

Schlumberger Drilling and Measurements
Drilling Group
Geo Market Area: South West Texas Basin
7220 W I-H 20
Midland, Texas 79706
Phone : (432) 742-5400 (Main)
Fax : (432) 742-5606 (Shared)

Schlumberger

43762

January 27, 2018

HOBBS OCD

SEP 19 2018

DEVON ENERGY PRODUCTION CO., L.P.
333 WEST SHERIDAN AVENUE
OKLAHOMA CITY, OK 73102

RECEIVED

Re:

Sec 1 T26S R33E NWNW 200FNL 360FWL, , ,
N 32.079185 W 103.533432

CLIENT: DEVON ENERGY PRODUCTION CO., L.P.
WELL: Seawolf 1-12 Fed 81H
FIELD: Wolfcamp

RIG: Nabors x04
COUNTY: Lea
API NO: 30-025-43762
JOB NO: 17MLD3182

Enclosed, please find the original copy of the survey performed on the referenced well by Drilling & Measurements, a division of Schlumberger Technology Corporation (P-5 No. 754900).
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>
Juan Estrada FS	Seawolf 1-12 Fed 81H Original Hole	12752.00 Ft to 22396.00 Ft	December 30, 2017 to January 15, 2018	SlimPulse

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

Dustin Barlow
Field Service Manager

Schlumberger Drilling and Measurements
Drilling Group
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Well Reference:
Sec 1 T26S R33E NWNW 200FNL 360FWL, , ,
N 32.079185 W 103.533432

I, Juan Estrada certify that; I am employed by Drilling & Measurements, a division of Schlumberger Technology Corporation; that I did on the day(s) of December 30, 2017 through January 15, 2018, conduct or supervise the taking of the SlimPulse surveys from a depth of 12752.00 feet to a depth of 22396.00 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 DEVON ENERGY PRODUCTION CO., L.P. for the Seawolf 1-12 Fed 81H Well (Original Hole) API No. 30-025-43762 in New Mexico; 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
Juan Estrada
FS

Subscribed and Sworn to before me this 5th day of February (month) 2018 (yr)

My Commission expires:

12-20-2020

J. Allemand
Notary Public

Adams County Colorado
(County State)

(signature)

JENNIFER ALLEMAND
Notary Public
State of Colorado
Notary ID # 20164047962
My Commission Expires 12-20-2020

Devon Energy Seawolf 1-12 Fed 81H Off to 22437H Survey Report



(Dr Survey)

Report Date: January 15, 2018 - 11:17 AM
 Client: Devon
 Field: NGL Gas County (NAD 83)
 Structure / Shot: Devon Seawolf 1-12 Fed 81H / Devon Seawolf 1-12 Fed 81H
 Well: Devon Energy Seawolf 1-12 Fed 81H
 Borehole: Original Borehole
 UWI / APPI: Unknown / Unknown
 Survey Name: Devon Energy Seawolf 1-12 Fed 81H Off to 22437H
 Survey Date: December 15, 2017
 Total / AHD / DDI / END Radio: 264,567' / 1034,080 ft / 6,731' / 0.814
 Coordinates Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 4' 45.07894" W 103° 32' 0.34763"
 CRS Grid Name: NAD83, 680 MSL, E 78008.210 MSL
 CRS Grid Convergence Angle: 0.4248°
 Grid Scale Factor: 0.9997839
 Version / Patch: 2.10.088.0

Survey / ILS Completion: Medium Coverage / Lubbed
 Vertical Section Azimuth: 178.576° (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: Unknown
 Geashed / Ground Elevation: 3351.000 ft above MSL
 Magnetic Destination: 3316.500 ft above MSL
 Total Gravity Field Strength: 998.441 Omega (8.8095 Gauss)
 Gravity Model: GAGM
 Magnetic Dip Angle: 58.757°
 Magnetic Field Strength: 59.757°
 Declination Date: December 27, 2017
 Magnetic Declination Model: I-IGM 2017
 North Reference: Grid North
 Grid Convergence Used: 0.4248°
 Total Corr Mag North->Grid: 6.3588°
 North: Local Grid Referenced To: Structure Reference Point

