

HOBBSOCD

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

JAN 22 2015

RECEIVED

Well Reference:

N-12-19S-34E 330 FSL 1980 FWL
32° 40' 6.673" N 103° 30' 57.432" W

30-025-41858

I, Ricardo Gonzalez certify that; I am employed by PathFinder, a division of Schlumberger Technology Corporation; that I did on the day(s) of August 18, 2014 through August 27, 2014, conduct or supervise the taking of the SlimPulse surveys from a depth of 10220.00 feet to a depth of 15216.00 feet referenced to driller's depth; that the data is true, correct, complete and within the limitations of the tool as set forth by Drilling & Measurements, 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 Teal 12 State Com #002H Well (Original Hole) API No. 30-025-41858 and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by Drilling & Measurements, a division of Schlumberger Technology Corporation.

By
Ricardo Gonzalez
Field Engineer

Subscribed and Sworn to before me this 29th day of August (month) 2014 (yr)

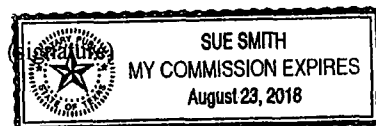
My Commission expires:

August 23, 2018

Sue Smith

Notary Public

MIDLAND TEXAS
(County State)



FEB 24 2015

Oilfield Services, Central U S Land

HOBBSOCD



Reservoir Development

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

JAN 22 2015

RECEIVED

August 28, 2014

Cimarex Energy Co.
600 N Marienfeld St.

Midland, TX 79701

Re:

CLIENT: Cimarex Energy Co.
WELL: Teal 12 State Com #002H
FIELD: Scharb; Bone Spring
RIG: NorAm 26
COUNTY: Lea
API NO: 30-025-41858
JOB NO: 14MLD0365

N-12-19S-34E 330 FSL 1980 FWL
32° 40' 6.673" N 103° 30' 57.432" W

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>
Ricardo Gonzalez Field Engineer	Teal 12 State Com #002H Original Hole	10220.00 Ft to 15216.00 Ft	August 18, 2014 to August 27, 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

SCHLUMBERGER

Survey Report

28-Aug-2014

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

Well.....: Teal 12 State Com #002H
API number.....: 30-025-41858
Engineer.....: Ricardo Gonzalez

Spud date.....: 6-Aug-14
Last survey date.....: 27-Aug-14
Total accepted surveys...: 71
MD of first survey.....: 10220.00 ft
MD of last survey.....: 15216.00 ft

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

Latitude.....: 32° 40' 6.673" N
Longitude....: 103° 30' 57.432" 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.....: 3955.00 ft
KB above permanent.....: 3980.00 ft
DF above permanent.....: 3980.00 ft

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

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

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

NAD27 Texas State Plane, Central Zone, US Feet
X.....: 792,863.50 ft
Y.....: 607,907.20 ft

Azimuth from Vsect Origin to target: 359.50 degrees

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

-----Run3----- Calculation Date: 18-Aug-2014
Location G....: 998.86 mgn Tolerance G...: 2.5 mgn
Location B....: 48532.23 nT Tolerance B...: 300 nT
Magnetic Dip: 60.52 degrees Tolerance Dip: 0.45 degrees

-----Run4----- Calculation Date: 19-Aug-2014
Location G....: 998.86 mgn Tolerance G...: 2.5 mgn
Location B....: 48531.89 nT Tolerance B...: 300 nT
Magnetic Dip: 60.52 degrees Tolerance Dip: 0.45 degrees

-----Run5----- Calculation Date: 23-Aug-2014
Location G....: 998.86 mgn Tolerance G...: 2.5 mgn
Location B....: 48530.53 nT Tolerance B...: 300 nT
Magnetic Dip: 60.52 degrees Tolerance Dip: 0.45 degrees

-----Run6----- Calculation Date: 24-Aug-2014
Location G....: 998.86 mgn Tolerance G...: 2.5 mgn
Location B....: 48530.19 nT Tolerance B...: 300 nT
Magnetic Dip: 60.52 degrees Tolerance Dip: 0.45 degrees

BGGM Model: 2014

-----Run3-----
Magnetic dec (+E/W-).....: 7.3636 degrees
Grid Conv (+E/W-).....: 0.4412 degrees
Total Azim Corr (+E/W-)..: 6.9224 degrees

