

Reservoir Development

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

HOBBS OCD**APR 15 2015****RECEIVED****PATHFINDER**
A Schlumberger Company

October 14, 2014

Cimarex
600 N MARIENFELD STREET SUITE 600

MIDLAND ,TX 79701

Re:

Sec 23, T23S, R32E
N 32.29658 W 103.64304

CLIENT: Cimarex Energy Co.
WELL: Diamondtail 23 Federal 6H
FIELD: Diamondtail; Bone Spring
RIG: NorAm 26
COUNTY: Lea
API NO: 30-025-40772
JOB NO: 14MLD0366

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>
Trevor Lowry MWD	Diamondtail 23 Federal 6H Side Track	9267.00 Ft to 14172.00 Ft	September 15, 2014 to September 24, 2014	SlimPulse

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

Jasem Alharer
Field Service Manager

APP 21 2015

HOBBS OCD

APR 15 2015

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Reservoir Development

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Well Reference:

Sec 23, T23S, R32E
N 32.29658 W 103.64304

I, Trevor Lowry certify that; I am employed by PathFinder, a division of Schlumberger Technology Corporation; that I did on the day(s) of September 15, 2014 through September 24, 2014, conduct or supervise the taking of the SlimPulse surveys from a depth of 9267.00 feet to a depth of 14172.00 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 Diamondtail 23 Federal 6H Well (Side Track) API No. 30-025-40772 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.

By

Trevor Lowry
MWD

Trevor Lowry

Subscribed and Sworn to before me this 2 day of December (month) 2014 (yr)

My Commission expires:

September 13, 2017

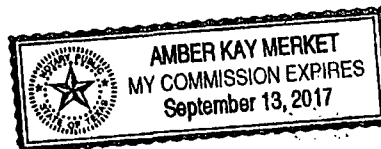
Amber Kay Markt

(signature)

Notary Public

Midland County, Texas

(County State)



dm

SCHLUMBERGER
Survey Report

3-Dec-2014

Client.....: Cimarex Energy Co.
Field.....: Diamondtail; Bone Spring

Well.....: Diamondtail 23 Federal 6H
API number.....: 30-025-40772
Engineer.....: Trevor Lowry

Spud date.....: 12-Sep-14
Last survey date.....: 24-Sep-14
Total accepted surveys...: 75
MD of first survey.....: 9267.00 ft
MD of last survey.....: 14172.00 ft

County.....: Lea
State.....: New Mexico
Rig.....: NorAm 26

Latitude.....: 32° 17' 47.682" N
Longitude.....: 103° 38' 34.938" 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.....: 3724.00
KB above permanent.....: 3749.00
DF above permanent.....: 3749.00

----- Vertical section origin-----

Latitude (+N/S-).....: 0.00 ft
Departure (+E/W-).....: 0.00 ft

----- Grid Coordinates -----

NAD83 New Mexico State Plane, Eastern Zone, US Feet
X.....: 754631.30 ft
Y.....: 472314.30 ft

Azimuth from Vsect Origin to target: 176.43 degrees

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

-----Run1----- Calculation Date: 16-Sep-2014
Location G....: 998.32163 mgn Tolerance G....: 2.50 mgn
Location B....: 48286.42 nT Tolerance B....: 300.00 nT
Magnetic Dip: 60.154 degrees Tolerance Dip: 0.45 degrees

-----Run2----- Calculation Date: 19-Sep-2014
Location G....: 998.94325 mgn Tolerance G....: 2.50 mgn
Location B....: 48283.72 nT Tolerance B....: 300.00 nT
Magnetic Dip: 60.1538 degrees Tolerance Dip: 0.45 degrees

-----Run3----- Calculation Date: 22-Sep-2014
Location G....: 998.94325 mgn Tolerance G....: 2.50 mgn
Location B....: 48282.71 nT Tolerance B....: 300.00 nT
Magnetic Dip: 60.1536 degrees Tolerance Dip: 0.45 degrees

BGGM Model: 2014

-----Run1-----
Magnetic dec (+E/W-).....: 7.388 degrees
Grid Conv (+E/W-).....: 0.368 degrees
Total Azim Corr (+E/W-)...: 7.02 degrees

