



KANSAS CORPORATION COMMISSION 1064640
OIL & GAS CONSERVATION DIVISION

Form ACO-1
June 2009

CONFIDENTIAL

WELL COMPLETION FORM

Form Must Be Typed
Form must be Signed
All blanks must be Filled

WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 34192
Name: SandRidge Exploration and Production LLC
Address 1: 123 ROBERT S. KERR AVE
Address 2: _____
City: OKLAHOMA CITY State: OK Zip: 73102 + 6406
Contact Person: Karen Sharp
Phone: (405) 429-5745
CONTRACTOR: License # 34464
Name: Lariat Services, Inc.
Wellsite Geologist: Tammy Alcorn
Purchaser: Parnon

Designate Type of Completion:
 New Well Re-Entry Workover
 Oil WSW SWD SIOW
 Gas D&A ENHR SIGW
 OG GSW Temp. Abd.
 CM (Coal Bed Methane)
 Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:
Operator: _____

Well Name: _____
Original Comp. Date: _____ Original Total Depth: _____
 Deepening Re-perf. Conv. to ENHR Conv. to SWD
 Conv. to GSW
 Plug Back: _____ Plug Back Total Depth
 Commingled Permit #: _____
 Dual Completion Permit #: _____
 SWD Permit #: _____
 ENHR Permit #: _____
 GSW Permit #: _____

09/05/2011	09/25/2011	10/24/2011
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-007-23756-01-00
Spot Description: _____
S2 S2 SE SE Sec. 13 Twp. 35 S. R. 11 East West
200 Feet from North / South Line of Section
660 Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:
 NE NW SE SW
County: Barber
Lease Name: Robert Well #: 1-13H
Field Name: Waldron West

Producing Formation: Mississippi Lime
Elevation: Ground: 1308 Kelly Bushing: 1328
Total Depth: 9999 Plug Back Total Depth: _____
Amount of Surface Pipe Set and Cemented at: 955 Feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set: _____ Feet
If Alternate II completion, cement circulated from: _____
feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: 7300 ppm Fluid volume: 2370 bbls
Dewatering method used: Hauled to Disposal
Location of fluid disposal if hauled offsite:
Operator Name: Richard Gray Mud Disposal
Lease Name: Drilling Mud License #: 32300
Quarter NW Sec. 15 Twp. 24 S. R. 7 East West
County: Garfield, OK Permit #: 355765

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

Letter of Confidentiality Received
Date: 12/29/2011
 Confidential Release Date: _____
 Wireline Log Received
 Geologist Report Received
 UIC Distribution
ALT I II III Approved by: NAOMI JAMES Date: 01/26/2012

Section 1 SCHROCK 1-1H
35S 11W*

Section 6
35S 10W

1480' FNL

643' FEL

BHL: 11084'
-98.459418, 37.017016

Bottom Perf: 10980'
-98.459371, 37.016711

Section 11
35S 11W

Section 12
35S 11W

Section 7
35S 10W

Section 14
35S 11W

Section 13
35S 11W

Section 18
35S 10W

Top Perf: 5038'
-98.459451, 37.000404

ROBERT 1-13H

Section 15
29N 12W

Section 14
29N 12W

Section 13
29N 12W



● Actual BH Location

* SandRidge Wells

--- Perf

□ Sections

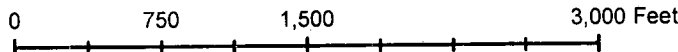
Actual Bottom-Hole Location of Robert 1-13H
Barber County, Kansas

T&R: 35S 11W

Section: 12 & 13, 1480' FNL & 643' FEL

Long: -98.459418, Lat: 37.017016

1 in = 990 ft



Draftsman:
Matt White

Draft Date: 1/26/2012

Drawing Name/Number:

Addendum_Robert_1-13H.mxd

Coordinate System:

NAD 1927 State Plane
Kansas South FIPS: 1502

Section 1 SCHROCK I-1H
35S 11W*

Section 6
35S 10W

Section 11
35S 11W

Section 12
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Section 7
35S 10W