Comments	MD	Int	Asht Grid	TVD	WESC	NS	EW	CLS	North	East	Latitude	Longitude
Tri-H	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	330,461.69	789,008.21	N 32° 4' 45.07	W 103 32' 0.35
	221.00	1.00	177.37	220.89	1.93	-1.93	0.09	0.45	330,461.76	789,008.30	N 32° 4' 45.05	W 103 32' 0.35
	310.50	1.10	272.37	310.47	3.43	-3.43	0.34	0.71	330,469.25	789,007.47	N 32° 4' 45.04	W 103 32' 0.35
	439.40	0.40	185.37	439.36	4.92	-4.93	0.59	0.99	330,458.76	789,007.17	N 32° 4' 45.02	W 103 32' 0.35
	533.70	0.40	210.37	533.66	5.53	-5.54	1.04	0.59	330,458.16	789,006.87	N 32° 4' 45.01	W 103 32' 0.36
	622.40	1.00	188.37	627.65	6.82	-6.83	0.69	0.69	330,457.06	789,006.67	N 32° 4' 45.01	W 103 32' 0.37
	728.40	1.40	186.37	722.33	8.54	-8.55	-2.00	0.45	330,455.14	789,006.21	N 32° 4' 44.99	W 103 32' 0.37
	816.40	1.20	217.37	816.31	10.41	-10.44	-2.82	0.56	330,451.25	789,005.29	N 32° 4' 44.97	W 103 32' 0.38
	910.20	1.20	181.37	911.09	12.19	-12.22	-3.54	0.78	330,451.47	789,004.67	N 32° 4' 44.95	W 103 32' 0.38
	1010.20	1.30	212.37	1010.27	14.18	-14.21	-4.17	0.69	330,448.48	789,004.04	N 32° 4' 44.92	W 103 32' 0.40
	1090.00	0.88	188.30	1099.86	15.02	-15.06	-4.53	1.24	330,448.33	789,003.69	N 32° 4' 44.91	W 103 32' 0.41
	1161.00	0.88	187.44	1160.85	16.38	-16.42	-4.84	0.16	330,441.27	789,003.37	N 32° 4' 44.91	W 103 32' 0.41
	1243.00	0.79	188.38	1242.84	17.83	-17.89	-5.16	0.19	330,441.01	789,003.06	N 32° 4' 44.90	W 103 32' 0.41
	1334.00	0.96	183.05	1333.83	18.67	-18.71	-5.35	0.21	330,441.18	789,002.82	N 32° 4' 44.88	W 103 32' 0.41
	1426.00	0.96	188.50	1425.83	19.53	-19.57	-5.59	0.86	330,444.12	789,002.42	N 32° 4' 44.88	W 103 32' 0.42
	1521.00	0.44	184.96	1520.82	20.33	-20.37	-5.77	0.18	330,443.50	789,002.40	N 32° 4' 44.88	W 103 32' 0.42
	1616.00	0.56	188.14	1615.82	21.15	-21.19	-5.77	0.18	330,443.50	789,002.40	N 32° 4' 44.88	W 103 32' 0.42
	1711.00	0.63	184.05	1710.82	22.11	-22.15	-5.48	0.09	330,441.24	789,002.13	N 32° 4' 44.85	W 103 32' 0.41
	1807.00	0.63	178.17	1806.81	23.89	-23.92	-5.06	0.20	330,438.77	789,002.16	N 32° 4' 44.83	W 103 32' 0.41
	1902.00	0.56	188.53	1901.80	24.86	-24.90	-4.89	0.17	330,438.79	789,002.13	N 32° 4' 44.82	W 103 32' 0.41
	2007.00	0.50	177.23	2006.80	26.74	-26.78	-5.14	0.14	330,437.82	789,002.07	N 32° 4' 44.82	W 103 32' 0.41
	2181.00	0.38	181.58	2180.79	28.45	-28.49	-5.20	0.16	330,437.20	789,002.07	N 32° 4' 44.81	W 103 32' 0.41
	2276.00	0.38	166.43	2275.79	27.04	-27.08	-5.14	0.26	330,436.61	789,002.07	N 32° 4' 44.80	W 103 32' 0.41
	2370.00	0.13	178.69	2369.78	27.43	-27.47	-5.01	0.26	330,436.22	789,002.01	N 32° 4' 44.80	W 103 32' 0.41
	2465.00	0.08	244.03	2464.79	27.56	-27.60	-4.89	0.12	330,436.09	789,002.10	N 32° 4' 44.80	W 103 32' 0.41
	2559.00	0.19	45.74	2558.79	27.57	-27.61	-5.05	0.13	330,436.08	789,002.16	N 32° 4' 44.80	W 103 32' 0.41
	2654.00	0.44	52.85	2653.79	27.12	-27.15	-4.89	0.20	330,436.54	789,002.65	N 32° 4' 44.80	W 103 32' 0.40
	2749.00	0.38	42.58	2748.79	27.07	-27.10	-4.06	0.10	330,436.89	789,002.65	N 32° 4' 44.81	W 103 32' 0.40
	2843.00	0.96	74.75	2842.78	26.67	-26.70	-3.32	0.23	330,437.33	789,002.48	N 32° 4' 44.81	W 103 32' 0.39
	3033.00	0.63	68.98	3032.78	26.01	-26.05	-3.40	0.12	330,437.06	789,002.48	N 32° 4' 44.81	W 103 32' 0.39
	3127.00	1.08	74.82	3126.77	25.58	-25.59	-2.69	0.45	330,438.10	789,002.12	N 32° 4' 44.82	W 103 32' 0.36
	3222.00	1.31	70.00	3221.75	25.00	-25.09	-1.09	0.28	330,438.70	789,001.19	N 32° 4' 44.82	W 103 32' 0.34
	3318.00	1.44	75.98	3317.72	24.34	-24.32	2.89	0.20	330,438.37	789,001.19	N 32° 4' 44.83	W 103 32' 0.32
	3413.00	1.75	80.73	3412.69	23.60	-23.56	9.51	0.36	330,440.13	789,001.55	N 32° 4' 44.84	W 103 32' 0.29
	3507.00	1.81	86.73	3506.64	22.82	-22.86	8.34	0.33	330,440.83	789,001.55	N 32° 4' 44.84	W 103 32' 0.28
	3602.00	1.89	73.32	3601.59	22.28	-22.17	11.31	0.26	330,441.52	789,001.55	N 32° 4' 44.84	W 103 32' 0.25
	3696.00	1.51	81.25	3695.55	21.89	-21.87	10.83	0.35	330,442.12	789,002.08	N 32° 4' 44.86	W 103 32' 0.19