-----Run2-----
Magnetic dec (+E/W-).....: 7.3858 degrees
Grid Conv (+E/W-).....: 0.3658 degrees
Total Azim Corr (+E/W-)...: 7.02 degrees

-----Run3-----
Magnetic dec (+E/W-).....: 7.385 degrees
Grid Conv (+E/W-).....: 0.365 degrees
Total Azim Corr (+E/W-)...: 7.02 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	124.00	0.62	178.54	124.00	124.00	0.67	-0.67	0.02	0.67	178.54	0.50	Other	0

3	209.00	0.79	127.91	85.00	208.99	1.52	-1.49	0.49	1.57	161.76	0.73	Other	0
4	327.00	0.79	182.19	118.00	326.98	2.87	-2.80	1.10	3.01	158.54	0.61	Other	0
5	447.00	0.62	120.71	120.00	446.97	4.06	-3.96	1.63	4.28	157.65	0.61	Other	0
6	563.00	0.79	134.73	116.00	562.97	5.01	-4.84	2.74	5.56	150.54	0.21	Other	0
7	659.00	0.79	132.31	96.00	658.96	5.97	-5.76	3.70	6.84	147.30	0.03	Other	0
8	750.00	0.48	121.32	91.00	749.95	6.64	-6.38	4.49	7.8	144.88	0.36	Other	0
9	839.00	0.62	113.72	89.00	838.95	7.08	-6.76	5.24	8.56	142.21	0.18	Other	0
10	900.00	0.40	112.01	61.00	899.94	7.32	-6.98	5.74	9.04	140.53	0.36	Other	0
11	995.00	0.40	106.42	95.00	994.94	7.58	-7.19	6.37	9.61	138.48	0.04	Other	0
12	1089.00	0.22	101.11	94.00	1088.94	7.73	-7.32	6.86	10.03	136.86	0.19	Other	0
13	1183.00	0.22	130.64	94.00	1182.94	7.91	-7.47	7.18	10.36	136.17	0.12	Other	0
14	1268.00	0.40	103.83	85.00	1267.94	8.11	-7.65	7.59	10.78	135.24	0.27	Other	0
15	1369.00	0.31	134.64	101.00	1368.94	8.42	-7.93	8.12	11.35	134.30	0.21	Other	0
16	1464.00	0.31	101.24	95.00	1463.94	8.68	-8.16	8.56	11.82	133.63	0.19	Other	0
17	1558.00	0.31	116.40	94.00	1557.93	8.87	-8.32	9.04	12.28	132.64	0.09	Other	0
18	1652.00	0.31	119.74	94.00	1651.93	9.13	-8.56	9.48	12.78	132.07	0.02	Other	0
19	1746.00	0.31	162.32	94.00	1745.93	9.52	-8.93	9.78	13.24	132.39	0.24	Other	0
20	1840.00	0.22	147.91	94.00	1839.93	9.93	-9.32	9.96	13.64	133.12	0.12	Other	0
21	1937.00	0.31	119.83	97.00	1936.93	10.23	-9.61	10.28	14.08	133.07	0.16	Other	0
22	2031.00	0.22	119.43	94.00	2030.93	10.47	-9.83	10.66	14.5	132.67	0.10	Other	0
23	2124.00	0.31	151.73	93.00	2123.93	10.80	-10.14	10.94	14.91	132.83	0.18	Other	0
24	2220.00	0.40	144.61	96.00	2219.93	11.32	-10.64	11.25	15.49	133.39	0.10	Other	0
25	2314.00	0.09	154.02	94.00	2313.92	11.67	-10.97	11.47	15.88	133.72	0.33	Other	0
26	2408.00	0.09	241.73	94.00	2407.92	11.76	-11.07	11.44	15.92	134.06	0.13	Other	0
27	2501.00	0.00	147.12	93.00	2500.92	11.79	-11.11	11.38	15.9	134.31	0.10	Other	0
28	2596.00	0.22	103.30	95.00	2595.92	11.85	-11.15	11.56	16.06	133.98	0.23	Other	0