1480' FNL

643' FEL

BHL: 4866'
-98.459418, 37.017016

Bottom Perf: 4862'
-98.459371, 37.016711

Section 14
35S 11W

Section 13
35S 11W

Section 18
35S 10W

Top Perf: 4828'
-98.459451, 37.000404

ROBERT I-13H

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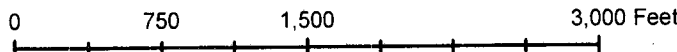
● Actual BH Location

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Perf
Sections

	Measured Depth (ft)	Sub-Sea Incl. (ft)	Vertical Azim. (ft)	True Vert Depth (ft)	Northings (+) Southings (-) (ft)	Eastings (+) Westings (-) (ft)	Vertical Section (ft)	Sec
								FNL
SHL	0	0	0	0	0	0	0	2736.00
BHL	11084	88.10	357.60	4865.82	6575.62	17.08	6575.63	-4039.62
Miss Entry	5028	60.54	0.59	4822.91	537.60	-7.29	537.57	1998.40
Top Perf	5038	61.61	0.43	4827.68	546.39	-7.22	546.35	1989.61
Bottom Perf	10980	87.98	357.78	4862.28	6471.76	21.28	6471.79	-3935.76

	Measured Depth (ft)	Sub-Sea Incl. (ft)	Vertical Azim. (ft)	True Vert Depth (ft)	Northings (+) Southings (-) (ft)	Eastings (+) Westings (-) (ft)	Vertical Section (ft)	Sec
								FNL
	0	0	0	0	0	0	0	2736.00
	990	0.10	188.60	990.00	-0.85	-0.13	-0.85	2536.85
	1243	0.10	130.40	1243.00	-1.22	0.01	-1.22	2537.22
	1720	0.10	63.90	1720.00	-1.30	0.70	-1.30	2537.30
	2196	0.60	168.10	2195.99	-3.56	1.58	-3.55	2539.56
	2672	0.60	122.90	2671.97	-7.35	4.19	-7.33	2543.35
	3149	0.50	174.90	3148.95	-10.78	6.47	-10.75	2546.78
	3530	0.50	153.10	3529.93	-13.92	7.37	-13.89	2549.92
	3625	0.30	34.20	3624.93	-14.08	7.70	-14.05	2550.08
	3721	0.40	26.70	3720.93	-13.58	7.99	-13.54	2549.58
	3815	0.80	20.80	3814.92	-12.67	8.37	-12.63	2548.67
	3911	0.50	353.30	3910.92	-11.63	8.56	-11.59	2547.63
	3974	1.80	333.70	3973.90	-10.47	8.09	-10.43	2546.47
	4006	3.90	332.20	4005.86	-9.05	7.36	-9.02	2545.05
	4038	6.10	335.50	4037.74	-6.54	6.15	-6.51	2542.54
	4069	8.20	338.40	4068.50	-2.99	4.65	-2.97	2538.99
	4101	10.60	342.80	4100.07	1.95	2.94	1.96	2534.05
	4132	13.50	346.00	4130.38	8.18	1.22	8.19	2527.82
	4164	15.70	348.30	4161.34	16.05	-0.56	16.04	2519.95
	4196	16.80	348.70	4192.07	24.82	-2.35	24.81	2511.18
	4228	17.80	349.30	4222.62	34.16	-4.16	34.14	2501.84
	4260	19.20	352.80	4252.96	44.19	-5.73	44.16	2491.81
	4291	20.60	355.60	4282.11	54.69	-6.78	54.65	2481.31
	4323	23.10	358.30	4311.81	66.58	-7.40	66.54	2469.42
	4355	25.70	1.30	4340.95	79.79	-7.43	79.75	2456.21
	4387	27.70	4.60	4369.54	94.14	-6.68	94.11	2441.86
	4418	30.00	5.30	4396.69	109.04	-5.38	109.02	2426.96
	4450	32.40	4.60	4424.06	125.56	-3.96	125.54	2410.44
	4481	34.50	4.00	4449.93	142.60	-2.68	142.58	2393.40
	4513	35.40	2.50	4476.15	160.90	-1.64	160.89	2375.10
	4545	36.80	2.10	4502.01	179.73	-0.89	179.73	2356.27
	4577	38.90	1.20	4527.28	199.36	-0.32	199.36	2336.64
	4608	40.90	359.80	4551.06	219.24	-0.16	219.24	2316.76
	4640	42.70	358.80	4574.91	240.57	-0.42	240.56	2295.43
	4672	44.10	358.60	4598.16	262.55	-0.92	262.54	2273.45
	4704	46.60	358.40	4620.65	285.30	-1.52	285.29	2250.70
	4735	49.30	358.30	4641.41	308.31	-2.18	308.30	2227.69
	4767	49.80	358.10	4662.17	332.65	-2.94	332.63	2203.35
	4799	49.40	357.80	4682.91	357.00	-3.82	356.98	2179.00
	4831	49.30	357.50	4703.76	381.26	-4.81	381.24	2154.74
	4862	49.70	357.60	4723.89	404.81	-5.82	404.78	2131.19
	4894	49.80	357.90	4744.57	429.22	-6.78	429.18	2106.78

