

Results of Directional Survey

API number:	30-025-41062		
OGRID:		Operator:	CIMAREX ENERGY CO. OF COLORADO
		Property:	HALLERTAU 4 FEDERAL # 5H

surface	ULSTR:	D	04	T 26S	R 32E
				330 FNL	605 FWL

BH Loc	ULSTR:	M	04	T 26S	R 32E
13804	MD	9399.9	TVD	282 FSL	858 FWL
				4998 FNL	

Top Perf/OH	ULSTR:	D	04	T 26S	R 32E
9710	MD	9395.1	TVD	906 FNL	812 FWL

Bot Perf/OH	ULSTR:	M	04	T 26S	R 32E
13775	MD	9400.1	TVD	311 FSL	858 FWL
				4969 FNL	

	MD	N/S	E/W	VD
	9630.00	-497.68	198.98	9383.39
TOP PERFS/OH	9710.00	-576.31	207.08	9395.09
	9726.00	-592.04	208.70	9397.43
	13759.00	-4623.25	252.55	9400.25
BOT PERFS/OH	13775.00	-4639.25	252.56	9400.13
	13804.00	-4668.24	252.57	9399.92

NEXT TO LAST	13759.00	-4623.25	252.55	9400.25
LAST READING	13804.00	-4668.24	252.57	9399.92
TD	13804.00	-4668.24	252.57	9399.92

Surface Location	330	FN	605	FW
Projected BHL	4998	FN	858	FW
Location of				
Top Perfs/OH	906	FN	812	FW
Bottom Perfs/OH	4969	FN	858	FW

SUMMARY of Subsurface Locations

Surface Location	D-04-26S-32E	330	FN	605	FW	Vert. Depth
Top Perfs/OH	D-04-26S-32E	906	FN	812	FW	9395.09
Bottom Perfs/OH	M-04-26S-32E	4969	FN	858	FW	9400.13
Projected TD	M-04-26S-32E	4998	FN	858	FW	9399.92

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

PATHFINDER
A Schlumberger Company

HOBBSOCD

JAN 22 2015

August 26, 2014

RECEIVED

Cimarex
600 N MARIENFELD STREET SUITE 600
MIDLAND, TX 79701

Re:

Sec 4, T26S, R32E Lea NM
N 32.07872 W 103.68638

CLIENT: Cimarex Energy Co.
WELL: Hallertau 4 Federal 5H
FIELD: Wildcat Bone Spring
RIG: Cactus104
COUNTY: Lea
API NO: 30-025-41062
JOB NO: 14MLD0371

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>
John Gilchrist MWD	Hallertau 4 Federal 5H Original Hole	8744.00 Ft to 13759.00 Ft	May 27, 2014 to June 6, 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

dm

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

PATHFINDER
A Schlumberger Company

Well Reference:
Sec 4, T26S, R32E Lea NM
N 32.07872 W 103.68638

I, John Gilchrist certify that; I am employed by PathFinder, a division of Schlumberger Technology Corporation; that I did on the day(s) of May 27, 2014 through June 06, 2014, conduct or supervise the taking of the SlimPulse surveys from a depth of 8744.00 feet to a depth of 13759.00 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 Hallertau 4 Federal 5H Well (Original Hole) API No. 30-025-41062 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
John Gilchrist
MWD

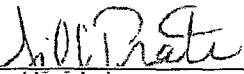


Subscribed and Sworn to before me this 26 day of August (month) 2014 (yr)

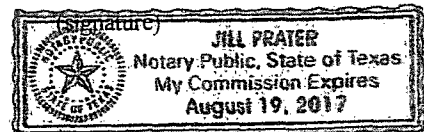
My Commission expires:

8/19/2017

Notary Public



Williamson County, Texas
(County State)



SCHLUMBERGER
Survey Report

26-Aug-2014

Client.....: Cimarex Energy Co
Field.....: Wildcat Bone Spring

Well.....: Hallertau 4 Federal 5H
API number.....: 30-025-41062
Engineer.....: John Gilchrist

Spud date.....: 21-May-14
Last survey date.....: 6-Jun-14
Total accepted surveys...: 67
MD of first survey.....: 8744.00 ft
MD of last survey.....: 13759.00 ft

