

NM OIL CONSERVATION
ARTESIA DISTRICT

SEP 10 2015

PATHFINDER
A Schlumberger Company

Reservoir Development

PathFinder, a Schlumberger Company
9200 West Reno Avenue
Oklahoma City, Oklahoma 73127 USA
Phone: (405) 789-1515
Fax: (405) 789-1519

RECEIVED

30-015-42165

Well Reference:

S35-T26S-R27E 210 FSL 1270 FWL
N 32.00058 W 104.16513

I, Jesse White certify that; I am employed by PathFinder, a division of Schlumberger Technology Corporation; that I did on the day(s) of August 24, 2014 through September 04, 2014, conduct or supervise the taking of the SlimPulse surveys from a depth of 6783.00 feet to a depth of 14450.00 feet referenced to driller's depth; that the data is true, correct, complete and within the limitations of the tool as set forth by PathFinder, a division of Schlumberger Technology Corporation; that I am authorized and qualified to make this report; that this survey was conducted at the request of Cimarex Energy Co. for the Hornsby 35 Federal Com 2H Well (Original Hole) API No. 30-015-42165 and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by PathFinder, a division of Schlumberger Technology Corporation.

SIGNED ON BEHALF OF JESSE WHITE BY JOE HOGAN

By
Jesse White
MWD

Subscribed and Sworn to before me this 3 day of December (month) 2014 (yr)

My Commission expires:

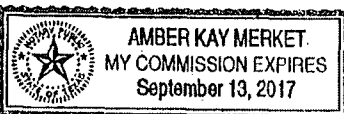
September 13, 2017

Amber Kay Merket

Notary Public

Midland County, Texas

(County State)



Reservoir Development
PathFinder, a Schlumberger Company
9200 West Reno Avenue
Oklahoma City, Oklahoma 73127 USA
Phone: (405) 789-1515
Fax: (405) 789-1519



December 3, 2014

Cimarex
600 N MARIENFELD STREET SUITE 600

MIDLAND, TX 79701

Re:

S35-T26S-R27E 210 FSL 1270 FWL
N 32.00058 W 104.16513

CLIENT: Cimarex Energy Co.
WELL: Hornsby 35 Federal Com 2H
FIELD: Wildcat Wolfcamp
RIG: Cactus 112
COUNTY: Eddy
API NO: 30-015-42165
JOB NO: 14MLD0401

Enclosed, please find the original copy of the survey performed on the referenced well by PathFinder, a division of Schlumberger Technology Corporation.
Other information required by your office is as follows.

<u>Name & Title of Surveyor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Jesse White MWD	Hornsby 35 Federal Com 2H Original Hole	6783.00 Ft to 14450.00 Ft	August 24, 2014 to September 4, 2014	SlimPulse

If any other information is required, please contact the undersigned at the above letterhead and phone number.
Sincerely,

Joseph Hogan
Field Service Manager

SCHLUMBERGER
Survey Report

3-Dec-2014

Client..... Cimarex Energy Co.
Field..... Wildcat Wolfcamp

Well..... Hornsby 35 Federal Com 2H
API number..... 30-015-42165
Engineer..... J. White

Spud date..... 5-Jun-14
Last survey date..... 4-Sep-14
Total accepted surveys..... 113
MD of first survey..... 6783.00 ft
MD of last survey..... 14456.00 ft

County..... Eddy
State..... New Mexico
Rig..... Cactus 112

Latitude..... 32° 0' 2.09" N
Longitude..... 104° 5' 54.453" W

----- Survey calculation methods -----
Method for positions..... Minimum curvature
Method for DLS..... Lubinski

----- Depth reference -----
Permanent datum..... MSL
Depth reference..... Driller's Depth
GL above permanent..... 3275.00
KB above permanent..... 3300.00
DF above permanent..... 3300.00

----- Vertical section origin -----
Latitude (+N/-)..... 0.00 ft
Departure (+E/-)..... 0.00 ft

----- Grid Coordinates -----
NAD27 Texas State Plane, Central Zone, US Feet
X..... 593479.55 ft
Y..... 363991.25 ft

