,474	1.40	270.80	3030.75	110.48	-188.58	-111.47	218.56	300.37	0.11	-0.11
33	7,568	1.30	264.80	3124.72	110.40	-190.79	-111.40	220.43	300.06	0.18	-0.11
34	7,663	1.00	258.20	3219.70	110.14	-192.67	-111.14	221.93	299.75	0.34	-0.32
35	7,757	0.80	243.60	3313.69	109.68	-194.06	-110.69	222.91	299.47	0.32	-0.21
36	7,852	1.00	239.60	3408.68	108.96	-195.37	-109.98	223.70	299.15	0.22	0.21
37	7,946	1.10	231.60	3502.66	107.99	-196.78	-109.01	224.47	298.76	0.19	0.11
38	8,041	0.40	189.90	3597.66	107.09	-197.56	-108.13	224.72	298.46	0.89	-0.74
39	8,135	1.10	119.90	3691.65	106.32	-196.83	-107.35	223.71	298.38	1.10	0.74
40	8,229	0.90	131.00	3785.63	105.39	-195.49	-106.41	222.09	298.33	0.30	-0.21
41	8,323	0.70	141.90	3879.63	104.45	-194.58	-105.47	220.84	298.23	0.27	-0.21
42	8,418	0.70	142.30	3974.62	103.53	-193.87	-104.55	219.78	298.10	0.01	0.00
43	8,512	0.60	153.00	4068.61	102.64	-193.29	-103.65	218.85	297.97	0.17	-0.11
44	8,607	0.50	169.20	4163.61	101.79	-192.99	-102.80	218.19	297.81	0.19	-0.11
45	8,701	0.30	187.70	4257.61	101.14	-192.95	-102.15	217.85	297.66	0.25	-0.21
46	8,796	0.30	250.90	4352.60	100.82	-193.21	-101.83	217.93	297.55	0.33	0.00
47	8,890	0.70	253.10	4446.60	100.57	-194.00	-101.58	218.51	297.40	0.43	0.43
48	8,985	0.90	251.80	4541.59	100.17	-195.26	-101.19	219.45	297.16	0.21	0.21
49	9,079	1.90	266.20	4635.56	99.83	-197.52	-100.87	221.31	296.81	1.12	1.06
50	9,173	2.10	269.20	4729.50	99.71	-200.79	-100.76	224.18	296.41	0.24	0.21
51	9,268	2.10	264.30	4824.44	99.51	-204.26	-100.58	227.21	295.97	0.19	0.00
52	9,362	2.60	258.40	4918.36	98.91	-208.07	-100.00	230.38	295.42	0.59	0.53
53	9,457	2.50	253.60	5013.27	97.89	-212.17	-99.00	233.66	294.77	0.25	-0.11
54	9,551	1.60	258.90	5107.21	97.06	-215.42	-98.19	236.28	294.25	0.98	-0.96
55	9,646	1.40	256.40	5202.17	96.53	-217.85	-97.67	238.28	293.90	0.22	-0.21
56	9,741	1.60	249.50	5297.14	95.79	-220.22	-96.95	240.15	293.51	0.28	0.21
57	9,835	1.20	240.10	5391.11	94.84	-222.30	-96.01	241.69	293.11	0.49	-0.43
58	9,930	1.20	299.00	5486.10	94.83	-224.03	-96.00	243.28	292.94	1.24	0.00
59	10,024	1.20	288.00	5580.08	95.61	-225.83	-96.79	245.24	292.95	0.24	0.00
60	10,119	1.40	274.90	5675.05	96.02	-227.93	-97.21	247.33	292.84	0.38	0.21
61	10,214	1.70	273.70	5770.02	96.21	-230.50	-97.41	249.77	292.66	0.32	0.32
62	10,308	1.90	248.30	5863.97	95.72	-233.34	-96.94	252.21	292.30	0.87	0.21
63	10,402	1.80	247.60	5957.92	94.58	-236.15	-95.82	254.39	291.83	0.11	-0.11
64	10,497	2.60	242.60	6052.85	93.02	-239.44	-94.27	256.88	291.23	0.87	0.84

