



Final MWD Survey Certification

Lea County, New Mexico

Client: Devon Energy

Well Name: Alley Cat 17-20 Fed Com 526H

Total Job No: 2019-521-103

API No: 30-025-46252

Start Date: 8/7/2019

End Date: 8/27/2019

Measured Start Depth: 0 feet

Measured End Depth with PTB: 19952 feet

I, Michael Smitham, MWD Operator, hereby certify that; I am employed by Total Directional Services, LLC and we conducted or supervised the taking of these open hole MWD surveys at the request of this client. This data is true, correct, complete and within the limitations of the tool as set forth by Total Directional Services, LLC. I am authorized and qualified to make this report and have reviewed this report and find that it conforms to the principals and procedures as set forth by Total Directional Services, LLC.

Date: 8/27/2019

Signed: Michael Smitham



Alley Cat 17-20 Fed Com 526H

Directional Survey Report

Start date: August 07 2019

End date: August 27 2019

Company: Devon Energy	State/Prov: NM	Survey Company: Total Directional Services LLC
Well Name: Alley Cat 17-20 Fed Com 526H	County: Lea County	Job Number: 2019-521-103
Field: LEA	Country: USA	Proposed Azimuth: 179.63
Rig ID: Cactus 103	Declination: 6.8	Elevations KB: 3637
API/UWI: 30-025-46252	North Reference: Grid	DF: 27
Location: Alley Cat Fed Com	Latitude/Longitude: 32.311659 / -103.655262	GL: 3610