	3791.00	1.63	74.92	3790.82	21.18	-21.06	17.38	0.38	330,443.74	789,002.67	N 32° 4' 44.87	W 103 32' 0.16
	3886.00	1.08	34.05	3885.50	20.07	-19.86	18.89	1.15	330,443.74	789,003.07	N 32° 4' 44.88	W 103 32' 0.15
	3981.00	1.08	34.05	3980.49	18.46	-18.35	18.89	0.99	330,444.16	789,003.06	N 32° 4' 44.88	W 103 32' 0.15
	4076.00	0.84	17.70	4075.46	16.87	-16.75	17.38	0.89	330,444.16	789,003.06	N 32° 4' 44.88	W 103 32' 0.15
	4181.00	0.84	359.87	4180.45	14.00	-13.82	17.16	0.29	330,444.16	789,003.06	N 32° 4' 44.88	W 103 32' 0.15
	4286.00	0.89	341.78	4285.45	12.80	-12.68	16.87	0.26	330,441.01	789,003.06	N 32° 4' 44.88	W 103 32' 0.15
	4391.00	0.86	445.44	4390.44	11.74	-11.61	16.83	0.56	330,452.08	789,003.06	N 32° 4' 44.88	W 103 32' 0.15
	4496.00	0.56	58.40	4495.44	10.76	-10.82	16.82	0.88	330,453.07	789,003.06	N 32° 4' 44.88	W 103 32' 0.15
	4601.00	1.31	58.40	4600.38	9.32	-9.17	20.44	0.87	330,454.52	789,003.06	N 32° 4' 44.88	W 103 32' 0.15
	4706.00	2.13	77.03	4705.30	7.88	-7.80	24.03	0.88	330,455.09	789,003.06	N 32° 4' 44.89	W 103 32' 0.07
	4811.00	2.86	75.28	4810.18	6.85	-6.84	28.70	0.80	330,457.05	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	4916.00	4.19	68.42	4915.18	4.92	-4.87	34.88	1.04	330,458.02	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	5021.00	4.28	63.50	5020.82	2.12	-1.82	40.86	0.39	330,461.87	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	5126.00	3.50	81.04	5125.75	-0.78	1.12	46.59	0.82	330,464.81	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	5231.00	3.08	55.99	5230.25	-3.59	3.86	51.22	0.57	330,467.65	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	5336.00	2.81	53.13	5335.29	-6.49	6.80	55.35	0.12	330,470.69	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	5441.00	2.50	48.44	5440.38	-12.09	8.78	59.20	0.27	330,473.47	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	5546.00	2.44	48.44	5545.38	-14.74	15.52	62.89	0.37	330,476.24	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	5651.00	2.00	59.94	5650.30	-17.40	17.81	66.50	0.18	330,481.06	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	5756.00	1.75	51.51	5755.78	-19.87	20.38	68.12	0.40	330,481.06	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	5861.00	1.08	56.74	5860.72	-22.26	22.79	68.12	0.27	330,481.06	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	5966.00	1.08	56.74	5965.72	-24.00	24.54	72.48	0.17	330,481.06	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	6071.00	0.23	67.37	6070.71	-24.83	25.17	72.48	0.08	330,481.06	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	6176.00	0.19	68.84	6175.71	-24.87	25.31	72.88	0.09	330,481.06	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	6281.00	0.06	68.84	6280.71	-24.87	25.31	72.88	0.15	330,481.06	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	6386.00	0.19	68.84	6385.71	-24.87	25.31	72.88	0.18	330,481.06	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	6491.00	0.13	68.84	6490.71	-24.87	25.31	72.88	0.14	330,481.06	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	6596.00	0.13	68.84	6595.71	-24.87	25.31	72.88	0.23	330,481.06	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	6701.00	0.13	68.84	6700.71	-24.87	25.31	72.88	0.18	330,481.06	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	6806.00	0.13	68.84	6805.71	-24.87	25.31	72.88	0.19	330,481.06	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	6911.00	0.13	68.84	6910.71	-24.87	25.31	72.88	0.14	330,481.06	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	7016.00	0.13	68.84	7015.71	-24.87	25.31	72.88	0.15	330,481.06	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	7121.00	0.13	68.84	7120.71	-24.87	25.31	72.88	0.15	330,481.06	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	7226.00	0.13	68.84	7225.71	-24.87	25.31	72.88	0.15	330,481.06	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	7331.00	0.13	68.84	7330.71	-24.87	25.31	72.88	0.15	330,481.06	789,003.06	N 32° 4' 44.89	W 103 32' 0.01
	7436.00	0.13	68.84	7435.71	-2							