Azimuth from Vsect Origin to target: 355.29 degrees

-----MWD Survey Reference Criteria-----

-----Run1----- Calculation Date: 23-Aug-2014
Location G..... 998.68465 mgn Tolerance G..... 2.50 mgn
Location B..... 48054.7 nT Tolerance B..... 300.00 nT
Magnetic Dip: 59.786 degrees Tolerance Dip: 0.45 degrees

-----Run2----- Calculation Date: 31-Aug-2014
Location G..... 998.68154 mgn Tolerance G..... 2.50 mgn
Location B..... 48054.7 nT Tolerance B..... 300.00 nT
Magnetic Dip: 59.79 degrees Tolerance Dip: 0.45 degrees

BGGM Model: 2014

-----Run1-----
Magnetic dec (+E/-)..... 7.616 degrees
Grid Conv (+E/-)..... 0.08914 degrees
Total Azim Corr (+E/-)..... 7.52686 degrees

-----Run2-----
Magnetic dec (+E/-)..... 7.616 degrees
Grid Conv (+E/-)..... 0.08914 degrees
Total Azim Corr (+E/-)..... 7.52686 degrees

----- Survey Correction Index Description -----

0 = Uncorrected 1 = Sag Corrected
2 = DMAG Corrected 3 = Sag + DMAG Corrected

Survey List													
Seq	MD (ft)	Incl (deg)	Azim (deg)	Course (ft)	TVD (ft)	V Sec (ft)	N/-S (ft)	E/-W (ft)	Closure (ft)	at Azi (deg)	DLS (deg/100ft)	Tool	Correction
1	0.00	0.00	0.00	-999.25	0.00	0.00	0.00	0.00	0	90.00	0.00	TIP	0
2	121.00	0.70	347.57	121.00	121.00	0.73	0.72	-0.16	0.73914	347.57	0.58	Other	0
3	181.00	1.10	140.99	60.00	180.99	0.62	0.63	0.12	0.64436	11.15	2.92	Other	0
4	242.00	1.01	145.16	61.00	241.98	-0.33	-0.26	0.80	0.84268	108.26	0.19	Other	0
5	357.00	1.01	158.39	115.00	356.97	-2.18	-2.04	1.75	2.68806	139.31	0.20	Other	0
6	390.00	1.01	314.88	33.00	389.96	-2.23	-2.10	1.65	2.67553	141.83	5.99	Other	0
7	451.00	0.70	160.68	61.00	450.96	-2.18	-2.08	1.40	2.50136	146.08	2.73	Other	0
8	512.00	0.31	155.05	61.00	511.96	-2.70	-2.58	1.59	3.02731	148.34	0.64	Other	0
9	571.00	0.22	168.28	59.00	570.96	-2.96	-2.83	1.68	3.29281	149.34	0.18	Other	0
10	632.00	0.09	91.99	61.00	631.96	-3.08	-2.95	1.75	3.42943	149.30	0.36	Other	0
11	693.00	0.09	36.88	61.00	692.96	-3.05	-2.91	1.83	3.43807	147.89	0.14	Other	0
12	752.00	0.09	291.15	59.00	751.96	-3.00	-2.86	1.81	3.38436	147.63	0.24	Other	0
13	844.00	0.09	323.98	92.00	843.96	-2.90	-2.77	1.70	3.2545	148.47	0.06	Other	0
14	935.00	0.09	307.58	91.00	934.96	-2.80	-2.67	1.60	3.11663	149.04	0.03	Other	0
15	1032.00	0.09	7.26	97.00	1031.96	-2.67	-2.55	1.55	2.98593	148.07	0.09	Other	0
16	1123.00	0.09	196.18	91.00	1122.96	-2.67	-2.55	1.54	2.97836	148.82	0.20	Other	0
17	1213.00	0.09	150.17	90.00	1212.96	-2.80	-2.68	1.56	3.09737	149.82	0.08	Other	0