Svy	Depth	Inc	Azm	TVD	NS	EW	VS	CD	CA	DLS	CL
TieIn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	
1	106.00	0.10	57.60	106.00	0.05	0.08	-0.05	0.09	57.60	0.09	106.00
2	169.00	0.20	304.40	169.00	0.14	0.03	-0.14	0.15	13.47	0.41	63.00
3	264.00	0.20	274.30	264.00	0.25	-0.27	-0.25	0.36	312.66	0.11	95.00
4	359.00	0.30	264.60	359.00	0.24	-0.68	-0.24	0.72	289.13	0.11	95.00
5	455.00	0.40	253.00	455.00	0.11	-1.25	-0.12	1.26	275.23	0.13	96.00
6	550.00	0.40	252.50	549.99	-0.08	-1.89	0.07	1.89	267.51	0.00	95.00
7	645.00	0.50	251.30	644.99	-0.31	-2.59	0.30	2.61	263.08	0.11	95.00
8	740.00	0.70	257.20	739.99	-0.58	-3.55	0.55	3.60	260.79	0.22	95.00
9	835.00	0.80	256.70	834.98	-0.86	-4.76	0.83	4.84	259.80	0.11	95.00
10	930.00	0.90	253.70	929.97	-1.22	-6.13	1.18	6.25	258.74	0.12	95.00
11	1,026.00	1.00	252.30	1,025.95	-1.69	-7.65	1.64	7.83	257.57	0.11	96.00
12	1,121.00	1.10	252.50	1,120.94	-2.21	-9.31	2.15	9.57	256.63	0.11	95.00
13	1,126.00	1.10	255.50	1,125.94	-2.24	-9.40	2.18	9.66	256.61	1.15	5.00
14	1,267.00	0.80	320.90	1,266.92	-1.81	-11.33	1.74	11.47	260.91	0.75	141.00
15	1,362.00	0.60	114.40	1,361.92	-1.50	-11.30	1.43	11.40	262.42	1.44	95.00
16	1,456.00	0.50	243.70	1,455.92	-1.89	-11.21	1.82	11.37	260.44	1.06	94.00
17	1,552.00	0.20	225.80	1,551.91	-2.19	-11.71	2.12	11.91	259.40	0.33	96.00
18	1,647.00	0.20	261.20	1,646.91	-2.33	-11.99	2.25	12.22	258.99	0.13	95.00
19	1,742.00	0.20	252.10	1,741.91	-2.41	-12.31	2.33	12.55	258.93	0.03	95.00
20	1,837.00	0.20	258.60	1,836.91	-2.49	-12.64	2.41	12.88	258.84	0.02	95.00
21	1,932.00	0.10	236.20	1,931.91	-2.57	-12.87	2.49	13.12	258.70	0.12	95.00
22	2,028.00	0.10	98.50	2,027.91	-2.63	-12.85	2.55	13.12	258.43	0.19	96.00
23	2,123.00	0.20	192.60	2,122.91	-2.80	-12.81	2.72	13.11	257.65	0.24	95.00
24	2,218.00	0.10	169.10	2,217.91	-3.05	-12.83	2.96	13.19	256.64	0.12	95.00