Comments	MD	Inc	Cl	Azim	Grid	TVD	WSEC	NS	EW	DLS	North	East	Lat	Long	Time
	7570.00	0.31	23.28	750.59	750.59	750.59	750.59	750.59	750.59	750.59	750.59	750.59	750.59	750.59	750.59
	7568.00	0.30	23.66	750.59	750.59	750.59	750.59	750.59	750.59	750.59	750.59	750.59	750.59	750.59	750.59
	7700.00	0.36	23.40	750.59	750.59	750.59	750.59	750.59	750.59	750.59	750.59	750.59	750.59	750.59	750.59
	7554.00	0.69	23.01	751.59	751.59	751.59	751.59	751.59	751.59	751.59	751.59	751.59	751.59	751.59	751.59
	8044.00	0.81	22.18	753.86	753.86	753.86	753.86	753.86	753.86	753.86	753.86	753.86	753.86	753.86	753.86
	8224.00	0.75	21.32	813.86	813.86	813.86	813.86	813.86	813.86	813.86	813.86	813.86	813.86	813.86	813.86
	8221.00	0.75	21.85	822.86	822.86	822.86	822.86	822.86	822.86	822.86	822.86	822.86	822.86	822.86	822.86
	8325.00	0.75	20.53	832.86	832.86	832.86	832.86	832.86	832.86	832.86	832.86	832.86	832.86	832.86	832.86
	8419.00	0.69	21.80	841.86	841.86	841.86	841.86	841.86	841.86	841.86	841.86	841.86	841.86	841.86	841.86
	8511.00	0.61	21.20	851.86	851.86	851.86	851.86	851.86	851.86	851.86	851.86	851.86	851.86	851.86	851.86
	8608.00	0.94	21.44	860.86	860.86	860.86	860.86	860.86	860.86	860.86	860.86	860.86	860.86	860.86	860.86
	8702.00	1.18	21.31	870.86	870.86	870.86	870.86	870.86	870.86	870.86	870.86	870.86	870.86	870.86	870.86
	8788.00	1.25	21.31	878.86	878.86	878.86	878.86	878.86	878.86	878.86	878.86	878.86	878.86	878.86	878.86
	8788.00	0.89	22.88	878.86	878.86	878.86	878.86	878.86	878.86	878.86	878.86	878.86	878.86	878.86	878.86
	8907.00	0.90	22.87	890.86	890.86	890.86	890.86	890.86	890.86	890.86	890.86	890.86	890.86	890.86	890.86
	8982.00	0.70	22.87	898.86	898.86	898.86	898.86	898.86	898.86	898.86	898.86	898.86	898.86	898.86	898.86
	9082.00	0.19	22.87	908.86	908.86	908.86	908.86	908.86	908.86	908.86	908.86	908.86	908.86	908.86	908.86
	9176.00	0.30	23.23	917.86	917.86	917.86	917.86	917.86	917.86	917.86	917.86	917.86	917.86	917.86	917.86
	9270.00	0.63	23.74	927.86	927.86	927.86	927.86	927.86	927.86	927.86	927.86	927.86	927.86	927.86	927.86
	9364.00	0.69	24.24	936.86	936.86	936.86	936.86	936.86	936.86	936.86	936.86	936.86	936.86	936.86	936.86
	9459.00	0.75	22.41	945.86	945.86	945.86	945.86	945.86	945.86	945.86	945.86	945.86	945.86	945.86	945.86
	9554.00	0.75	22.41	955.86	955.86	955.86	955.86	955.86	955.86	955.86	955.86	955.86	955.86	955.86	955.86
	9647.00	1.13	23.17	964.86	964.86	964.86	964.86	964.86	964.86	964.86	964.86	964.86	964.86	964.86	964.86
	9738.00	0.69	23.40	973.86	973.86	973.86	973.86	973.86	973.86	973.86	973.86	973.86	973.86	973.86	973.86