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PTB:	MD	INC	AZM	TVD	N/S	E/W	VS				
	18,930	90.9	171.3	7594.74	-7083.95	-181.15	7082.9				
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Closure Distance	Azm	DLS/ 100	BUR/ 100'
65	10,591	2.70	241.90	6146.75	91.00	-243.29	-92.27	259.75	290.51	0.11	0.11
66	10,686	3.30	243.60	6241.62	88.73	-247.71	-90.02	263.12	289.71	0.64	0.63
67	10,780	2.20	249.50	6335.51	86.89	-251.82	-88.21	266.39	289.04	1.21	-1.17
68	10,875	1.30	230.00	6430.47	85.56	-254.36	-86.89	268.36	288.59	1.12	-0.95
69	10,969	1.40	225.70	6524.44	84.07	-256.00	-85.41	269.45	288.18	0.15	0.11
70	11,063	1.30	232.10	6618.41	82.62	-257.66	-83.97	270.58	287.78	0.19	-0.11
71	11,158	1.30	242.60	6713.39	81.46	-259.47	-82.82	271.95	287.43	0.25	0.00
72	11,252	1.20	250.30	6807.37	80.64	-261.34	-82.00	273.50	287.15	0.21	-0.11
73	11,346	1.30	260.30	6901.35	80.13	-263.32	-81.50	275.24	286.92	0.25	0.11
74	11,439	3.30	216.90	6994.27	77.81	-265.96	-79.20	277.11	286.31	2.71	2.15
75	11,471	7.00	198.00	7026.14	75.22	-267.12	-76.61	277.51	285.73	12.57	11.56
76	11,502	10.30	196.40	7056.78	70.76	-268.49	-72.16	277.65	284.76	10.67	10.65
77	11,534	13.30	197.30	7088.10	64.50	-270.39	-65.91	277.98	283.42	9.39	9.38
78	11,565	17.10	198.00	7118.01	56.76	-272.86	-58.18	278.70	281.75	12.27	12.26
79	11,597	21.00	195.60	7148.25	46.76	-275.86	-48.20	279.79	279.62	12.43	12.19
80	11,628	24.20	193.40	7176.87	35.22	-278.82	-36.68	281.04	277.20	10.68	10.32
81	11,660	27.40	191.60	7205.68	21.62	-281.83	-23.10	282.65	274.39	10.29	10.00
82	11,691	30.40	187.10	7232.82	6.85	-284.23	-8.34	284.31	271.38	11.95	9.68
83	11,723	33.00	183.20	7260.04	-9.89	-285.72	8.39	285.89	268.02	10.34	8.13
84	11,754	35.30	179.90	7285.70	-27.28	-286.17	25.78	287.47	264.55	9.52	7.42
85	11,786	37.90	176.80	7311.39	-46.34	-285.61	44.85	289.34	260.78	9.97	8.13
86	11,818	40.60	175.20	7336.17	-66.54	-284.19	65.05	291.87	256.82	9.01	8.44
87	11,849	42.90	174.90	7359.29	-87.10	-282.41	85.62	295.53	252.86	7.45	7.42
88	11,881	45.40	176.00	7382.25	-109.32	-280.64	107.85	301.18	248.72	8.17	7.81
89	11,912	48.10	177.80	7403.49	-131.86	-279.43	130.40	308.98	244.74	9.68	8.71
90	11,943	50.70	179.20	7423.67	-155.39	-278.82	153.93	319.19	240.87	9.06	8.39
91	11,975	52.50	179.20	7443.54	-180.46	-278.47	179.00	331.83	237.05	5.63	5.62
92	12,006	52.70	178.70	7462.37	-205.08	-278.02	203.63	345.48	233.58	1.43	0.65
93	12,038	54.20	177.50	7481.43	-230.78	-277.16	229.32	360.66	230.22	5.57	4.69