18	1306.00	0.09	25.28	93.00	1305.96	-2.80	-2.67	1.62	3.12957	148.72	0.17	Other	0
19	1388.00	0.09	294.66	92.00	1397.96	-2.70	-2.58	1.59	3.02996	148.35	0.14	Other	0
20	1492.00	0.20	146.79	94.00	1401.96	-2.73	-2.61	1.56	3.04258	149.00	0.18	Other	0
21	1587.00	0.09	133.87	95.00	1566.96	-2.85	-2.72	1.66	3.18921	148.68	0.02	Other	0
22	1682.00	0.22	189.59	95.00	1681.96	-3.08	-2.96	1.68	3.40066	150.37	0.19	Other	0
23	1780.00	0.09	173.46	98.00	1779.96	-3.34	-3.22	1.66	3.62029	152.73	0.14	Other	0
24	1875.00	0.09	134.79	95.00	1874.96	-3.47	-3.34	1.72	3.76106	152.78	0.06	Other	0
25	1970.00	0.09	127.18	95.00	1969.96	-3.58	-3.44	1.84	3.89672	151.88	0.02	Other	0
26	2068.00	0.09	61.75	98.00	2067.96	-3.59	-3.44	1.97	3.96607	150.22	0.09	Other	0
27	2166.00	0.09	252.48	48.00	2155.96	-3.58	-3.43	1.97	3.95807	150.21	0.37	Other	0
28	2170.00	0.09	42.46	54.00	2169.96	-3.57	-3.42	1.95	3.94613	150.12	0.32	Other	0
29	2265.00	0.31	77.18	95.00	2264.96	-3.48	-3.30	2.26	4.00089	145.68	0.25	Other	0
30	2360.00	0.22	46.46	95.00	2359.95	-3.33	-3.12	2.64	4.0874	139.79	0.17	Other	0
31	2455.00	0.31	19.96	95.00	2454.95	-2.98	-2.75	2.86	3.96965	133.94	0.16	Other	0
32	2550.00	0.22	28.75	95.00	2549.95	-2.59	-2.35	3.03	3.83946	127.80	0.10	Other	0
33	2644.00	0.22	16.27	94.00	2643.95	-2.28	-2.02	3.17	3.76083	122.52	0.05	Other	0
34	2739.00	0.09	319.76	95.00	2738.95	-2.04	-1.79	3.17	3.64388	119.41	0.20	Other	0
35	2834.00	0.40	266.67	95.00	2833.95	-1.98	-1.75	2.79	3.29858	122.08	0.37	Other	0
36	2928.00	0.40	292.78	94.00	2927.95	-1.82	-1.64	2.16	2.71824	127.21	0.19	Other	0
37	3023.00	0.40	281.17	95.00	3022.95	-1.57	-1.45	1.59	2.11151	133.42	0.09	Other	0
38	3118.00	0.48	258.85	95.00	3117.94	-1.53	-1.46	0.82	1.67698	150.80	0.20	Other	0
39	3213.00	0.62	257.88	95.00	3212.94	-1.64	-1.65	-0.07	1.6505	182.60	0.15	Other	0
40	3308.00	0.48	264.56	95.00	3307.93	-1.71	-1.79	-0.97	2.04135	208.48	0.16	Other	0
41	3403.00	0.62	272.25	95.00	3402.93	-1.65	-1.81	-1.88	2.61347	226.11	0.17	Other	0
42	3498.00	0.40	266.58	95.00	3497.93	-1.58	-1.81	-2.73	3.27468	226.41	0.24	Other	0
43	3593.00	0.40	280.38	95.00	3592.92	-1.49	-1.77	-3.39	3.82702	242.37	0.10	Other	0
44	3685.00	0.40	269.97	92.00	3684.92	-1.38	-1.71	-4.02	4.37211	249.92	0.08	Other	0
45	3779.00	0.48	257.88	94.00	3778.92	-1.40	-1.80	-4.74	5.06468	249.22	0.13	Other	0
46	3874.00	0.70	249.05	95.00	3873.91	-1.62	-2.09	-5.67	6.03866	269.77	0.25	Other	0
47	3970.00	0.88	241.49	96.00	3969.90	-2.08	-2.65	-6.86	7.35342	268.69	0.22	Other	0
48	4065.00	0.09	72.56	95.00	4064.90	-2.30	-2.93	-7.47	8.02746	248.60	1.00	Other	0