-----Run4-----
Magnetic dec (+E/W-).....: 7.3633 degrees
Grid Conv (+E/W-).....: 0.4412 degrees
Total Azim Corr (+E/W-)..: 6.9221 degrees

-----Run5-----

Magnetic dec (+E/W-).....: 7.3622 degrees
 Grid Conv (+E/W-).....: 0.4412 degrees
 Total Azim Corr (+E/W-)...: 6.921 degrees

-----Run6-----

Magnetic dec (+E/W-).....: 7.362 degrees
 Grid Conv (+E/W-).....: 0.4412 degrees
 Total Azim Corr (+E/W-)...: 6.9207 degrees

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

0 = Uncorrected 2 = Sag Corrected
 1 = 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	0.00	90.00	0.00	TIP	0
2	58.00	0.88	12.29	58.00	58.00	0.43	0.44	0.09	0.45	12.29	1.52	Other	0
3	79.00	1.01	102.99	21.00	79.00	0.55	0.55	0.31	0.63	29.32	6.42	Other	0
4	110.00	1.10	172.25	31.00	109.99	0.19	0.19	0.62	0.65	72.44	3.88	Other	0
5	140.00	1.19	163.59	30.00	139.99	-0.40	-0.39	0.74	0.84	117.66	0.65	Other	0
6	170.00	1.10	351.68	30.00	169.98	-0.41	-0.40	0.79	0.89	117.07	7.61	Other	0
7	235.00	1.32	339.68	65.00	234.97	0.91	0.92	0.44	1.02	25.59	0.51	Other	0
8	295.00	1.32	338.76	60.00	294.95	2.21	2.21	-0.05	2.21	358.66	0.04	Other	0
9	355.00	1.19	342.18	60.00	354.94	3.45	3.45	-0.49	3.48	351.86	0.25	Other	0
10	415.00	1.41	342.76	60.00	414.92	4.75	4.74	-0.90	4.83	349.23	0.37	Other	0
11	474.00	1.19	339.99	59.00	473.91	6.02	6.01	-1.33	6.16	347.56	0.39	Other	0
12	535.00	1.10	349.66	61.00	534.90	7.20	7.18	-1.65	7.37	347.07	0.35	Other	0
13	626.00	1.01	349.96	91.00	625.88	8.85	8.83	-1.95	9.04	347.58	0.10	Other	0
14	719.00	0.88	348.38	93.00	718.87	10.36	10.34	-2.23	10.58	347.82	0.14	Other	0
15	809.00	0.62	341.17	90.00	808.86	11.50	11.48	-2.53	11.75	347.58	0.31	Other	0
16	899.00	0.70	322.85	90.00	898.85	12.40	12.38	-3.02	12.74	346.30	0.25	Other	0
17	989.00	0.70	344.78	90.00	988.85	13.38	13.35	-3.49	13.80	345.33	0.30	Other	0
18	1084.00	0.62	346.05	95.00	1083.84	14.44	14.40	-3.77	14.89	345.33	0.09	Other	0
19	1179.00	0.48	342.27	95.00	1178.84	15.32	15.28	-4.02	15.80	345.28	0.15	Other	0
20	1274.00	0.40	334.76	95.00	1273.83	16.00	15.96	-4.28	16.52	345.00	0.10	Other	0
21	1368.00	0.22	12.07	94.00	1367.83	16.47	16.43	-4.38	17.01	345.08	0.28	Other	0
22	1461.00	0.09	329.26	93.00	1460.83	16.71	16.67	-4.38	17.24	345.28	0.18	Other	0
23	1555.00	0.09	303.38	94.00	1554.83	16.81	16.78	-4.48	17.36	345.05	0.04	Other	0
24	1641.00	0.31	246.47	86.00	1640.83	16.76	16.72	-4.75	17.38	344.14	0.32	Other	0
25	1726.00	0.09	5.97	85.00	1725.83	16.74	16.69	-4.95	17.41	343.48	0.43	Other	0