4926	50.50	358.80	4765.07	453.77	-7.48	453.74	2082.23
4958	53.20	359.80	4784.84	478.93	-7.79	478.89	2057.07
4989	56.50	0.70	4802.68	504.28	-7.67	504.24	2031.72
5021	59.80	0.70	4819.57	531.45	-7.34	531.41	2004.55
5053	63.20	0.20	4834.83	559.57	-7.12	559.53	1976.43
5085	67.00	359.90	4848.30	588.59	-7.10	588.55	1947.41
5117	70.60	359.60	4859.87	618.42	-7.23	618.38	1917.58
5148	72.20	0.00	4869.76	647.80	-7.33	647.76	1888.20
5180	74.30	360.00	4878.98	678.44	-7.33	678.40	1857.56
5212	75.40	0.60	4887.35	709.33	-7.17	709.29	1826.67
5244	78.50	360.00	4894.57	740.50	-7.01	740.46	1795.50
5275	82.10	359.30	4899.79	771.05	-7.19	771.01	1764.95
5307	84.40	359.90	4903.55	802.82	-7.42	802.78	1733.18
5339	86.20	0.20	4906.18	834.71	-7.39	834.67	1701.29
5352	87.30	359.60	4906.91	847.69	-7.41	847.65	1688.31
5436	89.90	1.30	4908.97	931.65	-6.75	931.61	1604.35
5468	90.60	0.90	4908.83	963.65	-6.14	963.61	1572.35
5500	91.10	1.30	4908.35	995.64	-5.52	995.60	1540.36
5532	91.50	1.50	4907.62	1027.62	-4.74	1027.59	1508.38
5564	92.00	2.20	4906.65	1059.59	-3.71	1059.56	1476.41
5596	92.30	1.50	4905.45	1091.55	-2.68	1091.53	1444.45
5627	91.10	1.50	4904.53	1122.52	-1.86	1122.50	1413.48
5659	91.20	2.10	4903.89	1154.50	-0.86	1154.49	1381.50
5691	91.50	1.10	4903.13	1186.48	0.03	1186.47	1349.52
5723	91.60	1.00	4902.27	1218.46	0.62	1218.45	1317.54
5755	91.20	0.60	4901.48	1250.45	1.07	1250.44	1285.55
5787	91.10	0.40	4900.84	1282.44	1.35	1282.43	1253.56
5819	91.10	1.00	4900.23	1314.43	1.74	1314.43	1221.57
5851	90.90	0.90	4899.67	1346.42	2.27	1346.42	1189.58
5883	91.10	2.10	4899.11	1378.41	3.10	1378.41	1157.59
5915	91.10	1.90	4898.50	1410.38	4.22	1410.39	1125.62
5947	91.50	2.10	4897.77	1442.35	5.34	1442.36	1093.65
5979	91.50	2.20	4896.93	1474.32	6.54	1474.34	1061.68
6011	90.70	2.20	4896.32	1506.29	7.77	1506.31	1029.71
6043	90.40	1.00	4896.01	1538.28	8.66	1538.30	997.72
6075	90.00	0.70	4895.90	1570.27	9.13	1570.30	965.73
6107	90.00	2.10	4895.90	1602.26	9.92	1602.29	933.74
6139	90.60	2.70	4895.73	1634.23	11.26	1634.27	901.77
6170	89.50	1.70	4895.70	1665.21	12.45	1665.25	870.79
6203	88.80	1.70	4896.19	1698.19	13.42	1698.24	837.81
6235	89.10	1.80	4896.78	1730.17	14.40	1730.22	805.83
6266	89.10	359.70	4897.27	1761.16	14.81	1761.21	774.84
6298	89.60	358.70	4897.63	1793.16	14.36	1793.20	742.84
6330	89.90	359.10	4897.77	1825.15	13.75	1825.19	710.85
6362	89.90	356.90	4897.83	1857.13	12.63	1857.17	678.87
6394	90.50	356.50	4897.71	1889.08	10.79	1889.11	646.92
6426	91.10	356.80	4897.27	1921.02	8.92	1921.04	614.98
6458	91.30	356.50	4896.60	1952.96	7.05	1952.97	583.04
6490	92.00	357.40	4895.68	1984.90	5.35	1984.90	551.10
6522	91.50	357.90	4894.70	2016.86	4.04	2016.85	519.14
6554	90.70	358.00	4894.08	2048.83	2.89	2048.82	487.17
6586	90.90	358.20	4893.64	2080.81	1.83	2080.79	455.19
6618	90.90	359.60	4893.13	2112.80	1.22	2112.78	423.20
6650	90.40	0.90	4892.77	2144.79	1.36	2144.78	391.21
6681	90.30	1.60	4892.58	2175.79	2.03	2175.77	360.21