25	2,313.00	0.10	15.50	2,312.91	-3.05	-12.79	2.97	13.15	256.59	0.20	95.00
26	2,409.00	0.20	241.80	2,408.91	-3.05	-12.92	2.96	13.27	256.72	0.29	96.00
27	2,504.00	0.00	345.10	2,503.91	-3.13	-13.06	3.04	13.43	256.54	0.21	95.00
28	2,599.00	1.50	101.90	2,598.90	-3.38	-11.84	3.31	12.32	254.06	1.58	95.00
29	2,695.00	3.30	97.20	2,694.81	-3.99	-7.87	3.94	8.83	243.14	1.88	96.00
30	2,790.00	4.70	90.40	2,789.58	-4.36	-1.27	4.35	4.54	196.23	1.55	95.00
31	2,885.00	6.00	85.10	2,884.16	-3.96	7.57	4.01	8.54	117.62	1.46	95.00
32	2,980.00	7.40	82.60	2,978.51	-2.75	18.59	2.87	18.79	98.41	1.50	95.00
33	3,075.00	8.90	81.90	3,072.55	-0.93	31.93	1.13	31.94	91.66	1.58	95.00
34	3,171.00	9.00	82.30	3,167.38	1.13	46.72	-0.83	46.73	88.62	0.12	96.00
35	3,266.00	8.70	82.70	3,261.25	3.04	61.21	-2.64	61.29	87.16	0.32	95.00
36	3,361.00	8.10	83.30	3,355.23	4.73	74.99	-4.25	75.13	86.39	0.64	95.00
37	3,456.00	7.60	83.00	3,449.34	6.28	87.87	-5.71	88.09	85.91	0.53	95.00
38	3,551.00	7.30	86.00	3,543.54	7.46	100.12	-6.82	100.40	85.74	0.52	95.00
39	3,647.00	8.80	96.40	3,638.60	7.07	113.51	-6.34	113.73	86.44	2.17	96.00
40	3,741.00	9.90	102.10	3,731.35	4.57	128.56	-3.74	128.64	87.96	1.53	94.00
41	3,836.00	9.20	102.70	3,825.03	1.19	143.95	-0.26	143.95	89.53	0.74	95.00
42	3,932.00	8.90	105.40	3,919.84	-2.47	158.60	3.49	158.61	90.89	0.54	96.00
43	4,027.00	8.80	108.80	4,013.71	-6.76	172.56	7.87	172.69	92.24	0.56	95.00
44	4,122.00	8.10	101.20	4,107.68	-10.40	186.00	11.60	186.29	93.20	1.39	95.00
45	4,217.00	8.30	99.30	4,201.71	-12.81	199.34	14.10	199.75	93.68	0.35	95.00
46	4,312.00	8.20	101.80	4,295.72	-15.30	212.74	16.68	213.28	94.11	0.39	95.00
47	4,408.00	8.20	99.60	4,390.74	-17.85	226.19	19.31	226.89	94.51	0.33	96.00
48	4,503.00	9.00	90.70	4,484.68	-19.07	240.30	20.62	241.05	94.54	1.63	95.00
49	4,598.00	9.00	87.10	4,578.51	-18.78	255.15	20.43	255.84	94.21	0.59	95.00