29	2693.00	0.09	45.34	97.00	2692.92	11.85	-11.14	11.79	16.22	133.37	0.19	Other	0
30	2788.00	0.00	328.83	95.00	2787.92	11.80	-11.09	11.84	16.22	133.11	0.09	Other	0
31	2882.00	0.09	76.94	94.00	2881.92	11.79	-11.07	11.92	16.26	132.89	0.10	Other	0
32	2975.00	0.09	79.44	93.00	2974.92	11.77	-11.04	12.06	16.35	132.48	0.00	Other	0
33	3069.00	0.09	165.93	94.00	3068.92	11.83	-11.10	12.15	16.46	132.41	0.13	Other	0
34	3164.00	0.09	42.31	95.00	3163.92	11.85	-11.12	12.22	16.52	132.30	0.17	Other	0
35	3258.00	0.22	152.13	94.00	3257.92	11.97	-11.22	12.35	16.69	132.25	0.28	Other	0
36	3353.00	0.31	123.33	95.00	3352.92	12.33	-11.56	12.62	17.12	132.51	0.12	Other	0
37	3447.00	0.48	191.63	94.00	3446.92	12.90	-12.13	12.72	17.58	133.65	0.43	Other	0
38	3543.00	0.48	206.71	96.00	3542.92	13.63	-12.88	12.45	17.92	135.97	0.13	Other	0
39	3636.00	0.40	198.14	93.00	3635.91	14.27	-13.54	12.18	18.21	138.03	0.11	Other	0
40	3731.00	0.31	209.92	95.00	3730.91	14.80	-14.08	11.95	18.46	139.68	0.12	Other	0
41	3824.00	0.48	194.20	93.00	3823.91	15.38	-14.67	11.73	18.78	141.37	0.22	Other	0
42	3918.00	0.40	216.73	94.00	3917.91	16.00	-15.32	11.43	19.12	143.26	0.20	Other	0
43	4015.00	0.48	222.22	97.00	4014.91	16.54	-15.89	10.56	19.3	145.41	0.09	Other	0
44	4108.00	0.48	202.93	93.00	4107.90	17.16	-16.54	10.54	19.61	147.48	0.17	Other	0
45	4202.00	0.79	165.14	94.00	4201.90	18.15	-17.53	10.56	20.46	148.94	0.54	Other	0
46	4296.00	0.88	159.03	94.00	4295.89	19.48	-18.83	10.98	21.8	149.75	0.13	Other	0
47	4391.00	1.10	142.81	95.00	4390.87	20.93	-20.24	11.79	23.42	149.77	0.37	Other	0
48	4485.00	1.41	144.61	94.00	4484.85	22.66	-21.90	13.01	25.47	149.29	0.33	Other	0
49	4579.00	1.49	141.93	94.00	4578.82	24.65	-23.80	14.43	27.84	148.77	0.11	Other	0
50	4673.00	1.71	141.54	94.00	4672.78	26.81	-25.86	16.06	30.44	148.16	0.23	Other	0
51	4767.00	1.89	136.61	94.00	4766.74	29.15	-28.09	18.00	33.36	147.35	0.25	Other	0
52	4857.00	1.80	137.10	94.00	4856.69	31.46	-30.28	19.88	36.23	146.71	0.22	Other	0
53	4883.00	1.89	359.73	96.00	4882.68	31.37	-30.17	20.13	36.27	146.29	13.43	Other	0
54	4978.00	1.58	135.52	95.00	4977.67	30.79	-29.54	21.04	36.27	144.54	3.39	Other	0
55	5071.00	1.58	135.91	93.00	5070.63	32.74	-31.38	22.83	38.81	143.96	0.01	Other	0
56	5164.00	1.58	135.12	93.00	5163.59	34.68	-33.21	24.63	41.34	143.44	0.02	Other	0
57	5258.00	1.58	136.70	94.00	5257.56	36.65	-35.07	26.43	43.92	142.99	0.05	Other	0
58	5352.00	1.71	137.93	94.00	5351.52	38.73	-37.04	28.28	46.6	142.64	0.14	Other	0
59	5446.00	1.49	5445.48	94.00	5445.48	40.77	-38.97	30.05	49.21	142.37	0.24	Other	0