6713	90.60	1.30	4892.33	2207.77	2.84	2207.76	328.23
6745	90.90	0.40	4891.91	2239.77	3.32	2239.76	296.23
6777	90.70	1.40	4891.47	2271.76	3.82	2271.75	264.24
6809	90.00	2.20	4891.27	2303.74	4.82	2303.74	232.26
6841	89.80	1.90	4891.33	2335.72	5.97	2335.73	200.28
6873	90.00	1.50	4891.38	2367.71	6.92	2367.72	168.29
6905	90.50	0.70	4891.24	2399.70	7.53	2399.71	136.30
6937	90.80	0.60	4890.88	2431.70	7.89	2431.71	104.30
6969	91.10	2.40	4890.35	2463.68	8.73	2463.70	72.32
7001	92.10	3.10	4889.45	2495.63	10.27	2495.65	40.37
7033	91.40	3.60	4888.48	2527.56	12.14	2527.59	8.44
7065	90.30	3.80	4888.00	2559.49	14.20	2559.53	-23.49
7097	89.20	3.20	4888.14	2591.43	16.15	2591.48	-55.43
7128	88.50	3.10	4888.76	2622.38	17.86	2622.43	-86.38
7160	86.90	1.70	4890.05	2654.32	19.20	2654.38	-118.32
7192	84.80	359.80	4892.36	2686.23	19.61	2686.29	-150.23
7224	84.40	359.50	4895.38	2718.09	19.42	2718.15	-182.09
7256	85.40	358.40	4898.22	2749.96	18.84	2750.01	-213.96
7288	87.20	358.10	4900.29	2781.87	17.86	2781.93	-245.87
7320	87.90	358.20	4901.65	2813.83	16.83	2813.87	-277.83
7352	89.20	358.60	4902.46	2845.80	15.94	2845.85	-309.80
7384	90.20	358.10	4902.63	2877.79	15.01	2877.83	-341.79
7416	90.50	358.80	4902.44	2909.78	14.15	2909.81	-373.78
7448	91.20	358.20	4901.96	2941.76	13.31	2941.79	-405.76
7480	91.00	357.90	4901.35	2973.74	12.22	2973.76	-437.74
7512	90.90	358.90	4900.82	3005.72	11.33	3005.74	-469.72
7544	91.80	359.20	4900.06	3037.71	10.80	3037.72	-501.71
7575	92.60	359.20	4898.87	3068.68	10.37	3068.70	-532.68
7607	92.80	358.60	4897.36	3100.64	9.75	3100.65	-564.64
7639	92.70	359.80	4895.83	3132.60	9.31	3132.61	-596.60
7671	92.90	359.60	4894.27	3164.56	9.14	3164.57	-628.56
7703	92.20	359.30	4892.84	3196.53	8.83	3196.53	-660.53
7735	90.90	0.00	4891.98	3228.51	8.64	3228.52	-692.51
7767	90.60	0.90	4891.56	3260.51	8.89	3260.52	-724.51
7799	89.10	1.00	4891.64	3292.50	9.42	3292.51	-756.50
7831	89.70	0.80	4891.98	3324.50	9.92	3324.51	-788.50
7863	91.10	0.10	4891.75	3356.49	10.17	3356.51	-820.49
7894	92.00	0.90	4890.92	3387.48	10.44	3387.49	-851.48
7926	92.40	0.80	4889.69	3419.45	10.92	3419.47	-883.45
7958	91.60	1.70	4888.57	3451.43	11.61	3451.44	-915.43
7990	91.40	1.50	4887.73	3483.40	12.51	3483.42	-947.40
8022	91.40	2.00	4886.95	3515.38	13.49	3515.40	-979.38
8054	91.60	1.70	4886.11	3547.35	14.52	3547.38	-1011.35
8086	91.90	2.60	4885.14	3579.31	15.72	3579.35	-1043.31
8118	91.50	1.70	4884.19	3611.28	16.92	3611.32	-1075.28
8150	89.80	2.10	4883.82	3643.26	17.98	3643.30	-1107.26
8182	90.90	2.20	4883.63	3675.23	19.18	3675.28	-1139.23
8214	90.70	2.70	4883.18	3707.20	20.55	3707.25	-1171.20
8246	90.70	1.60	4882.79	3739.17	21.75	3739.23	-1203.17
8278	90.20	0.60	4882.54	3771.17	22.36	3771.23	-1235.17
8309	90.10	0.10	4882.46	3802.17	22.55	3802.23	-1266.17
8341	91.40	1.30	4882.04	3834.16	22.94	3834.22	-1298.16
8373	92.40	0.80	4880.98	3866.14	23.53	3866.20	-1330.14
8405	92.70	1.10	4879.55	3898.10	24.06	3898.17	-1362.10
8437	92.90	0.90	4877.99	3930.06	24.62	3930.13	-1394.06