Svy	Depth	Inc	Azm	TVD	NS	EW	VS	CD	CA	DLS	CL
50	4,693.00	8.30	87.70	4,672.43	-18.13	269.42	19.87	270.03	93.85	0.74	95.00
51	4,788.00	8.10	88.00	4,766.46	-17.62	282.96	19.45	283.51	93.56	0.22	95.00
52	4,883.00	8.50	88.90	4,860.46	-17.25	296.67	19.17	297.17	93.33	0.44	95.00
53	4,978.00	8.70	88.40	4,954.39	-16.92	310.87	18.92	311.33	93.11	0.22	95.00
54	5,073.00	8.40	87.00	5,048.34	-16.35	324.98	18.45	325.39	92.88	0.38	95.00
55	5,169.00	8.30	86.10	5,143.32	-15.52	338.90	17.70	339.25	92.62	0.17	96.00
56	5,264.00	9.00	87.30	5,237.24	-14.70	353.16	16.98	353.47	92.38	0.76	95.00
57	5,359.00	10.50	94.10	5,330.87	-14.97	369.22	17.35	369.52	92.32	1.99	95.00
58	5,455.00	11.00	97.30	5,425.18	-16.76	387.03	19.26	387.39	92.48	0.81	96.00
59	5,550.00	10.70	96.80	5,518.48	-18.95	404.78	21.57	405.22	92.68	0.33	95.00
60	5,645.00	10.40	96.30	5,611.88	-20.94	422.06	23.66	422.58	92.84	0.33	95.00
61	5,740.00	10.20	95.80	5,705.35	-22.73	438.95	25.56	439.54	92.96	0.23	95.00
62	5,835.00	9.70	95.30	5,798.92	-24.32	455.29	27.26	455.94	93.06	0.53	95.00
63	5,931.00	9.20	95.40	5,893.61	-25.79	470.98	28.83	471.69	93.13	0.52	96.00
64	6,026.00	9.10	95.00	5,987.41	-27.16	486.02	30.29	486.78	93.20	0.12	95.00
65	6,121.00	9.10	94.60	6,081.21	-28.41	501.00	31.65	501.80	93.25	0.07	95.00
66	6,216.00	8.90	93.90	6,175.04	-29.52	515.82	32.85	516.66	93.28	0.24	95.00
67	6,312.00	8.50	94.00	6,269.93	-30.52	530.30	33.94	531.18	93.29	0.42	96.00
68	6,407.00	8.30	93.40	6,363.92	-31.41	544.15	34.93	545.06	93.30	0.23	95.00
69	6,502.00	8.40	89.60	6,457.91	-31.77	557.94	35.37	558.84	93.26	0.59	95.00
70	6,597.00	8.80	88.80	6,551.84	-31.57	572.14	35.26	573.01	93.16	0.44	95.00
71	6,692.00	9.30	90.30	6,645.66	-31.46	587.08	35.25	587.92	93.07	0.58	95.00
72	6,787.00	9.20	90.60	6,739.42	-31.58	602.35	35.47	603.18	93.00	0.12	95.00
73	6,882.00	8.80	91.00	6,833.25	-31.78	617.21	35.77	618.03	92.95	0.43	95.00
74	6,978.00	8.40	92.40	6,928.17	-32.21	631.56	36.28	632.38	92.92	0.47	96.00
75	7,073.00	8.00	92.80	7,022.20	-32.82	645.09	36.99	645.93	92.91	0.43	95.00
76	7,168.00	7.40	93.60	7,116.35	-33.53	657.80	37.77	658.66	92.92	0.64	95.00
77	7,264.00	7.00	94.90	7,211.59	-34.41	669.80	38.74	670.69	92.94	0.45	96.00
78	7,359.00	6.60	95.60	7,305.92	-35.44	681.00	39.84	681.92	92.98	0.43	95.00
79	7,454.00	5.90	96.70	7,400.35	-36.54	691.29	41.01	692.25	93.03	0.75	95.00
80	7,549.00	5.40	96.80	7,494.89	-37.64	700.57	42.17	701.58	93.08	0.53	95.00
81	7,644.00	4.90	97.80	7,589.51	-38.72	709.03	43.30	710.09	93.13	0.53	95.00
82	7,740.00	4.50	99.40	7,685.19	-39.89	716.81	44.52	717.92	93.19	0.44	96.00