County.....: Lea
State.....: New Mexico
Rig.....: Cactus 104

Latitude.....: 32° 4' 43.344" N
Longitude.....: 103° 41' 12.192" 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.....: 3310.00
KB above permanent.....: 3330.00
DF above permanent.....: 3330.00

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

----- Grid Coordinates -----
NAD27 Texas State Plane, Central Zone, US Feet
X.....: 392970.90 ft
Y.....: 741610.40 ft

Azimuth from Vsect Origin to target: 176.87 degrees

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

-----Run1----- Calculation Date: 31-May-2014
Location G.....: 998.94325 mgn Tolerance G.....: 2.50 mgn
Location B.....: 48195.96 nT Tolerance B.....: 300.00 nT
Magnetic Dip: 59.9412 degrees Tolerance Dip: 0.45 degrees

BGGM Model: 2013

-----Run1-----
Magnetic dec (+E/-).....: 7.3784 degrees
Grid Conv (+E/-).....: 0.3484 degrees
Total Azim Corr (+E/-).....: 7.03 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	174.00	1.01	226.26	174.00	173.99	1.00	-1.06	-1.11	1.53	226.26	0.58	SingleShot	0
3	206.00	1.10	213.26	32.00	205.99	1.43	-1.51	-1.48	2.12	224.39	0.80	SingleShot	0
4	267.00	0.88	216.16	61.00	266.98	2.26	-2.38	-2.08	3.16	221.12	0.37	SingleShot	0
5	326.00	0.88	223.14	59.00	325.97	2.93	-3.08	-2.65	4.06	220.79	0.18	SingleShot	0
6	387.00	0.79	234.04	61.00	386.96	3.48	-3.67	-3.32	4.94	222.13	0.30	SingleShot	0
7	445.00	0.79	222.97	58.00	444.96	3.97	-4.19	-3.91	5.73	223.02	0.26	SingleShot	0
8	505.00	0.79	212.47	60.00	504.95	4.60	-4.84	-4.42	6.55	222.35	0.24	SingleShot	0
9	561.00	0.40	182.45	56.00	560.95	5.10	-5.37	-4.63	7.09	220.80	0.87	SingleShot	0
10	625.00	0.40	122.55	64.00	624.95	5.46	-5.71	-4.45	7.24	217.95	0.62	SingleShot	0
11	713.00	0.31	65.34	88.00	712.95	5.55	-5.77	-3.98	7.01	214.56	0.40	SingleShot	0
12	772.00	0.40	15.06	59.00	771.95	5.29	-5.51	-3.78	6.68	214.45	0.53	SingleShot	0
13	864.00	1.01	13.44	92.00	863.94	4.21	-4.41	-3.51	5.63	218.49	0.66	SingleShot	0
14	957.00	1.58	36.24	93.00	956.91	2.44	-2.58	-2.56	3.63	224.77	0.81	SingleShot	0
15	1048.00	2.02	36.24	91.00	1047.87	0.23	-0.27	-0.87	0.91	252.52	0.48	SingleShot	0
16	1237.00	2.11	21.26	189.00	1236.75	-5.52	5.66	2.36	6.13	22.67	0.29	SingleShot	0
17	1324.00	2.02	38.75	87.00	1323.69	-8.12	8.34	3.90	9.21	25.07	0.73	SingleShot	0
18	1385.00	2.11	39.63	61.00	1384.65	-9.74	10.05	5.29	11.36	27.78	0.16	SingleShot	0
19	1481.00	1.41	53.87	96.00	1480.61	-11.68	12.10	7.37	14.17	31.35	0.85	SingleShot	0
20	1576.00	1.49	54.83	95.00	1575.58	-12.98	13.51	9.33	16.41	34.63	0.09	SingleShot	0
21	1672.00	1.58	58.04	96.00	1671.54	-14.28	14.93	11.47	18.82	37.54	0.13	SingleShot	0
22	1767.00	1.41	58.47	95.00	1766.51	-15.47	16.23	13.58	21.16	39.92	0.18	SingleShot	0