8469	91.60	0.10	4876.73	3962.03	24.89	3962.10	-1426.03
8501	90.70	0.70	4876.09	3994.02	25.12	3994.09	-1458.02
8533	90.00	0.10	4875.90	4026.02	25.34	4026.09	-1490.02
8565	89.80	0.30	4875.95	4058.02	25.45	4058.09	-1522.02
8597	89.00	0.30	4876.29	4090.02	25.62	4090.09	-1554.02
8629	89.50	359.70	4876.71	4122.01	25.62	4122.09	-1586.01
8661	89.40	359.20	4877.01	4154.01	25.31	4154.08	-1618.01
8693	89.10	359.90	4877.43	4186.01	25.06	4186.08	-1650.01
8725	90.40	359.00	4877.57	4218.00	24.75	4218.07	-1682.00
8739	90.60	359.90	4877.45	4232.00	24.62	4232.07	-1696.00
8771	90.70	359.80	4877.09	4264.00	24.54	4264.07	-1728.00
8803	90.50	359.90	4876.75	4296.00	24.45	4296.07	-1760.00
8835	90.50	359.60	4876.47	4328.00	24.31	4328.06	-1792.00
8867	91.00	359.80	4876.05	4359.99	24.15	4360.06	-1823.99
8899	90.80	359.60	4875.55	4391.99	23.98	4392.05	-1855.99
8931	90.40	359.30	4875.22	4423.99	23.67	4424.05	-1887.99
8963	90.30	359.00	4875.02	4455.98	23.20	4456.04	-1919.98
8995	90.10	358.60	4874.91	4487.98	22.53	4488.03	-1951.98
9027	90.00	358.70	4874.88	4519.97	21.77	4520.02	-1983.97
9059	90.30	359.10	4874.80	4551.96	21.16	4552.01	-2015.96
9091	90.30	358.60	4874.63	4583.95	20.52	4584.00	-2047.95
9123	90.30	358.30	4874.46	4615.94	19.65	4615.98	-2079.94
9155	90.70	358.10	4874.18	4647.92	18.65	4647.96	-2111.92
9186	90.90	357.90	4873.75	4678.90	17.56	4678.93	-2142.90
9218	91.20	358.30	4873.16	4710.88	16.50	4710.91	-2174.88
9250	91.10	358.20	4872.52	4742.86	15.53	4742.88	-2206.86
9282	90.90	358.50	4871.96	4774.84	14.60	4774.86	-2238.84
9314	90.60	358.40	4871.54	4806.82	13.74	4806.84	-2270.82
9346	89.50	358.90	4871.52	4838.82	12.98	4838.82	-2302.82
9378	89.70	359.40	4871.74	4870.81	12.51	4870.82	-2334.81
9410	89.50	359.80	4871.96	4902.81	12.29	4902.81	-2366.81
9442	89.10	359.90	4872.35	4934.81	12.20	4934.81	-2398.81
9474	89.20	1.40	4872.83	4966.80	12.57	4966.81	-2430.80
9506	89.70	2.10	4873.14	4998.78	13.54	4998.79	-2462.78
9538	89.80	1.80	4873.28	5030.76	14.63	5030.78	-2494.76
9569	89.80	1.50	4873.38	5061.75	15.52	5061.77	-2525.75
9601	89.30	1.40	4873.63	5093.74	16.33	5093.76	-2557.74
9633	88.60	1.90	4874.22	5125.72	17.26	5125.75	-2589.72
9665	89.20	2.10	4874.84	5157.70	18.37	5157.73	-2621.70
9697	88.90	2.20	4875.37	5189.67	19.57	5189.70	-2653.67
9729	89.20	2.70	4875.90	5221.64	20.94	5221.68	-2685.64
9761	90.40	2.60	4876.01	5253.60	22.42	5253.65	-2717.60
9793	92.70	3.20	4875.14	5285.55	24.04	5285.60	-2749.55
9825	93.40	2.70	4873.44	5317.46	25.68	5317.52	-2781.46
9857	93.5	3	4872	5349	27.32627032	5349.426	-2813.36
9889	92.3	3	4870	5381	29.05451414	5381.345	-2845.27
9921	91.9	2	4869	5413	30.47722684	5413.297	-2877.21
9953	91.7	2	4868	5445	31.73292354	5445.262	-2909.17
9985	91.8	2	4867	5477	32.93286811	5477.23	-2941.14
10017	91.8	1	4866	5509	33.82591558	5509.205	-2973.11
10049	91.7	1	4865	5541	34.35621532	5541.188	-3005.09
10080	90.2	360	4864	5572	34.51846728	5572.182	-3036.08
10112	89.6	360	4864	5604	34.37884396	5604.181	-3068.08
10144	89.9	359	4864	5636	34.07167372	5636.177	-3100.08
10177	90.1	359	4864	5669	33.72610502	5669.173	-3133.08