94	12,069	56.70	176.40	7499.01	-256.27	-275.80	254.82	376.48	227.10	8.58	8.06
95	12,101	59.30	175.50	7515.96	-283.34	-273.88	281.90	394.07	224.03	8.47	8.12
96	12,145	63.00	174.20	7537.19	-321.71	-270.41	320.29	420.26	220.05	8.80	8.41

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	18,930	90.9	171.3	7594.74	-7083.95	-181.15	7082.9				
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Closure Distance	Azm	DLS/ 100	BUR/ 100'
97	12,232	68.30	174.00	7573.05	-400.52	-262.27	399.14	478.75	213.22	6.10	6.09
98	12,263	72.80	173.30	7583.37	-429.57	-259.03	428.20	501.62	211.09	14.67	14.52
99	12,295	77.00	172.10	7591.70	-460.20	-255.10	458.86	526.18	209.00	13.61	13.13
100	12,326	80.40	172.00	7597.78	-490.31	-250.90	488.99	550.77	207.10	10.97	10.97
101	12,357	82.40	172.70	7602.41	-520.68	-246.82	519.38	576.22	205.36	6.83	6.45
102	12,389	85.30	174.00	7605.84	-552.28	-243.14	551.00	603.43	203.76	9.92	9.06
103	12,420	86.80	174.90	7607.98	-583.06	-240.15	581.80	630.58	202.39	5.64	4.84
104	12,515	91.10	178.70	7609.72	-677.86	-234.85	676.62	717.39	199.11	6.04	4.53
105	12,609	91.90	177.90	7607.26	-771.78	-232.06	770.56	805.92	196.74	1.20	0.85
106	12,704	90.10	176.90	7605.60	-866.67	-227.75	865.46	896.09	194.72	2.17	-1.89
107	12,798	90.20	174.30	7605.35	-960.38	-220.54	959.21	985.38	192.93	2.77	0.11
108	12,893	91.00	177.00	7604.36	-1055.09	-213.34	1053.96	1076.44	191.43	2.96	0.84
109	12,987	90.70	177.90	7602.96	-1148.99	-209.16	1147.88	1167.87	190.32	1.01	-0.32
110	13,081	88.60	176.50	7603.54	-1242.87	-204.56	1241.78	1259.59	189.35	2.68	-2.23
111	13,176	89.90	179.10	7604.78	-1337.78	-200.92	1336.71	1352.78	188.54	3.06	1.37
112	13,271	89.40	177.50	7605.36	-1432.73	-198.10	1431.67	1446.36	187.87	1.76	-0.53
113	13,365	92.20	182.30	7604.05	-1526.68	-197.94	1525.63	1539.46	187.39	5.91	2.98
114	13,460	92.00	182.70	7600.57	-1621.53	-202.08	1620.45	1634.07	187.10	0.47	-0.21
115	13,554	89.70	182.30	7599.17	-1715.42	-206.18	1714.32	1727.77	186.85	2.48	-2.45
116	13,649	89.10	181.90	7600.17	-1810.35	-209.66	1809.23	1822.45	186.61	0.76	-0.63
117	13,743	92.10	185.00	7599.18	-1904.16	-215.31	1903.00	1916.29	186.45	4.59	3.19
118	13,837	91.10	183.50	7596.56	-1997.86	-222.27	1996.67	2010.18	186.35	1.92	-1.06
119	13,932	88.70	181.80	7596.72	-2092.75	-226.67	2091.53	2104.98	186.18	3.10	-2.53
120	14,026	88.70	181.20	7598.86	-2186.69	-229.13	2185.46	2198.66	185.98	0.64	0.00
121	14,121	91.30	184.20	7598.86	-2281.56	-233.60	2280.31	2293.49	185.85	4.18	2.74
122	14,215	88.70	181.30	7598.86	-2375.44	-238.11	2374.16	2387.34	185.72	4.14	-2.77