23	1862.00	1.58	62.35	95.00	1861.48	-16.56	17.45	15.73	23.49	42.04	0.21	SinglesShot	0
24	1957.00	1.49	60.63	95.00	1956.44	-17.65	18.66	17.97	25.91	43.92	0.11	SinglesShot	0
25	2052.00	1.41	53.84	95.00	2051.41	-18.66	19.78	20.10	28.2	45.45	0.12	SinglesShot	0
26	2147.00	1.41	62.57	95.00	2146.38	-19.60	20.84	22.18	30.43	46.79	0.03	SinglesShot	0
27	2242.00	1.41	68.48	95.00	2241.36	-20.45	21.80	24.31	32.65	48.11	0.15	SinglesShot	0
28	2337.00	1.49	70.83	95.00	2336.33	-21.16	22.64	26.56	34.9	49.56	0.10	SinglesShot	0
29	2432.00	1.19	72.63	95.00	2431.30	-21.74	23.34	28.67	36.97	50.85	0.32	SinglesShot	0
30	2526.00	1.19	79.97	94.00	2525.28	-22.10	23.80	30.56	38.74	52.09	0.16	SinglesShot	0
31	2621.00	1.01	75.36	95.00	2620.26	-22.38	24.18	32.34	40.38	53.21	0.21	SinglesShot	0
32	2717.00	1.10	79.36	96.00	2716.24	-22.67	24.57	34.07	42	54.20	0.12	SinglesShot	0
33	2812.00	1.32	78.17	95.00	2811.22	-22.96	24.96	36.03	43.83	55.29	0.23	SinglesShot	0
34	2907.00	1.41	77.55	95.00	2906.20	-23.31	25.44	38.25	45.93	56.37	0.10	SinglesShot	0
35	3002.00	1.41	76.06	95.00	3001.17	-23.72	25.97	40.52	48.13	57.35	0.04	SinglesShot	0
36	3046.00	1.49	76.76	44.00	3045.15	-23.92	26.23	41.61	49.18	57.77	0.19	SinglesShot	0
37	3097.00	1.58	75.66	51.00	3096.14	-24.18	26.56	42.93	50.48	58.26	0.19	SinglesShot	0
38	3192.00	1.58	71.53	95.00	3191.10	-24.78	27.30	45.44	53.01	59.01	0.12	SinglesShot	0
39	3287.00	1.71	75.97	95.00	3286.06	-25.39	28.06	48.06	55.65	59.73	0.19	SinglesShot	0
40	3382.00	1.89	74.43	95.00	3381.01	-26.00	28.82	50.94	58.53	60.50	0.20	SinglesShot	0
41	3475.00	1.89	76.54	93.00	3473.96	-26.60	29.59	53.91	61.5	61.24	0.07	SinglesShot	0
42	3570.00	1.49	97.77	95.00	3568.92	-26.65	29.79	56.66	64.01	62.27	0.78	SinglesShot	0
43	3664.00	1.41	103.35	94.00	3662.89	-26.09	29.35	59.00	65.9	63.55	0.17	SinglesShot	0
44	3760.00	1.41	102.34	96.00	3758.86	-25.44	28.83	61.30	67.74	64.81	0.03	SinglesShot	0
45	3855.00	1.71	106.87	95.00	3853.83	-24.65	28.17	63.80	69.74	66.18	0.34	SinglesShot	0
46	3950.00	2.11	107.13	95.00	3948.77	-23.56	27.24	66.83	72.16	67.82	0.42	SinglesShot	0
47	4044.00	2.11	108.14	94.00	4042.71	-22.33	26.19	70.12	74.86	69.52	0.04	SinglesShot	0
48	4140.00	2.50	114.47	96.00	4138.63	-20.72	24.77	73.71	77.76	71.42	0.48	SinglesShot	0
49	4236.00	2.42	109.77	96.00	4234.55	-18.96	23.22	77.52	80.93	73.32	0.23	SinglesShot	0
50	4331.00	2.59	109.06	95.00	4329.45	-17.37	21.84	81.44	84.32	74.99	0.18	SinglesShot	0