10208	89.7	359	4864	5700	33.26623155	5700.167	-3164.08
10240	89.6	359	4865	5732	32.6240058	5732.157	-3196.07
10272	89.7	359	4865	5764	32.03762013	5764.148	-3228.06
10304	89.9	359	4865	5796	31.59083387	5796.142	-3260.06
10336	89.6	359	4865	5828	31.08820738	5828.135	-3292.05
10368	89.5	359	4865	5860	30.61351048	5860.128	-3324.05
10400	90.9	360	4865	5892	30.30634561	5892.124	-3356.05
10432	91.0	360	4865	5924	30.13881655	5924.118	-3388.04
10464	91.0	0	4864	5956	30.11089554	5956.113	-3420.04
10496	90.7	360	4864	5988	29.999203	5988.108	-3452.03
10528	90.2	360	4863	6020	29.77581027	6020.105	-3484.03
10560	90.1	359	4863	6052	29.46863829	6052.102	-3516.03
10592	91.5	359	4863	6084	29.0777421	6084.093	-3548.02
10624	91.8	360	4862	6116	28.79860121	6116.077	-3580.01
10656	91.8	360	4861	6148	28.60322203	6148.059	-3611.99
10688	91.9	360	4860	6180	28.37993818	6180.041	-3643.98
10720	91.6	359	4859	6212	27.98916533	6212.021	-3675.96
10752	90.9	359	4858	6244	27.40290707	6244.005	-3707.94
10783	90.3	359	4858	6275	26.78077452	6274.994	-3738.94
10815	90.1	359	4858	6307	26.19438177	6306.985	-3770.93
10847	89.8	359	4858	6339	25.71967034	6338.979	-3802.93
10879	88.6	359	4858	6371	25.13336269	6370.967	-3834.92
10911	87.0	357	4860	6403	24.0455433	6402.918	-3866.87
10943	87.9	358	4861	6435	22.73478936	6434.852	-3898.82
11037	88.1	358	4864	6529	19.0466059	6528.705	-3992.69
11084	88.1	358	4866	6576	17.07953224	6575.628	-4039.62