60	5541.00	1.41	132.44	95.00	5540.45	42.58	-40.88	31.74	51.6	142.04	0.17	Other	0
61	5635.00	1.41	127.52	94.00	5634.42	44.17	-42.16	33.51	53.86	141.52	0.13	Other	0
62	5728.00	1.49	126.73	93.00	5727.40	45.70	-43.58	35.39	56.14	140.93	0.09	Other	0
63	5823.00	1.32	124.84	95.00	5822.37	47.18	-44.95	37.28	58.39	140.33	0.19	Other	0
64	5918.00	1.19	125.54	95.00	5917.34	48.48	-46.15	38.98	60.4	139.82	0.14	Other	0
65	6010.00	1.19	125.32	92.00	6009.32	49.69	-47.25	40.53	62.26	139.38	0.00	Other	0
66	6110.00	1.19	121.10	100.00	6109.30	50.93	-48.39	42.27	64.25	138.86	0.09	Other	0
67	6204.00	1.19	119.52	94.00	6203.28	52.02	-49.38	43.95	66.11	138.32	0.03	Other	0
68	6298.00	1.32	116.62	94.00	6297.26	53.09	-50.34	45.77	68.04	137.72	0.15	Other	0
69	6392.00	1.19	115.30	94.00	6391.24	54.11	-51.24	47.62	69.96	137.10	0.14	Other	0
70	6487.00	1.41	174.63	95.00	6486.22	55.75	-52.83	48.62	71.8	137.37	1.37	Other	0
71	6580.00	0.79	84.80	93.00	6579.20	56.88	-53.91	49.37	73.1	137.52	1.74	Other	0
72	6675.00	1.19	43.23	95.00	6674.19	56.19	-53.13	50.70	73.44	136.34	0.84	Other	0
73	6769.00	1.19	45.21	94.00	6768.17	54.87	-51.73	52.06	73.39	134.82	0.04	Other	0
74	6866.00	1.32	50.44	97.00	6865.15	53.55	-50.51	53.63	73.54	133.17	0.18	Other	0
75	6958.00	1.10	45.43	92.00	6957.11	52.35	-49.02	55.08	73.73	131.67	0.27	Other	0
76	7052.00	0.88	39.01	94.00	7051.11	51.23	-47.82	56.18	73.78	130.41	0.26	Other	0
77	7146.00	1.41	25.61	94.00	7145.09	49.69	-46.22	57.13	73.49	128.97	0.63	Other	0
78	7240.00	1.49	16.20	94.00	7239.06	47.53	-44.00	57.97	72.78	127.20	0.27	Other	0
79	7333.00	1.41	14.23	93.00	7332.03	45.30	-41.73	58.59	71.94	125.46	0.10	Other	0
80	7428.00	1.19	11.94	95.00	7427.01	43.24	-39.64	59.08	71.15	123.66	0.24	Other	0
81	7523.00	1.10	6.01	95.00	7521.99	41.39	-37.76	59.38	70.37	122.45	0.16	Other	0
82	7617.00	1.01	5.31	94.00	7615.97	39.68	-36.04	59.55	69.61	121.18	0.10	Other	0
83	7711.00	0.79	359.51	94.00	7709.96	38.21	-34.57	59.62	68.92	120.10	0.25	Other	0
84	7807.00	0.62	353.31	96.00	7805.96	37.03	-33.39	59.56	68.28	118.69	0.17	Other	0
85	7901.00	0.48	344.74	94.00	7899.95	36.14	-32.51	59.40	67.71	116.89	0.19	Other	0
86	7995.00	0.48	331.82	94.00	7993.95	35.40	-31.78	59.11	67.11	118.27	0.11	Other	0
87	8089.00	0.62	309.54	94.00	8087.94	34.69	-31.11	58.53	66.28	117.99	0.27	Other	0
88	8184.00	0.62	293.41	95.00	8182.94	34.11	-30.58	57.66	65.27	117.94	0.18	Other	0
89	8278.00	0.70	273.81	94.00	8276.93	33.80	-30.34	56.62	64.24	118.18	0.25	Other	0