123	14,309	90.40	181.50	7599.59	-2469.40	-240.41	2468.11	2481.08	185.56	1.82	1.81
124	14,403	89.80	181.30	7599.43	-2563.37	-242.70	2562.07	2574.84	185.41	0.67	-0.64
125	14,498	90.40	179.10	7599.26	-2658.37	-243.03	2657.06	2669.45	185.22	2.40	0.63
126	14,592	91.00	178.30	7598.12	-2752.33	-240.90	2751.04	2762.86	185.00	1.06	0.64
127	14,686	89.60	175.90	7597.62	-2846.20	-236.15	2844.93	2855.98	184.74	2.96	-1.49
128	14,781	90.30	180.10	7597.71	-2941.12	-232.83	2939.86	2950.33	184.53	4.48	0.74

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PTB:	MD		INC		AZM		TVD		N/S		E/W		VS	
	18,930		90.9		171.3		7594.74		-7083.95		-181.15		7082.9	
#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Closure Distance		Azm	DLS/ 100	BUR/ 100'		
129	14,875	89.90	177.20	7597.54	-3035.09	-230.62	3033.84	3043.84	184.35	3.11	-0.43			
130	14,969	89.70	175.40	7597.87	-3128.89	-224.55	3127.67	3136.93	184.10	1.93	-0.21			
131	15,064	89.90	175.50	7598.20	-3223.59	-217.02	3222.41	3230.88	183.85	0.24	0.21			
132	15,158	91.30	177.70	7597.22	-3317.41	-211.44	3316.26	3324.14	183.65	2.77	1.49			
133	15,252	88.00	178.40	7597.79	-3411.34	-208.24	3410.20	3417.69	183.49	3.59	-3.51			
134	15,347	90.40	180.80	7599.12	-3506.31	-207.58	3505.18	3512.45	183.39	3.57	2.53			
135	15,441	89.60	177.50	7599.12	-3600.29	-206.19	3599.16	3606.19	183.28	3.61	-0.85			
136	15,535	90.00	175.40	7599.45	-3694.10	-200.37	3693.00	3699.53	183.10	2.27	0.43			
137	15,630	89.60	179.20	7599.78	-3788.98	-195.89	3787.90	3794.04	182.96	4.02	-0.42			
138	15,724	88.70	179.70	7601.17	-3882.96	-194.99	3881.89	3887.86	182.87	1.10	-0.96			
139	15,818	88.70	179.00	7603.31	-3976.93	-193.92	3975.86	3981.66	182.79	0.74	0.00			
140	15,913	89.50	178.60	7604.80	-4071.90	-191.93	4070.84	4076.42	182.70	0.94	0.84			
141	16,007	90.00	177.40	7605.21	-4165.84	-188.65	4164.79	4170.11	182.59	1.38	0.53			
142	16,102	89.30	175.20	7605.79	-4260.63	-182.52	4259.62	4264.54	182.45	2.43	-0.74			
143	16,196	90.30	176.00	7606.12	-4354.35	-175.31	4353.38	4357.88	182.31	1.36	1.06			
144	16,290	91.20	180.50	7604.89	-4448.28	-172.44	4447.31	4451.62	182.22	4.88	0.96			
145	16,385	90.50	182.80	7603.48	-4543.22	-175.18	4542.24	4546.60	182.21	2.53	-0.74			
146	16,479	89.60	183.60	7603.39	-4637.07	-180.42	4636.06	4640.58	182.23	1.28	-0.96			
147	16,574	89.30	184.80	7604.31	-4731.81	-187.38	4730.76	4735.52	182.27	1.30	-0.32			
148	16,668	89.20	182.70	7605.54	-4825.60	-193.53	4824.52	4829.47	182.30	2.24	-0.11			