51	4427.00	2.59	110.34	96.00	4425.36	-15.69	20.38	85.52	87.92	76.60	0.06	SinglesShot	0
52	4527.00	2.88	113.06	100.00	4525.25	-13.75	18.68	89.79	91.71	78.25	0.15	SinglesShot	0
53	4622.00	1.10	110.86	95.00	4620.20	-12.40	17.48	92.69	94.32	79.32	1.66	SinglesShot	0
54	4716.00	0.22	100.76	94.00	4714.19	-11.99	17.13	93.71	95.26	79.64	0.94	SinglesShot	0
55	4811.00	0.22	187.55	95.00	4809.19	-11.77	16.91	93.86	95.38	79.78	0.32	SinglesShot	0
56	4905.00	0.22	182.67	94.00	4903.19	-11.41	16.56	93.83	95.28	79.99	0.02	SinglesShot	0
57	5000.00	0.40	194.84	95.00	4998.19	-10.92	16.05	93.74	95.1	80.28	0.20	SinglesShot	0
58	5095.00	0.48	201.57	95.00	5093.18	-10.24	15.36	93.51	94.76	80.67	0.10	SinglesShot	0
59	5191.00	0.48	224.07	96.00	5189.18	-9.60	14.70	93.08	94.23	81.03	0.20	SinglesShot	0
60	5284.00	0.40	264.44	93.00	5282.18	-9.32	14.39	92.48	93.6	81.16	0.34	SinglesShot	0
61	5380.00	0.70	261.16	96.00	5378.17	-9.25	14.27	91.57	92.68	81.15	0.31	SinglesShot	0
62	5474.00	0.79	254.17	94.00	5472.16	-9.05	14.00	90.38	91.46	81.19	0.14	SinglesShot	0
63	5570.00	0.70	246.83	96.00	5568.16	-8.70	13.59	89.21	90.23	81.34	0.14	SinglesShot	0
64	5665.00	0.88	241.16	95.00	5663.15	-8.19	13.01	88.03	88.99	81.59	0.21	SinglesShot	0
65	5760.00	0.79	246.96	95.00	5758.14	-7.65	12.40	86.79	87.67	81.87	0.13	SinglesShot	0
66	5855.00	0.79	243.27	95.00	5853.13	-7.16	11.85	85.60	86.42	82.12	0.05	SinglesShot	0
67	5949.00	0.70	246.83	94.00	5947.12	-6.71	11.33	84.50	85.25	82.36	0.11	SinglesShot	0
68	6044.00	0.79	235.45	95.00	6042.11	-6.17	10.73	83.42	84.11	82.67	0.18	SinglesShot	0
69	6140.00	0.88	233.16	96.00	6138.10	-5.41	9.92	82.29	82.88	83.13	0.10	SinglesShot	0
70	6236.00	1.01	238.66	96.00	6234.09	-4.60	9.03	80.98	81.48	83.63	0.16	SinglesShot	0
71	6331.00	0.88	235.84	95.00	6329.08	-3.83	8.19	79.66	80.08	84.13	0.15	SinglesShot	0
72	6426.00	0.22	338.68	95.00	6424.07	-3.64	7.96	79.05	79.45	84.25	1.07	SinglesShot	0
73	6520.00	0.88	244.37	94.00	6518.07	-3.54	7.83	78.39	78.78	84.30	1.05	SinglesShot	0
74	6614.00	1.01	243.45	94.00	6612.06	-2.94	7.15	77.00	77.33	84.70	0.14	SinglesShot	0
75	6709.00	0.88	240.55	95.00	6707.04	-2.28	6.41	75.62	75.89	85.15	0.15	SinglesShot	0
76	6805.00	1.01	236.24	96.00	6803.03	-1.52	5.58	74.27	74.48	85.70	0.15	SinglesShot	0
77	6900.00	1.10	238.96	95.00	6898.01	-0.67	4.65	72.80	72.94	86.35	0.11	SinglesShot	0