49	4160.00	0.31	48.57	95.00	4159.90	-2.08	-2.69	-7.25	7.73552	249.65	0.24	Other	0
50	4255.00	0.22	47.08	95.00	4254.90	-1.82	-2.40	-6.93	7.32911	250.92	0.10	Other	0
51	4349.00	0.48	87.07	94.00	4348.90	-1.72	-2.25	-5.76	6.78952	250.61	0.36	Other	0
52	4445.00	0.31	67.47	96.00	4444.90	-1.65	-2.13	-5.76	6.14178	249.68	0.21	Other	0
53	4539.00	0.48	51.69	94.00	4538.89	-1.36	-1.79	-5.22	5.51476	255.64	0.11	Other	0
54	4639.00	0.31	50.07	154.00	4637.89	-0.76	-1.12	-4.39	4.45314	255.64	0.11	Other	0
55	4732.00	0.09	305.26	39.00	4731.89	-0.68	-1.04	-4.33	4.45695	256.53	0.88	Other	0
56	4827.00	0.48	277.48	95.00	4826.89	-0.55	-0.94	-4.79	4.88183	258.66	0.42	Other	0
57	4922.00	0.62	70.28	95.00	4921.89	-0.33	-0.72	-4.70	4.75505	261.31	1.13	Other	0
58	5017.00	0.88	80.36	95.00	5016.88	-0.14	-0.43	-3.50	3.5256	262.99	0.31	Other	0
59	5112.00	0.70	74.37	95.00	5111.87	0.04	-0.14	-2.15	2.14956	266.29	0.14	Other	0
60	5207.00	0.70	77.57	95.00	5206.96	0.24	0.16	-0.95	0.96149	279.73	0.10	Other	0
61	5302.00	0.48	90.98	95.00	5301.86	0.28	0.28	0.02	0.28107	3.45	0.27	Other	0
62	5397.00	0.40	116.95	95.00	5396.85	0.06	0.12	0.71	0.72103	80.14	0.22	Other	0
63	5492.00	0.48	150.08	95.00	5491.85	-0.47	-0.37	1.20	1.26053	107.15	0.28	Other	0
64	5587.00	0.48	166.48	95.00	5586.85	-1.22	-1.10	1.50	1.85896	126.41	0.14	Other	0
65	5682.00	0.79	196.89	91.00	5677.84	-2.18	-2.07	1.40	2.50423	145.93	0.49	Other	0
66	5774.00	0.79	211.39	96.00	5773.83	-3.33	-3.27	0.87	3.38623	165.18	0.21	Other	0
67	5868.00	0.88	237.49	94.00	5867.82	-4.19	-4.21	-0.08	4.21453	181.09	0.41	Other	0
68	5964.00	0.88	256.39	96.00	5963.81	-4.05	-4.78	-1.42	4.98936	196.52	0.30	Other	0
69	6058.00	2.02	276.78	94.00	6057.78	-4.43	-4.76	-3.77	6.06742	218.36	1.31	Other	0
70	6153.00	2.02	294.66	95.00	6152.72	-3.78	-3.86	-6.95	7.9503	240.94	0.66	Other	0
71	6251.00	1.01	393.69	98.00	6250.69	-1.63	-2.37	-8.90	9.21132	255.11	1.42	Other	0
72	6346.00	1.89	394.05	95.00	6345.66	0.68	-0.12	-9.73	9.75068	269.31	0.96	Other	0
73	6441.00	2.59	323.89	95.00	6440.59	4.05	3.12	-11.45	11.86791	285.27	1.07	Other	0
74	6536.00	2.52	320.36	64.00	6535.49	7.67	6.55	-13.90	15.36627	295.23	0.11	Other	0
75	6631.00	2.50	312.07	95.00	6630.40	10.97	9.64	-16.62	19.21458	300.11	0.60	Other	0
76	6722.00	2.42	301.48	91.00	6721.32	13.55	11.97	-19.73	23.08138	301.24	0.51	Other	0
77	6813.00	1.25	272.00	61.00	6812.29	14.39	12.67	-21.50	24.95003	300.51	2.41	Other	0
78	6847.00	2.52	230.36	64.00	6846.25	13.67	11.80	-23.27	26.09096	296.88	2.79	Other	0