	9832.00	0.94	22.96	983.86	983.86	983.86	983.86	983.86	983.86	983.86	983.86	983.86	983.86	983.86	983.86
	9924.00	0.94	23.41	992.86	992.86	992.86	992.86	992.86	992.86	992.86	992.86	992.86	992.86	992.86	992.86
	10022.00	1.00	24.67	1002.86	1002.86	1002.86	1002.86	1002.86	1002.86	1002.86	1002.86	1002.86	1002.86	1002.86	1002.86
	10497.00	1.05	24.16	1049.86	1049.86	1049.86	1049.86	1049.86	1049.86	1049.86	1049.86	1049.86	1049.86	1049.86	1049.86
	10590.00	0.69	100.41	1059.86	1059.86	1059.86	1059.86	1059.86	1059.86	1059.86	1059.86	1059.86	1059.86	1059.86	1059.86
	10684.00	0.75	81.25	1068.86	1068.86	1068.86	1068.86	1068.86	1068.86	1068.86	1068.86	1068.86	1068.86	1068.86	1068.86
	10780.00	1.19	38.54	1077.86	1077.86	1077.86	1077.86	1077.86	1077.86	1077.86	1077.86	1077.86	1077.86	1077.86	1077.86
	10874.00	1.63	38.54	1087.86	1087.86	1087.86	1087.86	1087.86	1087.86	1087.86	1087.86	1087.86	1087.86	1087.86	1087.86
	10968.00	2.00	43.11	1096.86	1096.86	1096.86	1096.86	1096.86	1096.86	1096.86	1096.86	1096.86	1096.86	1096.86	1096.86
	11062.00	1.31	43.11	1106.86	1106.86	1106.86	1106.86	1106.86	1106.86	1106.86	1106.86	1106.86	1106.86	1106.86	1106.86
	11154.00	2.88	53.66	1115.86	1115.86	1115.86	1115.86	1115.86	1115.86	1115.86	1115.86	1115.86	1115.86	1115.86	1115.86
	11252.00	1.80	78.32	1125.86	1125.86	1125.86	1125.86	1125.86	1125.86	1125.86	1125.86	1125.86	1125.86	1125.86	1125.86
	11341.00	0.53	7.07	1134.86	1134.86	1134.86	1134.86	1134.86	1134.86	1134.86	1134.86	1134.86	1134.86	1134.86	1134.86
	11439.00	0.75	27.79	1143.86	1143.86	1143.86	1143.86	1143.86	1143.86	1143.86	1143.86	1143.86	1143.86	1143.86	1143.86
	11539.00	1.05	25.82	1153.86	1153.86	1153.86	1153.86	1153.86	1153.86	1153.86	1153.86	1153.86	1153.86	1153.86	1153.86
	11639.00	1.05	25.82	1163.86	1163.86	1163.86	1163.86	1163.86	1163.86	1163.86	1163.86	1163.86	1163.86	1163.86	1163.86
	11739.00	0.75	31.19	1173.86	1173.86	1173.86	1173.86	1173.86	1173.86	1173.86	1173.86	1173.86	1173.86	1173.86	1173.86
	11839.00	1.00	23.81	1183.86	1183.86	1183.86	1183.86	1183.86	1183.86	1183.86	1183.86	1183.86	1183.86	1183.86	1183.86
	11939.00	1.00	23.81	1193.86	1193.86	1193.86	1193.86	1193.86	1193.86	1193.86	1193.86	1193.86	1193.86	1193.86	1193.86
	12039.00	1.36	189.01	1203.86	1203.86	1203.86	1203.86	1203.86	1203.86	1203.86	1203.86	1203.86	1203.86	1203.86	1203.86
	12077.00	5.19	207.99	1207.86	1207.86	1207.86	1207.86	1207.86	1207.86	1207.86	1207.86	1207.86	1207.86	1207.86	1207.86
	12102.00	14.81	165.67	1210.86	1210.86	1210.86	1210.86	1210.86	1210.86	1210.86	1210.86	1210.86	1210.86	1210.86	1210.86