26	1838.00	0.09	214.26	112.00	1837.83	16.75	16.71	-4.99	17.44	343.36	0.16	Other	0
27	1933.00	0.09	6.93	95.00	1932.83	16.77	16.72	-5.03	17.46	343.27	0.18	Other	0
28	2028.00	0.31	184.07	95.00	2027.83	16.58	16.54	-5.04	17.29	343.07	0.42	Other	0
29	2122.00	0.09	171.85	94.00	2121.83	16.26	16.21	-5.04	16.98	342.72	0.24	Other	0
30	2216.00	0.22	177.87	94.00	2215.83	16.00	15.96	-5.03	16.73	342.52	0.14	Other	0
31	2310.00	0.31	150.45	94.00	2309.83	15.60	15.56	-4.89	16.31	342.54	0.16	Other	0
32	2404.00	0.31	162.76	94.00	2403.83	15.13	15.09	-4.69	15.81	342.73	0.07	Other	0
33	2498.00	0.40	177.17	94.00	2497.83	14.56	14.52	-4.60	15.23	342.42	0.13	Other	0
34	2590.00	0.09	196.55	92.00	2589.83	14.17	14.13	-4.61	14.86	341.95	0.34	Other	0
35	2686.00	0.48	182.75	96.00	2685.82	13.70	13.66	-4.65	14.43	341.21	0.41	Other	0
36	2779.00	0.40	166.36	93.00	2778.82	12.99	12.95	-4.59	13.74	340.49	0.16	Other	0
37	2874.00	0.22	142.45	95.00	2873.82	12.53	12.49	-4.40	13.24	340.59	0.23	Other	0
38	2976.00	0.31	100.65	102.00	2975.82	12.32	12.28	-4.01	12.92	341.92	0.20	Other	0
39	3061.00	0.40	97.45	85.00	3060.82	12.23	12.20	-3.49	12.69	344.04	0.11	Other	0
40	3155.00	0.48	102.77	94.00	3154.81	12.09	12.07	-2.78	12.39	347.03	0.10	Other	0
41	3249.00	0.70	93.19	94.00	3248.81	11.97	11.95	-1.82	12.09	351.33	0.26	Other	0
42	3349.00	0.79	82.69	100.00	3348.80	12.01	12.01	-0.53	12.02	357.48	0.16	Other	0
43	3443.00	0.79	82.47	94.00	3442.79	12.17	12.17	0.76	12.20	3.56	0.00	Other	0
44	3537.00	0.79	78.69	94.00	3536.78	12.37	12.39	2.03	12.55	9.33	0.06	Other	0
45	3663.00	0.70	80.05	126.00	3662.77	12.66	12.69	3.64	13.20	16.02	0.07	Other	0
46	4029.00	0.40	72.36	366.00	4028.75	13.40	13.46	7.06	15.20	27.69	0.08	Other	0
47	4124.00	0.40	82.47	95.00	4123.75	13.54	13.61	7.71	15.64	29.53	0.07	Other	0
48	4218.00	0.31	84.36	94.00	4217.75	13.60	13.67	8.29	15.99	31.22	0.10	Other	0
49	4313.00	0.31	55.97	95.00	4312.75	13.77	13.84	8.76	16.38	32.31	0.16	Other	0
50	4407.00	0.40	56.06	94.00	4406.75	14.09	14.17	9.24	16.91	33.11	0.10	Other	0
51	4501.00	0.22	29.38	94.00	4500.75	14.42	14.51	9.60	17.40	33.49	0.24	Other	0
52	4594.00	0.22	123.86	93.00	4593.75	14.48	14.56	9.84	17.57	34.03	0.35	Other	0
53	4691.00	0.70	139.95	97.00	4690.74	13.92	14.01	10.37	17.43	36.52	0.51	Other	0
54	4786.00	0.22	75.88	95.00	4785.74	13.51	13.61	10.92	17.45	38.75	0.67	Other	0
55	4880.00	0.22	74.47	94.00	4879.74	13.60	13.70	11.27	17.74	39.44	0.01	Other	0