90	8373.00	0.70	264.94	95.00	8371.93	33.74	-30.35	55.46	63.22	118.69	0.11	Other	0
91	8467.00	0.79	254.83	94.00	8465.92	33.89	-30.57	54.27	62.28	119.39	0.17	Other	0
92	8561.00	0.88	242.70	94.00	8559.91	34.31	-31.07	53.00	61.43	120.38	0.21	Other	0
93	8655.00	1.19	247.01	94.00	8653.89	34.92	-31.78	51.46	60.48	121.70	0.34	Other	0
94	8751.00	1.32	250.21	96.00	8749.87	35.56	-32.55	49.50	59.24	123.32	0.15	Other	0
95	8845.00	1.49	247.40	94.00	8843.84	36.26	-33.38	47.35	57.94	125.18	0.20	Other	0
96	8940.00	2.50	231.40	95.00	8938.78	37.86	-35.15	44.59	56.78	128.25	1.20	Other	0
97	9034.00	2.99	226.13	94.00	9032.67	40.62	-38.13	41.22	56.15	132.76	0.59	Other	0
98	9129.00	2.99	231.71	95.00	9127.55	43.63	-41.38	37.49	55.84	137.82	0.31	Other	0
99	9223.00	3.21	230.00	94.00	9221.41	46.59	-44.59	33.55	55.8	143.04	0.25	Other	0
100	9267.00	3.43	220.22	44.00	9265.33	48.27	-46.39	31.76	56.22	145.60	1.38	SlimPulse	1
101	9298.00	4.83	177.59	31.00	9296.26	50.25	-48.40	31.22	57.59	147.18	10.55	SlimPulse	1
102	9330.00	8.78	153.62	32.00	9328.03	53.85	-51.94	32.36	61.19	148.08	14.95	SlimPulse	1
103	9361.00	12.91	148.98	31.00	9358.47	59.11	-57.03	35.20	67.01	148.32	13.61	SlimPulse	1
104	9392.00	16.44	148.47	31.00	9388.46	66.06	-63.73	39.28	74.86	148.36	11.39	SlimPulse	1
105	9424.00	19.74	145.16	32.00	9418.87	74.68	-72.03	44.73	84.79	148.16	10.80	SlimPulse	1
106	9455.00	23.53	140.88	31.00	9447.69	84.19	-81.13	51.63	96.17	147.53	13.24	SlimPulse	1
107	9487.00	26.77	137.19	32.00	9476.65	94.97	-91.38	60.56	109.63	146.47	11.24	SlimPulse	1
108	9518.00	29.40	130.86	31.00	9504.00	105.71	-101.48	71.06	123.89	145.00	12.81	SlimPulse	1
109	9550.00	32.78	128.62	32.00	9531.40	117.03	-112.03	83.78	139.89	143.21	11.16	SlimPulse	1
110	9582.00	37.00	127.87	32.00	9557.65	129.22	-123.36	98.15	157.64	141.49	13.26	SlimPulse	1
111	9613.00	40.98	128.07	31.00	9581.74	142.16	-135.35	113.52	176.66	140.01	12.85	SlimPulse	1
112	9645.00	43.42	128.87	32.00	9605.44	156.55	-148.73	130.35	197.77	138.77	7.81	SlimPulse	1
113	9677.00	45.04	129.30	32.00	9628.37	171.68	-162.80	147.67	219.8	137.79	5.15	SlimPulse	1
114	9708.00	47.38	133.05	31.00	9649.82	187.43	-177.54	164.50	242.04	137.18	11.54	SlimPulse	1
115	9740.00	50.07	137.05	32.00	9670.94	205.48	-194.56	181.47	266.06	136.99	12.60	SlimPulse	1
116	9771.00	54.06	139.85	31.00	9689.99	224.75	-212.87	197.67	290.49	137.12	14.71	SlimPulse	1
117	9803.00	57.88	142.60	32.00	9707.90	246.42	-233.54	214.26	316.94	137.47	13.90	SlimPulse	1
118	9834.00	60.60	145.38	31.00	9723.76	268.90	-255.09	229.91	343.41	137.97	11.68	SlimPulse	1
119	9866.00	63.41	148.05	32.00	9738.78	293.44	-278.71	245.41	371.36	138.64	11.46	SlimPulse	1