79	6879.00	5.59	247.76	37.00	6878.17	12.80	10.76	-25.26	27.45184	293.07	10.24	Other	0
80	6910.00	8.97	252.19	31.00	6908.92	11.79	9.45	-28.96	30.45801	288.07	11.05	Other	0
81	6942.00	12.02	249.87	32.00	6940.38	10.34	7.54	-34.46	35.22459	282.34	9.60	Other	0
82	6973.00	14.23	248.54	31.00	6970.57	8.39	5.03	-41.04	41.34376	276.99	7.21	Other	0
83	7005.00	16.00	256.27	32.00	7004.46	6.56	2.54	-48.98	49.04838	272.97	8.37	Other	0
84	7036.00	16.54	264.07	31.00	7035.22	5.80	1.07	-57.52	57.52349	271.07	7.26	Other	0
85	7068.00	17.57	268.56	32.00	7067.82	5.98	0.48	-66.88	66.88444	270.41	5.20	Other	0
86	7100.00	19.69	270.21	32.00	7099.14	6.76	0.43	-77.10	77.10204	270.32	6.97	Other	0
87	7131.00	22.14	270.31	31.00	7131.10	7.77	0.52	-86.16	86.16696	270.34	7.92	Other	0
88	7163.00	24.67	269.23	32.00	7160.46	8.76	0.47	-100.87	100.87539	270.37	8.03	Other	0
89	7194.00	27.36	269.08	31.00	7193.32	9.67	0.26	-114.47	114.4702	270.13	8.69	Other	0
90	7226.00	30.37	269.63	32.00	7206.34	10.77	0.09	-129.91	129.91486	270.04	9.42	Other	0
91	7257.00	33.20	270.91	31.00	7252.69	12.20	0.18	-146.74	146.74065	270.07	9.41	Other	0
92	7289.00	35.86	273.80	32.00	7283.05	14.44	0.94	-164.36	164.36086	270.33	9.76	Other	0
93	7321.00	38.04	277.03	32.00	7284.62	17.84	2.77	-183.50	183.5206	270.86	9.11	Other	0
94	7351.00	39.74	280.20	30.00	7307.98	22.19	5.60	-202.11	202.19093	271.59	8.73	Other	0
95	7383.00	41.92	284.21	32.00	7347.06	25.82	40.35	-311.56	314.16712	277.48	10.63	Other	0
96	7415.00	44.62	286.66	32.00	7355.49	35.94	15.87	-335.25	339.15272	278.70	8.43	Other	0
97	7447.00	48.00	288.54	32.00	7373.59	44.63	22.86	-357.27	362.70054	279.96	8.62	Other	0
98	7478.00	51.34	290.08	31.00	7394.65	54.37	30.80	-387.99	389.6328	276.11	11.42	Other	0
99	7510.00	53.98	293.37	32.00	7417.06	78.69	40.35	-423.24	435.97	283.88	9.30	Other	0
100	7542.00	55.32	296.25	32.00	7435.58	85.82	40.35	-451.31	453.97	283.88	8.80	Other	0
101	7572.00	58.06	298.56	30.00	7453.28	91.94	62.78	-483.66	486.55114	286.59	6.87	Other	0
102	7602.00	58.06	301.55	30.00	7468.38	106.38	75.47	-519.27	521.72	287.99	12.38	Other	0
103	7634.00	58.28	303.16	32.00	7485.26	122.77	90.02	-402.23	412.18338	282.61	4.32	Other	0
104	7664.00	58.69	306.39	30.00	7500.95	139.03	104.60	-423.24	435.97	283.88	9.30	Other	0
105	7695.00	59.13	309.54	31.00	7516.96	157.03	120.93	-444.16	460.32814	285.23	8.80	Other	0
106	7726.00	59.72	311.91	31.00	7532.73	176.04	138.35	-464.38	484.55114	286.59	6.87	Other	0
107	7757.00	60.35	316.28	31.00	7548.22	196.25	157.03	-483.66	5				