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
56	4975.00	0.22	59.97	95.00	4974.74	13.74	13.84	11.60	18.06	39.98	0.06	Other	0
57	5068.00	0.31	65.55	93.00	5067.74	13.93	14.03	11.99	18.46	40.50	0.10	Other	0
58	5162.00	0.31	102.07	94.00	5161.74	13.98	14.09	12.47	18.81	41.51	0.21	Other	0
59	5256.00	0.22	90.38	94.00	5255.73	13.92	14.03	12.90	19.06	42.59	0.11	Other	0
60	5351.00	0.22	42.96	95.00	5350.73	14.05	14.16	13.20	19.36	42.99	0.19	Other	0
61	5447.00	0.22	60.45	96.00	5446.73	14.27	14.39	13.49	19.72	43.15	0.07	Other	0
62	5541.00	0.40	54.26	94.00	5540.73	14.55	14.67	13.91	20.22	43.48	0.19	Other	0
63	5636.00	0.40	38.48	95.00	5635.73	15.00	15.12	14.39	20.87	43.57	0.12	Other	0
64	5730.00	0.40	68.27	94.00	5729.73	15.37	15.50	14.90	21.50	43.86	0.22	Other	0
65	5824.00	0.48	65.99	94.00	5823.72	15.65	15.78	15.56	22.16	44.59	0.09	Other	0
66	5918.00	0.88	61.37	94.00	5917.72	16.14	16.29	16.55	23.23	45.46	0.43	Other	0
67	6012.00	1.10	79.48	94.00	6011.70	16.64	16.80	18.08	24.68	47.09	0.40	Other	0
68	6107.00	1.41	80.75	95.00	6106.68	16.98	17.15	20.13	26.44	49.56	0.33	Other	0
69	6200.00	1.32	74.38	93.00	6199.66	17.43	17.63	22.29	28.41	51.66	0.19	Other	0
70	6295.00	1.32	77.46	95.00	6294.63	17.95	18.16	24.41	30.42	53.35	0.07	Other	0
71	6391.00	1.41	79.08	96.00	6390.60	18.39	18.62	26.65	32.51	55.05	0.10	Other	0
72	6486.00	1.71	87.57	95.00	6485.57	18.65	18.90	29.21	34.80	57.09	0.40	Other	0
73	6580.00	1.71	94.07	94.00	6579.53	18.58	18.86	32.01	37.16	59.49	0.21	Other	0
74	6673.00	1.10	112.35	93.00	6672.50	18.13	18.43	34.22	38.87	61.70	0.81	Other	0
75	6768.00	1.80	181.17	95.00	6767.47	16.28	16.59	35.03	38.76	64.66	1.83	Other	0
76	6862.00	2.02	182.88	94.00	6861.42	13.15	13.46	34.92	37.42	68.93	0.24	Other	0
77	6958.00	1.89	185.26	96.00	6957.36	9.89	10.19	34.69	36.16	73.63	0.16	Other	0
78	7053.00	2.02	188.38	95.00	7052.31	6.68	6.97	34.30	35.01	78.51	0.18	Other	0
79	7147.00	1.89	183.76	94.00	7146.25	3.49	3.79	33.96	34.17	83.63	0.22	Other	0
80	7241.00	1.80	180.38	94.00	7240.21	0.47	0.77	33.85	33.86	88.70	0.15	Other	0
81	7337.00	1.80	175.06	96.00	7336.16	-2.54	-2.24	33.97	34.04	93.78	0.17	Other	0
82	7431.00	1.58	179.19	94.00	7430.12	-5.31	-5.01	34.11	34.48	98.36	0.27	Other	0
83	7525.00	1.80	188.16	94.00	7524.08	-8.06	-7.77	33.92	34.80	102.90	0.37	Other	0
84	7619.00	1.58	192.46	94.00	7618.04	-10.79	-10.49	33.43	35.04	107.43	0.27	Other	0
85	7714.00	1.49	189.39	95.00	7713.00	-13.28	-12.99	32.95	35.42	111.52	0.13	Other	0
86	7807.00	1.58	199.45	93.00	7805.97	-15.68	-15.39	32.33	35.80	115.46	0.31	Other	0
87	7902.00	1.32	198.88	95.00	7900.94	-17.94	-17.66	31.54	36.15	119.25	0.27	Other	0
88	7997.00	1.01	205.16	95.00	7995.92	-19.73	-19.46	30.83	36.45	122.26	0.35	Other	0
89	8091.00	1.01	200.86	94.00	8089.90	-21.24	-20.98	30.18	36.75	124.81	0.08	Other	0
90	8185.00	0.88	202.57	94.00	8183.89	-22.68	-22.42	29.61	37.14	127.14	0.14	Other	0
91	8281.00	0.79	180.69	96.00	8279.88	-24.02	-23.76	29.32	37.74	129.03	0.34	Other	0
92	8377.00	0.88	184.68	96.00	8375.87	-25.42	-25.16	29.25	38.58	130.71	0.11	Other	0