83	7,835.00	4.10	100.80	7,779.92	-41.14	723.82	45.81	724.99	93.25	0.44	95.00
84	7,930.00	3.70	101.50	7,874.70	-42.39	730.16	47.10	731.39	93.32	0.42	95.00
85	8,025.00	3.30	102.30	7,969.52	-43.58	735.84	48.33	737.13	93.39	0.42	95.00
86	8,120.00	3.30	103.10	8,064.36	-44.78	741.17	49.57	742.52	93.46	0.05	95.00
87	8,215.00	3.30	104.40	8,159.21	-46.08	746.48	50.90	747.91	93.53	0.08	95.00
88	8,311.00	3.10	108.10	8,255.06	-47.58	751.63	52.43	753.13	93.62	0.30	96.00
89	8,406.00	3.00	108.80	8,349.92	-49.18	756.42	54.06	758.02	93.72	0.11	95.00
90	8,502.00	3.00	108.40	8,445.79	-50.78	761.18	55.69	762.88	93.82	0.02	96.00
91	8,597.00	3.00	110.30	8,540.66	-52.43	765.87	57.37	767.67	93.92	0.10	95.00
92	8,692.00	3.00	111.90	8,635.53	-54.22	770.51	59.19	772.42	94.02	0.09	95.00
93	8,764.00	2.70	115.60	8,707.44	-55.65	773.79	60.65	775.79	94.11	0.49	72.00
94	8,904.00	3.50	143.40	8,847.24	-60.51	779.31	65.54	781.66	94.44	1.20	140.00
95	8,999.00	16.30	176.60	8,940.68	-76.22	781.84	81.26	785.55	95.57	14.22	95.00
96	9,094.00	28.60	177.90	9,028.31	-112.39	783.47	117.44	791.49	98.16	12.96	95.00
97	9,189.00	39.90	177.10	9,106.71	-165.71	785.86	170.78	803.14	101.91	11.90	95.00
98	9,236.00	45.80	177.90	9,141.15	-197.63	787.24	202.71	811.67	104.09	12.61	47.00
99	9,284.00	49.60	177.60	9,173.45	-233.10	788.63	238.19	822.36	106.47	7.93	48.00
100	9,331.00	51.00	176.40	9,203.47	-269.21	790.53	274.31	835.11	108.81	3.57	47.00
101	9,379.00	52.50	176.40	9,233.19	-306.83	792.90	311.94	850.19	111.16	3.13	48.00
102	9,426.00	56.50	178.80	9,260.48	-345.05	794.48	350.17	866.17	113.48	9.47	47.00
103	9,475.00	59.70	181.40	9,286.37	-386.64	794.39	391.76	883.48	115.95	7.93	49.00
104	9,570.00	65.50	180.80	9,330.07	-470.93	792.78	476.04	922.10	120.71	6.13	95.00
105	9,617.00	69.10	181.40	9,348.21	-514.27	791.95	519.37	944.27	123.00	7.75	47.00
106	9,665.00	71.60	182.50	9,364.35	-559.44	790.41	564.54	968.36	125.29	5.64	48.00
107	9,760.00	83.30	185.40	9,384.96	-651.78	783.98	656.83	1,019.53	129.74	12.67	95.00
108	9,856.00	90.40	182.10	9,390.23	-747.35	777.72	752.36	1,078.61	133.86	8.15	96.00
109	9,951.00	91.40	181.10	9,388.74	-842.30	775.07	847.29	1,144.64	137.38	1.49	95.00
110	10,046.00	92.80	179.60	9,385.26	-937.23	774.49	942.21	1,215.83	140.43	2.16	95.00
111	10,141.00	91.50	178.80	9,381.69	-1,032.15	775.82	1,037.14	1,291.21	143.07	1.61	95.00
112	10,236.00	92.20	178.60	9,378.63	-1,127.08	777.97	1,132.08	1,369.50	145.38	0.77	95.00
113	10,331.00	92.70	177.90	9,374.57	-1,221.95	780.87	1,226.96	1,450.14	147.42	0.90	95.00
114	10,427.00	89.50	178.10	9,372.72	-1,317.86	784.22	1,322.89	1,533.54	149.24	3.34	96.00