108	7787.00	60.84	320.67	30.00	7562.95	217.19	176.62	-500.94	531.16738	289.42	13.41	Simple	0
109	7817.00	61.42	323.30	30.00	7577.44	229.17	197.35	-517.08	553.46293	290.89	7.35	Simple	0
110	7847.00	62.74	325.08	30.00	7591.49	261.87	218.84	-532.59	575.72988	292.34	6.85	Simple	0
111	7878.00	64.34	326.92	31.00	7605.31	286.07	241.85	-548.11	599.09055	293.81	7.35	Simple	0
112	7909.00	65.31	328.77	31.00	7618.49	310.97	265.60	-563.03	622.5354	295.25	6.33	Simple	0
113	7939.00	66.66	330.79	30.00	7630.70	335.71	285.28	-576.82	645.29759	296.63	7.57	Simple	0
114	7969.00	68.59	332.70	30.00	7642.11	361.14	313.76	-589.95	668.11761	298.00	8.72	Simple	0
115	8000.00	70.35	334.85	31.00	7652.99	388.15	339.76	-602.78	691.93605	299.41	8.63	Simple	0
116	8031.00	72.76	337.61	31.00	7662.80	415.94	366.67	-614.62	715.68575	300.82	11.46	Simple	0
117	8061.00	74.54	340.53	30.00	7671.24	443.58	393.55	-624.90	738.50041	302.20	11.08	Simple	0
118	8092.00	76.70	342.64	31.00	7678.94	472.75	422.04	-634.38	761.9704	303.63	9.60	Simple	0
119	8122.00	79.06	345.75	32.00	7686.24	501.53	450.26	-642.37	784.45307	305.03	12.81	Simple	0
120	8154.00	80.29	348.13	30.00	7690.98	532.67	480.92	-649.48	808.15187	306.52	8.28	Simple	0
121	8185.00	80.64	350.17	31.00	7696.11	563.07	510.95	-655.23	830.89985	307.95	6.59	Simple	0
122	8216.00	80.53	353.58	31.00	7701.19	593.59	541.22	-659.55	853.18509	309.37	10.85	Simple	0
123	8246.00	82.20	355.38	30.00	7705.69	623.24	570.74	-662.41	874.36889	310.75	8.13	Simple	0
124	8277.00	85.01	356.39	31.00	7709.15	654.05	601.46	-664.62	896.36438	312.14	9.62	Simple	0
125	8309.00	86.80	356.81	32.00	7711.43	685.95	633.32	-666.51	919.41802	313.54	5.75	Simple	0
126	8341.00	87.56	356.92	32.00	7713.01	717.90	666.17	-668.26	942.92353	314.87	2.39	Simple	0
127	8372.00	88.35	356.86	31.00	7714.12	748.87	695.17	-669.94	966.16153	316.10	2.56	Simple	0
128	8407.00	89.93	358.68	95.00	7715.54	843.76	791.08	-673.63	1039.02917	319.58	2.54	Simple	0
129	8462.00	91.86	358.90	95.00	7714.06	938.57	886.04	-675.63	1114.24692	322.67	2.04	Simple	0
130	8517.00	91.38	358.90	95.00	7711.38	1033.28	981.00	-676.53	1191.65649	325.41	1.27	Simple	0
131	8572.00	90.76	359.70	95.00	7709.61	1127.96	1075.98	-676.76	1271.11859	327.83	0.73	Simple	0
132	8647.00	89.93	0.52	95.00	7709.04	1222.62	1170.98	-676.58	1357.38656	329.98	1.22	Simple	0
133	8694.00	89.90	0.70	95.00	7709.18	1317.21	1265.97	-675.57	1434.9505	331.91	0.19	Simple	0
134	9037.00	88.59	359.92	95.00	7710.44	1411.83	1360.96	-675.06	1519.18351	333.62	1.60	Simple	0
135	9133.00	87.49	0.51	96.00	7713.72	1507.42	1456.90	-674.71	1605.54868	335.15	1.30	Simple	0