120	9897.00	66.18	151.49	31.00	9751.98	318.51	-302.94	259.52	398.9	139.41	13.44	SlimPulse	1
121	9929.00	67.19	154.63	32.00	9764.65	345.48	-329.14	272.83	427.51	140.34	9.55	SlimPulse	1
122	9961.00	69.79	158.27	32.00	9776.38	373.45	-356.42	284.71	456.18	141.38	13.34	SlimPulse	1
123	9992.00	71.94	161.70	31.00	9786.55	401.54	-383.94	294.73	484.02	142.49	12.54	SlimPulse	1
124	10024.00	74.91	164.68	32.00	9795.68	431.38	-413.29	303.59	512.81	143.70	12.88	SlimPulse	1
125	10055.00	77.52	165.70	31.00	9803.06	460.91	-442.40	311.28	540.94	144.87	9.01	SlimPulse	1
126	10087.00	79.31	169.39	32.00	9809.49	491.88	-473.00	318.04	569.98	146.08	12.60	SlimPulse	1
127	10118.00	79.63	172.35	31.00	9815.16	522.21	-503.09	322.87	597.78	147.31	9.44	SlimPulse	1
128	10149.00	81.32	176.82	31.00	9820.29	552.75	-533.52	325.76	625.1	148.59	15.23	SlimPulse	1
129	10181.00	83.96	179.79	32.00	9824.39	584.47	-565.23	326.69	652.85	149.97	12.36	SlimPulse	1
130	10212.00	87.62	180.46	31.00	9826.67	615.31	-596.14	326.62	679.76	151.28	12.00	SlimPulse	1
131	10244.00	90.50	180.62	32.00	9827.19	647.22	-628.13	326.32	707.84	152.55	9.01	SlimPulse	1
132	10307.00	90.88	179.73	63.00	9826.43	710.08	-691.13	326.13	764.21	154.74	1.54	SlimPulse	1
133	10349.00	91.34	179.71	42.00	9825.62	752.01	-733.12	326.33	802.47	156.00	1.10	SlimPulse	0
134	10444.00	87.90	178.67	95.00	9826.24	846.88	-828.09	327.67	890.56	158.41	3.78	SlimPulse	0
135	10538.00	88.01	179.19	94.00	9829.60	940.73	-922.02	329.42	979.1	160.34	0.57	SlimPulse	0
136	10633.00	88.90	180.40	95.00	9832.16	1035.53	-1016.98	329.76	1069.11	162.03	1.58	SlimPulse	0
137	10727.00	89.97	181.19	94.00	9833.10	1129.25	-1110.96	328.46	1158.5	163.53	1.42	SlimPulse	0
138	10822.00	90.96	182.10	95.00	9832.32	1223.85	-1205.92	325.73	1249.14	164.88	1.42	SlimPulse	0
139	10916.00	91.24	182.06	94.00	9830.52	1317.38	-1299.84	322.32	1339.21	166.07	0.29	SlimPulse	0
140	11011.00	90.21	181.80	95.00	9829.32	1411.93	-1394.78	319.12	1430.82	167.11	1.12	SlimPulse	0
141	11105.00	90.48	181.14	94.00	9828.76	1505.57	-1488.74	316.71	1522.06	167.99	0.76	SlimPulse	0
142	11200.00	90.17	181.38	95.00	9828.22	1600.23	-1583.72	314.62	1614.67	168.76	0.41	SlimPulse	0
143	11295.00	90.03	181.13	95.00	9828.04	1694.89	-1678.69	312.54	1707.54	169.45	0.31	SlimPulse	0
144	11389.00	90.21	182.01	94.00	9827.85	1788.51	-1772.66	309.97	1799.55	170.08	0.95	SlimPulse	0
145	11484.00	90.93	181.81	95.00	9826.91	1883.07	-1867.60	306.81	1892.63	170.67	0.79	SlimPulse	0
146	11578.00	90.07	182.53	94.00	9826.09	1976.60	-1961.53	303.25	1984.83	171.21	1.20	SlimPulse	0