Svy	Depth	Inc	Azm	TVD	NS	EW	VS	CD	CA	DLS	CL
115	10,522.00	89.70	178.10	9,373.39	-1,412.80	787.37	1,417.86	1,617.39	150.87	0.21	95.00
116	10,617.00	90.80	176.20	9,372.97	-1,507.68	792.09	1,512.76	1,703.09	152.28	2.31	95.00
117	10,712.00	92.00	174.90	9,370.65	-1,602.36	799.46	1,607.49	1,790.72	153.48	1.86	95.00
118	10,807.00	88.90	175.80	9,369.90	-1,697.03	807.16	1,702.21	1,879.21	154.56	3.40	95.00
119	10,903.00	89.10	179.50	9,371.58	-1,792.92	811.09	1,798.12	1,967.85	155.66	3.86	96.00
120	10,998.00	89.20	179.70	9,372.99	-1,887.91	811.76	1,893.11	2,055.03	156.73	0.24	95.00
121	11,093.00	89.80	179.60	9,373.82	-1,982.90	812.34	1,988.11	2,142.85	157.72	0.64	95.00
122	11,188.00	91.20	178.60	9,372.99	-2,077.88	813.83	2,083.10	2,231.57	158.61	1.81	95.00
123	11,284.00	91.50	177.50	9,370.73	-2,173.80	817.09	2,179.03	2,322.29	159.40	1.19	96.00
124	11,379.00	92.00	177.60	9,367.83	-2,268.67	821.15	2,273.92	2,412.71	160.10	0.54	95.00
125	11,474.00	93.30	176.80	9,363.43	-2,363.45	825.79	2,368.73	2,503.56	160.74	1.61	95.00
126	11,569.00	90.80	177.50	9,360.04	-2,458.26	830.51	2,463.58	2,594.77	161.33	2.73	95.00
127	11,664.00	91.50	177.80	9,358.13	-2,553.16	834.40	2,558.50	2,686.05	161.90	0.80	95.00
128	11,760.00	89.00	178.60	9,357.71	-2,649.11	837.42	2,654.46	2,778.32	162.46	2.73	96.00
129	11,855.00	90.10	178.30	9,358.46	-2,744.07	839.99	2,749.44	2,869.75	162.98	1.20	95.00
130	11,950.00	90.10	177.40	9,358.29	-2,839.00	843.55	2,844.39	2,961.67	163.45	0.95	95.00
131	12,045.00	90.60	176.60	9,357.71	-2,933.87	848.52	2,939.29	3,054.11	163.87	0.99	95.00
132	12,141.00	93.00	180.40	9,354.69	-3,029.76	851.04	3,035.20	3,147.02	164.31	4.68	96.00
133	12,235.00	89.10	181.10	9,352.97	-3,123.72	849.81	3,129.14	3,237.25	164.78	4.22	94.00
134	12,330.00	88.30	181.30	9,355.13	-3,218.67	847.82	3,224.08	3,328.46	165.24	0.87	95.00
135	12,425.00	90.00	182.80	9,356.54	-3,313.60	844.42	3,318.98	3,419.50	165.70	2.39	95.00
136	12,521.00	90.60	182.90	9,356.03	-3,409.48	839.65	3,414.83	3,511.34	166.17	0.63	96.00
137	12,616.00	90.10	182.60	9,355.45	-3,504.36	835.09	3,509.68	3,602.49	166.60	0.61	95.00
138	12,711.00	89.40	182.40	9,355.87	-3,599.27	830.94	3,604.56	3,693.94	167.00	0.77	95.00
139	12,806.00	89.60	182.50	9,356.70	-3,694.18	826.88	3,699.44	3,785.59	167.38	0.24	95.00
140	12,902.00	88.60	182.20	9,358.21	-3,790.09	822.95	3,795.32	3,878.40	167.75	1.09	96.00
141	12,997.00	88.20	182.20	9,360.86	-3,884.98	819.30	3,890.19	3,970.43	168.09	0.42	95.00
142	13,092.00	88.50	182.80	9,363.59	-3,979.85	815.16	3,985.03	4,062.47	168.42	0.71	95.00
143	13,188.00	90.00	182.40	9,364.85	-4,075.74	810.81	4,080.89	4,155.61	168.75	1.62	96.00
144	13,283.00	90.90	182.40	9,364.10	-4,170.65	806.83	4,175.78	4,247.98	169.05	0.95	95.00
145	13,378.00	90.20	182.00	9,363.19	-4,265.58	803.18	4,270.68	4,340.54	169.34	0.85	95.00
146	13,473.00	90.80	181.70	9,362.36	-4,360.52	800.11	4,365.60	4,433.32	169.60	0.71	95.00