136	9228.00	89.04	0.54	95.00	7716.60	1601.98	1551.85	-673.84	1691.83236	336.53	1.63	Simple	0
137	9322.00	87.87	359.00	94.00	7719.14	1695.65	1645.81	-674.22	1778.55542	337.72	2.05	Simple	0
138	9418.00	89.31	358.57	96.00	7721.51	1791.44	1741.76	-676.25	1868.42919	338.78	1.57	Simple	0
139	9513.00	88.38	358.81	95.00	7723.42	1886.25	1836.71	-678.41	1957.99828	339.73	1.01	Simple	0
140	9608.00	89.28	358.72	95.00	7725.36	1981.06	1931.67	-680.46	2048.017	340.59	0.95	Simple	0
141	9703.00	88.35	357.30	95.00	7727.32	2075.93	2026.59	-683.76	2138.82866	341.36	1.78	Simple	0
142	9799.00	88.38	357.15	96.00	7730.06	2171.83	2122.44	-688.40	2231.28598	342.03	0.16	Simple	0
143	9894.00	90.10	357.71	95.00	7731.31	2266.77	2217.31	-693.07	2323.1046	342.64	1.81	Simple	0
144	9989.00	90.14	356.85	95.00	7731.12	2361.72	2312.18	-698.00	2415.2403	343.30	0.39	Simple	0
145	10085.00	90.03	356.95	96.00	7730.97	2457.69	2408.04	-703.19	2508.6131	343.72	0.15	Simple	0
146	10180.00	87.69	357.34	95.00	7732.85	2552.61	2502.90	-707.92	2601.06489	344.21	2.50	Simple	0
147	10253.00	87.21	357.72	95.00	7733.07	2647.44	2597.72	-712.02	2693.52774	344.67	0.65	Simple	0
148	10349.00	89.07	357.97	94.00	7730.12	2741.30	2691.60	-715.55	2785.08392	345.11	1.99	Simple	0
149	10464.00	91.48	357.91	95.00	7739.66	2836.19	2786.53	-718.96	2877.7827	345.53	2.54	Simple	0
150	10560.00	91.07	358.65	96.00	7737.53	2932.03	2882.46	-721.84	2971.46782	345.94	0.89	Simple	0
151	10655.00	91.69	358.75	95.00	7735.25	3026.83	2977.41	-723.99	3064.16582	346.33	0.66	Simple	0
152	10755.00	90.86	358.19	100.00	7733.03	3126.65	3077.34	-726.66	3161.97463	346.71	1.00	Simple	0
153	10851.00	89.83	357.20	96.00	7732.56	3222.56	3172.26	-730.52	3256.26401	347.04	1.49	Simple	0
154	10946.00	90.03	356.82	95.00	7732.33	3317.52	3268.13	-735.48	3349.86816	347.32	0.45	Simple	0
155	11042.00	90.24	357.09	96.00	7732.11	3413.48	3364.00	-740.57	3444.5495	347.85	0.35	Simple	0
156	11137.00	90.03	357.77	95.00	7732.11	3508.41	3458.90	-744.83	3538.18673	347.85	0.74	Simple	0
157	11232.00	89.93	357.45	95.00	7732.13	3603.33	3553.82	-748.80	3631.84751	348.10	0.36	Simple	0
158	11326.00	89.97	358.15	94.00	7732.22	3697.24	3647.75	-752.41	3724.53819	348.35	0.75	Simple	0
159	11421.00	95.00	358.25	95.00	7732.19	3792.12	3742.70	-755.40	3818.17139	348.59	0.15	Simple	0
160	11517.00	90.31	358.87	96.00	7731.87	3887.95	3883.67	-757.81	3912.7556	348.83	0.69	Simple	0
161	11611.00	90.48	359.30	94.00	7731.22	3981.75	3932.65	-759.31	4005.28686	349.07	0.50	Simple	0
162	11707.00	90.62	358.82	96.00	7730.30	4077.56	4028.64	-762.91	4093.98635	349.30	0.53	Simple	0