147	11673.00	90.10	181.83	95.00	9825.95	2071.12	-2056.46	299.63	2078.17	171.71	0.74	SlimPulse	0
148	11768.00	90.07	180.43	95.00	9825.80	2165.80	-2151.44	297.76	2171.94	172.12	1.47	SlimPulse	0
149	11862.00	90.10	179.99	94.00	9825.66	2259.59	-2245.44	297.41	2265.05	172.46	0.47	SlimPulse	0
150	11957.00	91.07	179.45	95.00	9824.69	2354.43	-2340.43	297.87	2359.31	172.75	1.16	SlimPulse	0
151	12051.00	89.86	178.56	94.00	9823.93	2448.33	-2434.41	299.51	2452.76	172.99	1.59	SlimPulse	0
152	12146.00	89.38	178.87	95.00	9824.56	2543.25	-2529.38	301.63	2547.3	173.20	0.60	SlimPulse	0
153	12240.00	89.45	179.98	94.00	9825.52	2637.12	-2623.37	302.57	2640.76	173.42	1.18	SlimPulse	0
154	12335.00	90.03	180.26	95.00	9825.95	2731.92	-2718.37	302.37	2735.13	173.65	0.68	SlimPulse	0
155	12429.00	89.83	179.70	94.00	9826.06	2825.74	-2812.37	302.41	2828.58	173.86	0.64	SlimPulse	0
156	12523.00	89.21	178.78	94.00	9826.85	2919.62	-2906.36	303.66	2922.18	174.04	1.18	SlimPulse	0
157	12618.00	89.79	178.53	95.00	9827.67	3014.54	-3001.33	305.89	3016.87	174.18	0.67	SlimPulse	0
158	12712.00	88.28	177.90	94.00	9829.25	3108.48	-3095.26	308.81	3110.63	174.30	1.75	SlimPulse	0
159	12807.00	87.25	177.67	95.00	9832.96	3203.38	-3190.12	312.49	3205.39	174.41	1.11	SlimPulse	0
160	12901.00	86.01	177.50	94.00	9838.49	3297.20	-3283.87	316.44	3299.08	174.50	1.33	SlimPulse	0
161	12997.00	85.18	176.56	96.00	9845.87	3392.91	-3379.46	321.40	3394.71	174.57	1.30	SlimPulse	1
162	13092.00	87.70	175.89	95.00	9851.76	3487.72	-3474.06	327.64	3489.48	174.61	2.74	SlimPulse	1
163	13186.00	90.48	175.35	94.00	9853.26	3581.68	-3567.76	334.82	3583.44	174.64	3.01	SlimPulse	1
164	13280.00	91.86	175.17	94.00	9851.34	3675.64	-3661.42	342.58	3677.41	174.65	1.48	SlimPulse	1
165	13375.00	92.62	175.25	95.00	9847.62	3770.55	-3756.02	350.51	3772.33	174.67	0.80	SlimPulse	1
166	13469.00	93.51	176.98	94.00	9842.60	3864.41	-3849.66	356.87	3866.17	174.70	2.07	SlimPulse	1
167	13564.00	93.79	179.26	95.00	9836.55	3959.17	-3944.41	359.98	3960.8	174.79	2.41	SlimPulse	1
168	13658.00	93.31	181.90	94.00	9830.73	4052.73	-4038.22	359.03	4054.15	174.92	2.85	SlimPulse	1
169	13753.00	90.29	183.95	95.00	9827.74	4147.06	-4133.03	354.18	4148.18	175.10	3.84	SlimPulse	1
170	13847.00	90.43	184.69	94.00	9827.15	4240.17	-4226.76	347.10	4240.99	175.31	0.80	SlimPulse	1
171	13942.00	90.53	184.92	95.00	9826.36	4334.15	-4321.42	339.15	4334.71	175.51	0.26	SlimPulse	1
172	14036.00	90.64	185.23	94.00	9825.40	4427.08	-4415.05	330.83	4427.43	175.71	0.35	SlimPulse	1
173	14130.00	91.22	185.06	94.00	9823.87	4519.98	-4508.66	322.40	4520.17	175.91	0.64	SlimPulse	1
174	14172.00	90											