147	13,568.00	88.00	180.00	9,363.36	-4,455.50	798.70	4,460.56	4,526.52	169.84	3.45	95.00
148	13,663.00	87.30	179.50	9,367.25	-4,550.41	799.12	4,555.48	4,620.05	170.04	0.91	95.00
149	13,759.00	87.20	179.40	9,371.86	-4,646.30	800.04	4,651.37	4,714.67	170.23	0.15	96.00
150	13,854.00	87.70	179.10	9,376.09	-4,741.20	801.28	4,746.27	4,808.43	170.41	0.61	95.00
151	13,949.00	87.80	178.60	9,379.82	-4,836.10	803.19	4,841.19	4,902.35	170.57	0.54	95.00
152	14,044.00	87.90	178.70	9,383.38	-4,931.01	805.42	4,936.11	4,996.36	170.72	0.15	95.00
153	14,139.00	87.50	178.40	9,387.19	-5,025.90	807.83	5,031.02	5,090.41	170.87	0.53	95.00
154	14,235.00	88.20	178.50	9,390.79	-5,121.80	810.42	5,126.93	5,185.52	171.01	0.74	96.00
155	14,330.00	89.10	178.70	9,393.03	-5,216.74	812.74	5,221.88	5,279.67	171.14	0.97	95.00
156	14,425.00	89.90	179.00	9,393.86	-5,311.72	814.65	5,316.87	5,373.83	171.28	0.90	95.00
157	14,521.00	88.00	178.90	9,395.62	-5,407.68	816.41	5,412.84	5,468.96	171.41	1.98	96.00
158	14,616.00	87.80	178.90	9,399.10	-5,502.60	818.23	5,507.77	5,563.10	171.54	0.21	95.00
159	14,711.00	88.30	178.60	9,402.33	-5,597.52	820.30	5,602.71	5,657.31	171.66	0.61	95.00
160	14,806.00	88.30	177.40	9,405.15	-5,692.42	823.61	5,697.62	5,751.70	171.77	1.26	95.00
161	14,902.00	88.90	177.90	9,407.50	-5,788.31	827.55	5,793.54	5,847.17	171.86	0.81	96.00
162	14,997.00	89.60	177.90	9,408.74	-5,883.24	831.03	5,888.48	5,941.64	171.96	0.74	95.00
163	15,092.00	90.50	177.80	9,408.66	-5,978.17	834.59	5,983.44	6,036.15	172.05	0.95	95.00
164	15,187.00	91.30	177.70	9,407.17	-6,073.09	838.32	6,078.37	6,130.67	172.14	0.85	95.00
165	15,283.00	92.30	177.70	9,404.15	-6,168.96	842.17	6,174.27	6,226.18	172.23	1.04	96.00
166	15,378.00	91.30	178.70	9,401.17	-6,263.86	845.16	6,269.19	6,320.62	172.32	1.49	95.00
167	15,473.00	90.20	179.30	9,399.92	-6,358.84	846.81	6,364.18	6,414.98	172.41	1.32	95.00
168	15,568.00	90.90	179.30	9,399.01	-6,453.83	847.97	6,459.17	6,509.30	172.51	0.74	95.00
169	15,663.00	92.30	179.20	9,396.36	-6,548.78	849.22	6,554.13	6,603.61	172.61	1.48	95.00
170	15,759.00	92.70	178.60	9,392.17	-6,644.67	851.06	6,650.03	6,698.95	172.70	0.75	96.00
171	15,854.00	91.50	179.30	9,388.69	-6,739.59	852.80	6,744.96	6,793.33	172.79	1.46	95.00
172	15,949.00	89.30	180.80	9,388.03	-6,834.58	852.71	6,839.94	6,887.57	172.89	2.80	95.00
173	16,044.00	89.70	180.90	9,388.86	-6,929.56	851.31	6,934.92	6,981.66	173.00	0.43	95.00
174	16,139.00	90.30	180.80	9,388.86	-7,024.55	849.90	7,029.89	7,075.78	173.10	0.64	95.00
175	16,235.00	91.00	180.90	9,387.77	-7,120.54	848.47	7,125.87	7,170.91	173.20	0.74	96.00
176	16,330.00	90.40	180.80	9,386.61	-7,215.52	847.06	7,220.84	7,265.07	173.30	0.64	95.00
177	16,425.00	91.10	180.60	9,385.36	-7,310.50	845.90	7,315.81	7,359.28	173.40	0.77	95.00
178	16,520.00	90.20	180.40	9,384.28	-7,405.49	845.07	7,410.79	7,453.55	173.49	0.97	95.00
179	16,615.00	90.90	180.10	9,383.37	-7,500.48	844.66	7,505.78	7,547.90	173.57	0.80	95.00