93	8469.00	0.88	180.95	92.00	8467.86	-26.83	-26.57	29.18	39.46	132.32	0.06	Other	0
94	8564.00	0.62	194.26	95.00	8562.85	-28.05	-27.80	29.04	40.20	133.75	0.33	Other	0
95	8660.00	0.79	196.68	96.00	8658.84	-29.19	-28.94	28.72	40.77	135.21	0.18	Other	0
96	8753.00	1.89	168.95	93.00	8751.82	-31.31	-31.06	28.83	42.38	137.13	1.34	Other	0
97	8847.00	1.80	179.46	94.00	8845.77	-34.31	-34.05	29.14	44.82	139.44	0.37	Other	0
98	8941.00	1.58	254.16	94.00	8939.74	-36.13	-35.88	27.91	45.46	142.13	2.19	Other	0
99	9036.00	1.49	320.26	95.00	9034.71	-35.52	-35.29	25.86	43.75	143.77	1.76	Other	0
100	9130.00	1.41	326.45	94.00	9128.68	-33.60	-33.39	24.44	41.38	143.80	0.19	Other	0
101	9318.00	0.79	346.05	188.00	9316.65	-30.40	-30.20	22.85	37.87	142.89	0.38	Other	0
102	9412.00	0.48	335.46	94.00	9410.64	-29.41	-29.22	22.53	36.89	142.36	0.35	Other	0
103	9600.00	0.40	343.85	188.00	9598.64	-28.06	-27.87	22.02	35.52	141.69	0.05	Other	0
104	9696.00	0.40	7.59	96.00	9694.63	-27.41	-27.21	21.97	34.98	141.09	0.17	Other	0
105	9790.00	0.62	358.18	94.00	9788.63	-26.57	-26.38	22.00	34.35	140.18	0.25	Other	0
106	9883.00	0.40	44.85	93.00	9881.63	-25.84	-25.65	22.21	33.93	139.11	0.49	Other	0
107	9979.00	0.70	56.98	96.00	9977.62	-25.29	-25.09	22.94	34.00	137.57	0.33	Other	0
108	10072.00	0.62	77.28	93.00	10070.62	-24.88	-24.67	23.91	34.35	135.90	0.26	Other	0
109	10168.00	0.70	110.15	96.00	10166.61	-24.97	-24.76	24.96	35.16	134.76	0.40	Other	0
110	10220.00	0.69	76.93	52.00	10218.61	-25.02	-24.80	25.57	35.62	134.12	0.76	SlimPulse	0
111	10315.00	1.70	16.99	95.00	10313.59	-23.55	-23.32	26.54	35.33	131.31	1.56	SlimPulse	0
112	10346.00	1.62	19.34	31.00	10344.57	-22.70	-22.47	26.81	34.98	129.96	0.35	SlimPulse	0
113	10378.00	3.85	3.46	32.00	10376.54	-21.21	-20.97	27.03	34.21	127.81	7.30	SlimPulse	0
114	10409.00	8.82	358.30	31.00	10407.34	-17.79	-17.55	27.02	32.22	123.01	16.12	SlimPulse	0
115	10441.00	15.22	357.55	32.00	10438.62	-11.13	-10.90	26.77	28.90	112.15	20.02	SlimPulse	0
116	10472.00	19.72	357.89	31.00	10468.18	-1.83	-1.60	26.40	26.45	93.47	14.51	SlimPulse	0
117	10504.00	21.03	357.79	32.00	10498.18	9.30	9.53	25.98	27.67	69.85	4.09	SlimPulse	0
118	10536.00	22.55	357.64	32.00	10527.89	21.18	21.40	25.51	33.29	50.00	4.75	SlimPulse	0
119	10568.00	25.44	358.12	32.00	10557.12	34.18	34.40	25.03	42.54	36.04	9.06	SlimPulse	0
120	10599.00	29.27	359.22	31.00	10584.65	48.42	48.64	24.70	54.55	26.93	12.45	SlimPulse	0
121	10630.00	34.36	359.00	31.00	10610.99	64.76	64.97	24.45	69.42	20.62	16.44	SlimPulse	0
122	10662.00	39.72	358.95	32.00	10636.52	84.03	84.24	24.10	87.62	15.97	16.74	SlimPulse	0
123	10693.00	42.88	359.19	31.00	10659.81	104.48	104.69	23.77	107.36	12.79	10.19	SlimPulse	0
124	10725.00	45.83	0.07	32.00	10682.69	126.85	127.06	23.63	129.24	10.54	9.42	SlimPulse	0
125	10756.00	48.80	359.47	31.00	10703.70	149.63	149.84	23.54	151.68	8.93	9.71	SlimPulse	0
126	10788.00	51.81	359.07	32.00	10724.14	174.25	174.46	23.22	176.00	7.58	9.45	SlimPulse	0
127	10819.00	52.94	359.19	31.00	10743.06	198.81	199.01	22.84	200.32	6.55	3.65	SlimPulse	0