163	11802.00	90.58	358.74	95.00	7729.30	4172.36	4173.61	-767.91	4183.59954	349.52	0.08	Simple	0
164	11897.00	90.41	358.49	95.00	7728.48	4267.19	4218.58	-775.20	4287.41647	349.72	0.32	Simple	0
165	11992.00	90.45	358.31	95.00	7727.76	4362.05	4313.44	-767.85	4381.34799	349.91	0.19	Simple	0
166	12086.00	90.38	358.51	94.00	7727.09	4455.91	4407.50	-770.45	4474.33294	350.08	0.23	Simple	0
167	12181.00	90.41	358.51	95.00	7726.43	4550.76	4502.47	-772.92	4568.3265	350.26	0.04	Simple	0
168	12276.00	90.55	358.08	95.00	7725.63	4645.62	4597.42	-775.75	4662.4096	350.42	0.47	Simple	0
169	12371.00	90.45	357.29	95.00	7724.95	4740.53	4692.34	-779.59	4756.65619	350.57	0.83	Simple	0
170	12466.00	90.59	357.08	95.00	7723.95	4835.48	4787.22	-784.25	4851.03362	350.70	0.27	Simple	0
171	12561.00	90.48	356.62	95.00	7723.06	4930.44	4882.07	-789.48	4945.49282	350.81	0.50	Simple	0
172	12654.00	90.58	356.23	93.00	7722.20	5023.42	4974.89	-795.28	5038.0516	350.92	0.43	Simple	0
173	12750.00	90.65	357.19	96.00	7721.16	5119.38	5070.72	-800.79	5133.56428	351.03	1.00	Simple	0
174	12845.00	90.52	357.66	95.00	7720.19	5214.31	5165.62	-805.06	5227.73475	351.14	0.52	Simple	0
175	12940.00	90.52	358.05	95.00	7719.34	5309.21	5260.55	-808.62	5327.33435	351.26	0.41	Simple	0
176	12995.00	90.38	358.34	95.00	7718.60	5404.08	5355.30	-811.61	5416.64909	351.38	0.33	Simple	0
177	13131.00	90.38	359.15	96.00	7717.96	5499.91	5451.47	-813.72	5511.86941	351.51	0.84	Simple	0
178	13226.00	90.48	359.00	95.00	7717.25	5594.70	5546.46	-815.26	5606.05463	351.64	0.19	Simple	0
179	13321.00	90.48	0.10	95.00	7716.45	5689.43	5641.45	-816.01	5700.16128	351.77	1.16	Simple	0
180	13416.00	90.45	0.58	95.00	7715.68	5784.06	5736.45	-815.45	5794.11506	351.91	0.51	Simple	0
181	13510.00	90.45	0.62	94.00	7714.95	5877.55	5830.44	-814.47	5887.04935	352.05	0.05	Simple	0
182	13605.00	90.65	1.49	95.00	7714.04	5972.16	5925.42	-812.71	5980.891	352.19	0.24	Simple	0
183	13700.00	90.83	1.65	95.00	7712.81	6066.58	6020.37	-810.11	6074.63226	352.34	0.25	Simple	0
184	13794.00	90.96	0.72	94.00	7711.34	6160.07	6114.32	-808.17	6167.51811	352.47	1.00	Simple	0
185	13890.00	91.07	0.74	96.00	7709.64	6255.63	6210.34	-806.94	6262.52265	352.60	0.11	Simple	0
186	13985.00	90.89	359.31	95.00	7708.02	6350.28	6305.30	-806.89	6356.71906	352.71	1.50	Simple	0
187	14080.00	90.86	357.99	95.00	7706.56	6445.11	6400.26	-806.11	6451.20129	352.79	1.41	Simple	0
188	14175.00	90.93	357.07	95.00	7705.08	6540.02	6495.16	-813.20	6545.86648	352.86	0.97	Simple	0
189	14270.00	90.89	355.87	95.00	7703.57	6634.99	6589.97	-819.04	6640.66932	352.92	1.26	Simple	0
190	14365.00	91.10	355.60	95.00	7701.92	6729.97	6684.69	-826.10	673				