Svy	Depth	Inc	Azm	TVD	NS	EW	VS	CD	CA	DLS	CL
180	16,710.00	91.30	180.40	9,381.55	-7,595.47	844.24	7,600.76	7,642.24	173.66	0.53	95.00
181	16,806.00	92.50	180.60	9,378.37	-7,691.41	843.41	7,696.69	7,737.51	173.74	1.27	96.00
182	16,901.00	90.30	180.70	9,376.05	-7,786.37	842.33	7,791.64	7,831.80	173.83	2.32	95.00
183	16,996.00	90.30	180.10	9,375.55	-7,881.36	841.67	7,886.63	7,926.18	173.90	0.63	95.00
184	17,091.00	91.10	179.80	9,374.39	-7,976.36	841.75	7,981.63	8,020.65	173.98	0.90	95.00
185	17,186.00	89.90	180.60	9,373.56	-8,071.35	841.42	8,076.61	8,115.09	174.05	1.52	95.00
186	17,281.00	89.80	180.80	9,373.81	-8,166.34	840.26	8,171.60	8,209.46	174.13	0.24	95.00
187	17,377.00	89.20	180.60	9,374.64	-8,262.33	839.08	8,267.58	8,304.83	174.20	0.66	96.00
188	17,472.00	90.30	181.30	9,375.06	-8,357.31	837.51	8,362.55	8,399.17	174.28	1.37	95.00
189	17,567.00	90.20	181.40	9,374.64	-8,452.29	835.27	8,457.50	8,493.46	174.36	0.15	95.00
190	17,662.00	90.20	181.40	9,374.31	-8,547.26	832.95	8,552.46	8,587.75	174.43	0.00	95.00
191	17,757.00	89.00	180.90	9,374.98	-8,642.23	831.04	8,647.42	8,682.10	174.51	1.37	95.00
192	17,852.00	89.80	180.40	9,375.97	-8,737.22	829.97	8,742.40	8,776.55	174.57	0.99	95.00
193	17,948.00	91.90	179.40	9,374.55	-8,833.20	830.13	8,838.38	8,872.13	174.63	2.42	96.00
194	18,043.00	92.90	179.60	9,370.57	-8,928.12	830.96	8,933.30	8,966.70	174.68	1.07	95.00
195	18,138.00	93.30	179.60	9,365.43	-9,022.98	831.62	9,028.16	9,061.22	174.73	0.42	95.00
196	18,233.00	92.50	179.70	9,360.63	-9,117.85	832.20	9,123.03	9,155.75	174.78	0.85	95.00
197	18,329.00	93.00	179.90	9,356.02	-9,213.74	832.54	9,218.92	9,251.28	174.84	0.56	96.00
198	18,424.00	90.70	179.40	9,352.95	-9,308.68	833.12	9,313.87	9,345.89	174.89	2.48	95.00
199	18,520.00	89.40	179.10	9,352.87	-9,404.67	834.37	9,409.86	9,441.61	174.93	1.39	96.00
200	18,615.00	87.50	178.50	9,355.44	-9,499.61	836.36	9,504.81	9,536.36	174.97	2.10	95.00
201	18,651.00	87.60	177.90	9,356.98	-9,535.56	837.49	9,540.77	9,572.27	174.98	1.69	36.00
202	18,747.00	89.80	177.10	9,359.16	-9,631.44	841.68	9,636.67	9,668.14	175.01	2.44	96.00
203	18,842.00	90.30	177.00	9,359.07	-9,726.31	846.57	9,731.57	9,763.08	175.03	0.54	95.00
204	18,937.00	90.60	176.90	9,358.33	-9,821.17	851.62	9,826.47	9,858.03	175.04	0.33	95.00
205	19,033.00	91.10	176.80	9,356.90	-9,917.02	856.90	9,922.34	9,953.97	175.06	0.53	96.00
206	19,128.00	91.60	176.60	9,354.66	-10,011.83	862.36	10,017.19	10,048.90	175.08	0.57	95.00
207	19,224.00	90.30	176.60	9,353.07	-10,107.65	868.06	10,113.04	10,144.86	175.09	1.35	96.00
208	19,319.00	89.90	176.80	9,352.91	-10,202.49	873.53	10,207.92	10,239.82	175.11	0.47	95.00
209	19,414.00	90.40	176.90	9,352.66	-10,297.35	878.75	10,302.81	10,334.77	175.12	0.54	95.00
210	19,509.00	91.00	176.90	9,351.50	-10,392.20	883.88	10,397.69	10,429.72	175.14	0.63	95.00
211	19,604.00	89.60	177.50	9,351.00	-10,487.08	888.52	10,492.60	10,524.66	175.16	1.60	95.00
212	19,700.00	90.80	178.00	9,350.66	-10,583.01	892.29	10,588.55	10,620.56	175.18	1.35	96.00
213	19,795.00	91.00	178.60	9,349.17	-10,677.95	895.11	10,683.51	10,715.40	175.21	0.67	95.00
214	19,891.00	91.70	178.10	9,346.91	-10,773.88	897.87	10,779.46	10,811.23	175.24	0.90	96.00
PTB	19,952.00	91.70	178.10	9,345.10	-10,834.82	899.90	10,840.41	10,872.13	175.25	0.00	61.00