149	16,763	89.10	183.40	7606.95	-4920.45	-198.58	4919.34	4924.46	182.31	0.74	-0.11			
150	16,857	90.80	184.90	7607.03	-5014.20	-205.39	5013.05	5018.40	182.35	2.41	1.81			
151	16,951	90.10	181.60	7606.29	-5108.03	-210.71	5106.86	5112.37	182.36	3.59	-0.74			
152	17,046	90.30	181.50	7605.96	-5202.99	-213.28	5201.81	5207.36	182.35	0.24	0.21			
153	17,141	90.80	182.70	7605.05	-5297.92	-216.76	5296.72	5302.36	182.34	1.37	0.53			
154	17,235	89.40	181.20	7604.88	-5391.86	-219.96	5390.64	5396.35	182.34	2.18	-1.49			
155	17,330	88.70	179.60	7606.46	-5486.85	-220.63	5485.61	5491.28	182.30	1.84	-0.74			
156	17,424	90.80	179.30	7606.87	-5580.83	-219.72	5579.61	5585.16	182.25	2.26	2.23			
157	17,519	91.60	179.40	7604.88	-5675.81	-218.65	5674.58	5680.02	182.21	0.85	0.84			
158	17,613	88.70	177.60	7604.63	-5769.76	-216.19	5768.55	5773.81	182.15	3.63	-3.09			
159	17,708	88.60	179.40	7606.87	-5864.70	-213.70	5863.50	5868.59	182.09	1.90	-0.11			
160	17,802	91.80	181.10	7606.54	-5958.68	-214.11	5957.48	5962.53	182.06	3.85	3.40			

Company:	ConocoPhillips Company		
Well Name:	Battle Axe Federal COM 2H		
Location:	Lea County, NM		
Rig:	H&P #486	Magnetic Declination:	6.79
Job Number:	DDMO-160046		
API #:	30-025-42896		
Vertical Section Azimuth:	179.70	Proposed Direction:	179.70
Survey Calculation Method:	Minimum Curvature		

PTB:	MD	INC	AZM	TVD	N/S	E/W	VS
	18,930	90.9	171.3	7594.74	-7083.95	-181.15	7082.9

#	Depth Feet	Inc Degrees	Azm Degrees	TVD Feet	N/S Feet	E/W Feet	Surface Vert Sec	Closure Distance	Azm	DLS/ 100	BUR/ 100'
161	17,896	89.60	180.30	7605.39	-6052.66	-215.26	6051.45	6056.49	182.04	2.49	-2.34
162	17,991	93.00	184.20	7603.24	-6147.53	-218.98	6146.30	6151.43	182.04	5.45	3.58
163	18,085	91.60	182.00	7599.47	-6241.31	-224.06	6240.05	6245.33	182.06	2.77	-1.49
164	18,180	90.10	180.70	7598.06	-6336.27	-226.30	6335.00	6340.31	182.05	2.09	-1.58
165	18,274	89.60	179.90	7598.30	-6430.26	-226.79	6428.99	6434.26	182.02	1.00	-0.53
166	18,369	91.20	180.10	7597.64	-6525.26	-226.79	6523.98	6529.20	181.99	1.70	1.68
167	18,463	89.80	176.80	7596.82	-6619.21	-224.25	6617.94	6623.00	181.94	3.81	-1.49
168	18,557	90.60	176.30	7596.49	-6713.03	-218.59	6711.80	6716.59	181.87	1.00	0.85
169	18,651	89.40	174.90	7596.49	-6806.75	-211.38	6805.55	6810.03	181.78	1.96	-1.28
170	18,745	90.30	176.20	7596.74	-6900.47	-204.09	6899.30	6903.48	181.69	1.68	0.96
171	18,840	90.50	172.30	7596.07	-6994.97	-194.57	6993.85	6997.67	181.59	4.11	0.21
172	18,862	90.90	171.30	7595.80	-7016.74	-191.43	7015.64	7019.35	181.56	4.90	1.82