78	6996.00	1.19	246.17	96.00	6994.00	0.12	3.77	71.09	71.19	86.97	0.18	SinglesShot	0
79	7091.00	1.49	240.07	95.00	7088.97	1.02	2.75	69.12	69.18	87.72	0.35	SinglesShot	0
80	7186.00	1.32	234.07	95.00	7183.94	2.17	1.49	67.17	67.18	88.73	0.24	SinglesShot	0
81	7281.00	1.19	235.28	95.00	7278.92	3.28	0.29	65.47	65.47	89.75	0.14	SinglesShot	0
82	7377.00	1.32	230.58	96.00	7374.90	4.46	-0.98	63.79	63.8	90.88	0.17	SinglesShot	0
83	7472.00	0.62	233.48	95.00	7469.88	5.39	-1.98	62.54	62.57	91.81	0.74	SinglesShot	0
84	7567.00	1.49	230.36	95.00	7564.86	6.41	-3.07	61.17	61.25	92.88	0.92	SinglesShot	0
85	7660.00	1.58	228.47	93.00	7657.83	7.92	-4.70	59.28	59.47	94.53	0.11	SinglesShot	0
86	7756.00	1.58	228.77	96.00	7753.79	9.56	-6.45	57.29	57.66	96.42	0.01	SinglesShot	0
87	7850.00	1.71	228.86	94.00	7847.76	11.22	-8.22	55.26	55.87	98.46	0.14	SinglesShot	0
88	7946.00	1.58	227.15	96.00	7943.72	12.95	-10.06	53.22	54.16	100.71	0.14	SinglesShot	0
89	8041.00	1.71	223.37	95.00	8038.68	14.76	-11.99	51.28	52.66	103.16	0.18	SinglesShot	0
90	8136.00	1.10	241.39	95.00	8133.65	16.13	-13.45	49.51	51.3	105.20	0.79	SinglesShot	0
91	8232.00	1.10	251.76	96.00	8229.63	16.77	-14.18	47.82	49.88	106.52	0.21	SinglesShot	0
92	8327.00	1.10	252.77	95.00	8324.61	17.23	-14.74	46.09	48.39	107.73	0.02	SinglesShot	0
93	8423.00	1.19	249.96	96.00	8420.59	17.74	-15.35	44.27	46.86	109.13	0.11	SinglesShot	0
94	8517.00	1.19	250.79	94.00	8514.57	18.30	-16.01	42.43	45.35	110.67	0.02	SinglesShot	0
95	8612.00	1.41	254.09	95.00	8609.55	18.83	-16.65	40.38	43.68	112.41	0.24	SinglesShot	0
96	8693.00	1.58	256.77	91.00	8690.52	19.25	-17.18	38.33	42	114.14	0.23	SinglesShot	0
97	8744.00	1.75	246.85	51.00	8741.50	19.64	-17.65	36.93	40.93	115.54	0.66	SlimPulse	0
98	8775.00	3.68	203.95	31.00	8772.47	20.69	-18.75	36.09	40.67	117.45	8.64	SlimPulse	0
99	8807.00	5.91	191.26	32.00	8804.35	23.20	-21.30	35.35	41.27	121.07	7.67	SlimPulse	0
100	8838.00	8.05	183.16	31.00	8835.12	26.90	-25.03	34.92	42.97	125.64	7.59	SlimPulse	0
101	8871.00	11.31	175.27	33.00	8867.65	32.43	-30.57	35.06	46.51	131.08	10.64	SlimPulse	0
102	8902.00	14.65	169.66	31.00	8897.85	39.36	-37.46	36.01	51.96	136.12	11.51	SlimPulse	0
103	8934.00	17.51	162.77	32.00	8928.60	48.05	-46.04	38.17	59.8	140.34	10.71	SlimPulse	0
104	8966.00	20.09	158.10	32.00	8958.89	57.92	-55.74	41.64	69.58	143.23	9.33	SlimPulse	0
105	9061.00	26.18	153.78	95.00	9046.22	92.69	-89.71	57.01	106.29	147.57	6.66	SlimPulse	0