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
128	10851.00	54.96	357.95	32.00	10761.89	224.67	224.87	22.19	225.97	5.64	7.04	SlimPulse	0
129	10882.00	58.05	357.70	31.00	10779.00	250.51	250.70	21.21	251.60	4.84	9.99	SlimPulse	0
130	10914.00	62.60	357.11	32.00	10794.84	278.29	278.47	19.95	279.19	4.10	14.32	SlimPulse	0
131	10945.00	66.52	356.82	31.00	10808.15	306.25	306.42	18.47	306.98	3.45	12.65	SlimPulse	0
132	10977.00	69.39	357.55	32.00	10820.16	335.88	336.04	17.01	336.47	2.90	9.23	SlimPulse	0
133	11040.00	78.00	359.17	63.00	10837.83	396.28	396.42	15.30	396.72	2.21	13.88	SlimPulse	0
134	11071.00	83.73	0.65	31.00	10842.75	426.87	427.02	15.26	427.29	2.05	19.07	SlimPulse	0
135	11102.00	88.59	1.00	31.00	10844.83	457.78	457.94	15.70	458.20	1.96	15.72	SlimPulse	0
136	11165.00	89.79	1.89	63.00	10845.72	520.74	520.91	17.29	521.19	1.90	2.37	SlimPulse	0
137	11191.00	89.66	2.05	26.00	10845.84	546.71	546.89	18.18	547.19	1.90	0.81	SlimPulse	0
138	11285.00	89.28	3.56	94.00	10846.72	640.55	640.77	22.78	641.18	2.04	1.66	SlimPulse	0
139	11380.00	87.97	6.88	95.00	10849.00	735.03	735.34	31.42	736.01	2.45	3.76	SlimPulse	0
140	11474.00	87.42	9.49	94.00	10852.78	827.87	828.29	44.79	829.50	3.10	2.84	SlimPulse	0
141	11569.00	88.18	11.06	95.00	10856.43	921.12	921.70	61.72	923.76	3.83	1.83	SlimPulse	0
142	11663.00	89.59	15.14	94.00	10858.26	1012.45	1013.21	83.02	1016.61	4.68	4.59	SlimPulse	0
143	11757.00	92.45	17.59	94.00	10856.59	1102.38	1103.37	109.49	1108.79	5.67	4.01	SlimPulse	1
144	11851.00	91.76	13.08	94.00	10853.13	1192.73	1193.94	134.33	1201.48	6.42	4.85	SlimPulse	1
145	11946.00	91.14	8.04	95.00	10850.73	1285.90	1287.27	151.73	1296.18	6.72	5.34	SlimPulse	1
146	12040.00	90.69	5.14	94.00	10849.23	1379.16	1380.63	162.51	1390.16	6.71	3.12	SlimPulse	1
147	12135.00	90.76	4.75	95.00	10848.03	1473.72	1475.27	170.70	1485.11	6.60	0.42	SlimPulse	1
148	12229.00	91.21	4.50	94.00	10846.41	1567.33	1568.95	178.28	1579.05	6.48	0.55	SlimPulse	1
149	12324.00	91.31	1.99	95.00	10844.32	1662.10	1663.77	183.65	1673.87	6.30	2.64	SlimPulse	1
150	12418.00	90.59	358.33	94.00	10842.76	1756.06	1757.74	183.92	1767.33	5.97	3.97	SlimPulse	1
151	12513.00	92.00	355.64	95.00	10840.61	1850.94	1852.57	178.92	1861.19	5.52	3.20	SlimPulse	1
152	12607.00	93.79	356.11	94.00	10835.87	1944.63	1946.20	172.17	1953.80	5.06	1.97	SlimPulse	1
153	12702.00	93.34	356.23	95.00	10829.96	2039.28	2040.81	165.84	2047.53	4.65	0.49	SlimPulse	1
154	12796.00	92.04	356.11	94.00	10825.55	2133.02	2134.49	159.56	2140.45	4.28	1.39	SlimPulse	1