	12131.00	18.69	176.17	1213.86	1213.86	1213.86	1213.86	1213.86	1213.86	1213.86	1213.86	1213.86	1213.86	1213.86	1213.86
	12166.00	22.89	174.77	1216.86	1216.86	1216.86	1216.86	1216.86	1216.86	1216.86	1216.86	1216.86	1216.86	1216.86	1216.86
	12196.00	22.89	174.77	1219.86	1219.86	1219.86	1219.86	1219.86	1219.86	1219.86	1219.86	1219.86	1219.86	1219.86	1219.86
	12220.00	27.31	172.22	1222.86	1222.86	1222.86	1222.86	1222.86	1222.86	1222.86	1222.86	1222.86	1222.86	1222.86	1222.86
	12262.00	30.81	174.59	1226.86	1226.86	1226.86	1226.86	1226.86	1226.86	1226.86	1226.86	1226.86	1226.86	1226.86	1226.86
	12291.00	39.81	176.00	1229.86	1229.86	1229.86	1229.86	1229.86	1229.86	1229.86	1229.86	1229.86	1229.86	1229.86	1229.86
	12322.00	45.08	176.00	1232.86	1232.86	1232.86	1232.86	1232.86	1232.86	1232.86	1232.86	1232.86	1232.86	1232.86	1232.86
	12376.00	42.03	176.53	1237.86	1237.86	1237.86	1237.86	1237.86	1237.86	1237.86	1237.86	1237.86	1237.86	1237.86	1237.86
	12386.00	46.00	176.53	1238.86	1238.86	1238.86	1238.86	1238.86	1238.86	1238.86	1238.86	1238.86	1238.86	1238.86	1238.86
	12444.00	50.81	177.00	1244.86	1244.86	1244.86	1244.86	1244.86	1244.86	1244.86	1244.86	1244.86	1244.86	1244.86	1244.86
	12480.00	55.94	177.00	1248.86	1248.86	1248.86	1248.86	1248.86	1248.86	1248.86	1248.86	1248.86	1248.86	1248.86	1248.86
	12519.00	59.83	176.89	1251.86	1251.86	1251.86	1251.86	1251.86	1251.86	1251.86	1251.86	1251.86	1251.86	1251.86	1251.86
	12544.00	65.00	176.89	1254.86	1254.86	1254.86	1254.86	1254.86	1254.86	1254.86	1254.86	1254.86	1254.86	1254.86	1254.86
	12583.00	68.76	168.16	1258.86	1258.86	1258.86	1258.86	1258.86	1258.86	1258.86	1258.86	1258.86	1258.86	1258.86	1258.86
	12626.00	70.76	168.16	1262.86	1262.86	1262.86	1262.86	1262.86	1262.86	1262.86	1262.86	1262.86	1262.86	1262.86	1262.86
	12672.00	70.76	168.16	1267.86	1267.86	1267.86	1267.86	1267.86	1267.86	1267.86	1267.86	1267.86	1267.86	1267.86	1267.86
	12707.00	77.83	176.82	1270.86	1270.86	1270.86	1270.86	1270.86	1270.86	1270.86	1270.86	1270.86	1270.86	1270.86	1270.86
	12740.00	80.33	177.72	1274.86	1274.86	1274.86	1274.86	1274.86	1274.86	1274.86	1274.86	1274.86	1274.86	1274.86	1274.86
	12770.00	84.00	179.17	1277.86	1277.86	1277.86	1277.86	1277.86	1277.86	1277.86	1277.86	1277.86	1277.86	1277.86	1277.86
	12800.00	87.83	176.82	1280.86	1280.86	1280.86	1280.86	1280.86	1280.86	1280.86	1280.86	1280.86	1280.86	1280.86	1280.86
	12830.00	90.72	180.57	1283.86	1283.86	1283.86	1283.86	1283.86	1283.86	1283.86	1283.86	1283.86	1283.86	1283.86	1283.86
	12860.00	93.76	180.57	1286.86	1286.86	1286.									