106	9156.00	33.87	159.91	95.00	9128.43	137.36	-133.45	75.39	153.27	150.54	8.70	SlimPulse	0
107	9220.00	40.35	160.76	64.00	9179.44	174.36	-169.80	88.36	191.41	152.51	10.16	SlimPulse	0
108	9251.00	43.41	160.91	31.00	9202.52	194.25	-189.34	95.15	211.91	153.32	9.89	SlimPulse	0
109	9283.00	46.23	158.04	32.00	9225.22	215.76	-210.45	103.07	234.34	153.91	10.85	SlimPulse	0
110	9314.00	49.21	156.31	31.00	9246.07	237.35	-231.59	111.98	257.24	154.20	10.46	SlimPulse	0
111	9346.00	52.40	155.23	32.00	9266.29	260.48	-254.20	122.16	282.02	154.33	10.31	SlimPulse	0
112	9378.00	55.24	156.61	32.00	9285.18	284.60	-277.78	132.69	307.84	154.47	9.54	SlimPulse	0
113	9410.00	58.31	158.91	32.00	9302.71	309.89	-302.55	142.81	334.56	154.73	11.31	SlimPulse	0
114	9441.00	61.19	159.68	31.00	9318.33	335.42	-327.60	152.27	361.26	155.07	9.53	SlimPulse	0
115	9473.00	64.29	159.85	32.00	9332.98	362.60	-354.29	162.11	389.61	155.41	9.71	SlimPulse	0
116	9504.00	67.23	161.97	31.00	9345.71	389.78	-381.00	171.35	417.75	155.79	11.34	SlimPulse	0
117	9536.00	69.93	164.36	32.00	9357.40	418.71	-409.51	179.97	447.31	156.28	10.92	SlimPulse	0
118	9567.00	72.66	166.60	31.00	9367.34	447.49	-437.93	187.32	476.31	156.84	11.16	SlimPulse	0
119	9630.00	77.83	171.28	63.00	9383.39	507.79	-497.68	198.98	535.99	158.21	10.90	SlimPulse	0
120	9726.00	85.35	176.91	96.00	9397.43	602.54	-592.04	208.70	627.75	160.58	9.75	SlimPulse	0
121	9821.00	89.93	176.53	95.00	9401.35	697.44	-686.78	214.13	719.39	162.68	4.84	SlimPulse	0
122	9916.00	89.69	179.18	95.00	9401.66	792.41	-781.71	217.68	811.45	164.44	2.80	SlimPulse	0
123	10010.00	90.86	179.70	94.00	9401.21	886.32	-875.70	218.60	902.57	165.98	1.36	SlimPulse	0
124	10105.00	89.83	179.57	95.00	9400.64	981.20	-970.70	219.20	995.14	167.28	1.10	SlimPulse	0
125	10200.00	92.00	182.32	95.00	9399.12	1075.94	-1065.66	217.63	1087.65	168.46	3.68	SlimPulse	0
126	10295.00	91.03	179.79	95.00	9396.61	1170.64	-1160.60	215.89	1180.51	169.46	2.85	SlimPulse	0
127	10389.00	91.58	183.78	94.00	9394.47	1264.25	-1254.51	212.96	1272.46	170.37	4.28	SlimPulse	0
128	10484.00	89.86	179.81	95.00	9393.27	1358.87	-1349.43	209.99	1365.67	171.15	4.55	SlimPulse	0
129	10579.00	89.35	181.33	95.00	9393.93	1453.67	-1444.42	209.04	1459.47	171.77	1.69	SlimPulse	0
130	10674.00	89.69	178.63	95.00	9394.72	1548.52	-1539.41	209.08	1553.54	172.27	2.86	SlimPulse	0
131	10769.00	89.59	178.73	95.00	9395.32	1643.47	-1634.38	211.26	1647.98	172.63	0.15	SlimPulse	0
132	10864.00	89.24	176.40	95.00	9396.29	1738.45	-1729.28	215.29	1742.64	172.90	2.48	SlimPulse	0
133	10959.00	89.11	176.37	95.00	9397.66	1833.44	-1824.09	221.28	1837.46	173.08	0.15	SlimPulse	0
134	11055.00	89.00	177.52	96.00	9399.25	1928.42	-1919.94	226.39	1933.24	173.27	1.20	SlimPulse	0
135	11150.00	88.42	178.00	95.00	9401.38	2024.39	-2014.84	230.10	2027.93	173.48	0.79	SlimPulse	0