155	12891.00	90.55	355.34	95.00	10823.40	2227.78	2229.20	152.48	2234.41	3.91	1.77	SlimPulse	1
156	12986.00	91.11	354.79	95.00	10822.02	2322.49	2323.84	144.31	2328.31	3.55	0.83	SlimPulse	1
157	13081.00	92.03	354.68	95.00	10819.42	2417.12	2418.40	135.60	2422.20	3.21	0.98	SlimPulse	1
158	13175.00	91.86	355.66	94.00	10816.23	2510.80	2512.01	127.69	2515.25	2.91	1.06	SlimPulse	1
159	13270.00	92.03	356.20	95.00	10813.01	2605.56	2606.72	120.95	2609.52	2.66	0.60	SlimPulse	1
160	13364.00	92.13	356.62	94.00	10809.60	2699.36	2700.47	115.07	2702.92	2.44	0.46	SlimPulse	1
161	13459.00	91.89	356.69	95.00	10806.26	2794.19	2795.25	109.53	2797.39	2.24	0.26	SlimPulse	1
162	13553.00	91.86	356.03	94.00	10803.19	2887.99	2889.01	103.56	2890.86	2.05	0.70	SlimPulse	1
163	13648.00	92.47	355.94	95.00	10799.60	2982.75	2983.71	96.92	2985.28	1.86	0.65	SlimPulse	1
164	13742.00	92.10	355.79	94.00	10795.85	3076.48	3077.39	90.14	3078.71	1.68	0.42	SlimPulse	1
165	13836.00	92.13	354.91	94.00	10792.38	3170.17	3171.01	82.53	3172.09	1.49	0.94	SlimPulse	1
166	13931.00	91.82	353.75	95.00	10789.11	3264.73	3265.49	73.15	3266.31	1.28	1.26	SlimPulse	1
167	14025.00	92.17	351.83	94.00	10785.84	3358.02	3358.69	61.36	3359.25	1.05	2.07	SlimPulse	1
168	14120.00	92.14	351.75	95.00	10782.26	3452.10	3452.65	47.80	3452.98	0.79	0.09	SlimPulse	1
169	14214.00	91.93	351.21	94.00	10778.92	3545.12	3545.55	33.88	3545.71	0.55	0.62	SlimPulse	1
170	14309.00	91.86	350.88	95.00	10775.78	3639.03	3639.34	19.11	3639.39	0.30	0.35	SlimPulse	1
171	14403.00	91.48	351.58	94.00	10773.04	3732.02	3732.20	4.78	3732.20	0.07	0.85	SlimPulse	1
172	14498.00	91.38	352.55	95.00	10770.67	3826.19	3826.26	-8.33	3826.27	359.88	1.03	SlimPulse	1
173	14592.00	91.55	353.53	94.00	10768.27	3919.56	3919.54	-19.72	3919.59	359.71	1.06	SlimPulse	1
174	14686.00	91.44	354.87	94.00	10765.82	4013.12	4013.02	-29.21	4013.13	359.58	1.43	SlimPulse	1
175	14781.00	91.44	356.59	95.00	10763.43	4107.88	4107.72	-36.28	4107.88	359.49	1.81	SlimPulse	1
176	14875.00	91.48	358.23	94.00	10761.03	4201.79	4201.59	-40.53	4201.79	359.45	1.74	SlimPulse	1
177	14970.00	91.55	359.45	95.00	10758.52	4296.75	4296.54	-42.45	4296.75	359.43	1.29	SlimPulse	1
178	15064.00	91.41	357.94	94.00	10756.09	4390.70	4390.48	-44.59	4390.71	359.42	1.61	SlimPulse	1
179	15159.00	91.51	358.50	95.00	10753.67	4485.65	4485.40	-47.54	4485.66	359.39	0.60	SlimPulse	1
180	15216.00	91.44	358.34	57.00	10752.21	4542.62	4542.36	-49.11	4542.63	359.38	0.31	SlimPulse	1
181	15292.00	91.44	358.34	76.00	10750.30	4618.58	4618.31	-51.31	4618.59	359.36	0.00	PROJ	0