Comments		MD	Incl	Azim	MD Form	MD To	EOU Frag	Hole Size	Casing Diameter	Survey Tool Type	Borehole / Survey	Survey Program:		Survey Type:		Last Survey		Last Take Point		Proj to TD
		(m)	(°)	(°)	(m)	(m)	(m)	(m)	(m)			ISCWSA Rev 0 ... 3-D 85.000% Confidence 2.785 sigma		Det Survey						
15530.00	89.14	178.83	12637.81	12637.81	3211.36	3211.36	3211.36	3211.36	3211.36	3211.36	3211.36									
16001.00	89.16	178.72	12641.64	12641.64	3202.50	3202.50	3202.50	3202.50	3202.50	3202.50	3202.50									
15906.00	89.83	178.57	12641.76	12641.76	3207.51	3207.51	3207.51	3207.51	3207.51	3207.51	3207.51									
15812.00	89.71	178.71	12638.43	12638.43	3209.53	3209.53	3209.53	3209.53	3209.53	3209.53	3209.53									
15718.00	89.87	178.71	12637.84	12637.84	3205.34	3205.34	3205.34	3205.34	3205.34	3205.34	3205.34									
17221.00	89.55	178.90	12687.23	12687.23	3200.26	3200.26	3200.26	3200.26	3200.26	3200.26	3200.26									
17133.00	89.82	178.30	12684.82	12684.82	3203.13	3203.13	3203.13	3203.13	3203.13	3203.13	3203.13									
17038.00	87.14	177.14	12681.44	12681.44	3209.83	3209.83	3209.83	3209.83	3209.83	3209.83	3209.83									
16944.00	89.28	178.59	12677.84	12677.84	3204.55	3204.55	3204.55	3204.55	3204.55	3204.55	3204.55									
16850.00	89.17	181.28	12653.55	12653.55	3200.00	3200.00	3200.00	3200.00	3200.00	3200.00	3200.00									
16755.00	89.80	180.69	12653.87	12653.87	3205.05	3205.05	3205.05	3205.05	3205.05	3205.05	3205.05									
16659.00	89.82	182.82	12652.57	12652.57	3204.22	3204.22	3204.22	3204.22	3204.22	3204.22	3204.22									
16567.00	89.21	180.02	12651.81	12651.81	3200.20	3200.20	3200.20	3200.20	3200.20	3200.20	3200.20									
16472.00	89.21	180.69	12650.30	12650.30	3205.25	3205.25	3205.25	3205.25	3205.25	3205.25	3205.25									
16373.00	89.42	180.18	12648.18	12648.18	3200.26	3200.26	3200.26	3200.26	3200.26	3200.26	3200.26									
16261.00	89.82	180.82	12645.85	12645.85	3205.15	3205.15	3205.15	3205.15	3205.15	3205.15	3205.15									
16168.00	89.82	181.02	12643.17	12643.17	3206.46	3206.46	3206.46	3206.46	3206.46	3206.46	3206.46									
16088.00	89.00	178.67	12643.17	12643.17	3207.51	3207.51	3207.51	3207.51	3207.51	3207.51	3207.51									
15928.00	89.83	180.18	12637.87	12637.87	3202.50	3202.50	3202.50	3202.50	3202.50	3202.50	3202.50									
12878.00	32.500	12878.000	12878.000	12878.000	12878.000	12878.000	12878.000	12878.000	12878.000	12878.000	12878.000									
1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
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1	1	1	1	1	1	1	1	1	1	1	1									
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1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
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1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
1	1	1	1	1	1	1	1	1	1	1	1									
1																				