136	11245.00	90.34	178.77	95.00	9402.41	2119.34	-2109.79	232.78	2122.59	173.70	2.18	SlimPulse	0
137	11340.00	88.90	178.34	95.00	9403.04	2214.30	-2204.75	235.17	2217.26	173.91	1.59	SlimPulse	0
138	11434.00	90.17	180.46	94.00	9403.80	2308.20	-2298.74	236.16	2310.84	174.13	2.63	SlimPulse	0
139	11529.00	90.03	179.60	95.00	9403.63	2403.05	-2393.74	236.11	2405.35	174.37	0.91	SlimPulse	0
140	11624.00	90.03	179.91	95.00	9403.57	2497.93	-2488.74	236.51	2499.95	174.57	0.33	SlimPulse	0
141	11719.00	89.76	180.31	95.00	9403.74	2592.78	-2583.74	236.32	2594.52	174.77	0.51	SlimPulse	0
142	11814.00	89.86	179.99	95.00	9404.06	2687.62	-2678.74	236.07	2689.12	174.96	0.35	SlimPulse	0
143	11908.00	89.76	180.28	94.00	9404.37	2781.47	-2772.73	235.84	2782.75	175.14	0.33	SlimPulse	0
144	12004.00	89.97	179.68	96.00	9404.60	2877.33	-2868.73	235.88	2878.41	175.30	0.67	SlimPulse	0
145	12098.00	90.00	179.68	94.00	9404.63	2971.22	-2962.73	236.40	2972.15	175.44	0.04	SlimPulse	0
146	12194.00	89.86	180.55	96.00	9404.74	3067.06	-3058.73	236.21	3067.84	175.58	0.91	SlimPulse	0
147	12289.00	90.00	180.38	95.00	9404.86	3161.87	-3153.73	235.45	3162.5	175.73	0.23	SlimPulse	0
148	12384.00	90.03	179.56	95.00	9404.83	3256.74	-3248.73	235.50	3257.25	175.85	0.86	SlimPulse	0
149	12479.00	89.97	182.34	95.00	9404.83	3351.49	-3343.70	233.92	3351.88	176.00	2.93	SlimPulse	0
150	12574.00	89.55	178.01	95.00	9405.23	3446.30	-3438.68	233.63	3446.61	176.11	4.58	SlimPulse	0
151	12669.00	89.28	178.77	95.00	9406.20	3541.26	-3533.64	236.30	3541.53	176.17	0.85	SlimPulse	0
152	12764.00	90.69	175.18	95.00	9406.23	3636.25	-3628.49	241.31	3636.5	176.20	4.06	SlimPulse	0
153	12859.00	90.62	179.30	95.00	9405.14	3731.22	-3723.35	245.88	3731.46	176.22	4.33	SlimPulse	0
154	12954.00	90.38	180.39	95.00	9404.31	3826.09	-3818.34	246.13	3826.27	176.31	1.18	SlimPulse	0
155	13049.00	90.41	180.95	95.00	9403.66	3920.87	-3913.34	245.02	3921	176.42	0.58	SlimPulse	0
156	13143.00	90.00	179.74	94.00	9403.32	4014.70	-4007.33	244.46	4014.78	176.51	1.35	SlimPulse	0
157	13238.00	90.41	177.91	95.00	9402.98	4109.64	-4102.31	246.40	4109.7	176.56	1.98	SlimPulse	0
158	13333.00	90.10	179.40	95.00	9402.55	4204.59	-4197.28	248.63	4204.63	176.61	1.60	SlimPulse	0
159	13428.00	90.28	179.18	95.00	9402.24	4299.50	-4292.27	249.80	4299.53	176.67	0.30	SlimPulse	0
160	13523.00	90.14	179.95	95.00	9401.89	4394.40	-4387.27	250.53	4394.41	176.73	0.82	SlimPulse	0
161	13617.00	90.62	179.72	94.00	9401.27	4488.27	-4481.26	250.80	4488.28	176.80	0.57	SlimPulse	0
162	13713.00	90.28	178.79	96.00	9400.52	4584.18	-4577.25	252.06	4584.18	176.85	1.03	SlimPulse	0
163	13759.00	90.41	179.98	46.00	9400.25	4630.14	-4623.25	252.55	4630.14	176.87	2.60	SlimPulse	0
164	13804.00	90.41	179.98	45.00	9399.92	4675.07	-4668.24	252.57	4675.07	176.90	0.01	Proj. To Bit	7