13 Sec 12

FSL	FNL	FSL	FWL	FEL
200.00	-8056.00	-2736.00	4702.00	660.00
6775.62	1480.38	3839.62	4719.08	642.92
737.60	7518.40	-2198.40	4694.71	667.29
746.39	7509.61	-2189.61	4694.78	667.22
6671.76	1584.24	3735.76	4723.28	638.72

TD Extrap:
Miss Entry Extrap:

13 Sec 12

FSL	FNL	FSL	FWL	FEL
200.00	8056.00	-2736.00	4702.00	660.00
199.15	8056.85	-2736.85	4701.87	660.13
198.78	8057.22	-2737.22	4702.01	659.99
198.70	8057.30	-2737.30	4702.70	659.30
196.44	8059.56	-2739.56	4703.58	658.42
192.65	8063.35	-2743.35	4706.19	655.81
189.22	8066.78	-2746.78	4708.47	653.53
186.08	8069.92	-2749.92	4709.37	652.63
185.92	8070.08	-2750.08	4709.70	652.30
186.42	8069.58	-2749.58	4709.99	652.01
187.33	8068.67	-2748.67	4710.37	651.63
188.37	8067.63	-2747.63	4710.56	651.44
189.53	8066.47	-2746.47	4710.09	651.91
190.95	8065.05	-2745.05	4709.36	652.64
193.46	8062.54	-2742.54	4708.15	653.85
197.01	8058.99	-2738.99	4706.65	655.35
201.95	8054.05	-2734.05	4704.94	657.06
208.18	8047.82	-2727.82	4703.22	658.78
216.05	8039.95	-2719.95	4701.44	660.56
224.82	8031.18	-2711.18	4699.65	662.35
234.16	8021.84	-2701.84	4697.84	664.16
244.19	8011.81	-2691.81	4696.27	665.73
254.69	8001.31	-2681.31	4695.22	666.78
266.58	7989.42	-2669.42	4694.60	667.40
279.79	7976.21	-2656.21	4694.57	667.43
294.14	7961.86	-2641.86	4695.32	666.68
309.04	7946.96	-2626.96	4696.62	665.38
325.56	7930.44	-2610.44	4698.04	663.96
342.60	7913.40	-2593.40	4699.32	662.68
360.90	7895.10	-2575.10	4700.36	661.64
379.73	7876.27	-2556.27	4701.11	660.89
399.36	7856.64	-2536.64	4701.68	660.32
419.24	7836.76	-2516.76	4701.84	660.16
440.57	7815.43	-2495.43	4701.58	660.42
462.55	7793.45	-2473.45	4701.08	660.92
485.30	7770.70	-2450.70	4700.48	661.52
508.31	7747.69	-2427.69	4699.82	662.18
532.65	7723.35	-2403.35	4699.06	662.94
557.00	7699.00	-2379.00	4698.18	663.82
581.26	7674.74	-2354.74	4697.19	664.81
604.81	7651.19	-2331.19	4696.18	665.82
629.22	7626.78	-2306.78	4695.22	666.78

E)

Measured Depth (ft)	Sub-Sea Incl. (ft)	Vertical Azim. (ft)
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Top	5021	59.80	0.70
Bottom	5053	63.20	0.20
Extrapolation	5038	61.61	0.43

653.77	7602.23	-2282.23	4694.52	667.48
678.93	7577.07	-2257.07	4694.21	667.79
704.28	7551.72	-2231.72	4694.33	667.67
731.45	7524.55	-2204.55	4694.66	667.34
759.57	7496.43	-2176.43	4694.88	667.12
788.59	7467.41	-2147.41	4694.90	667.10
818.42	7437.58	-2117.58	4694.77	667.23
847.80	7408.20	-2088.20	4694.67	667.33
878.44	7377.56	-2057.56	4694.67	667.33
909.33	7346.67	-2026.67	4694.83	667.17
940.50	7315.50	-1995.50	4694.99	667.01
971.05	7284.95	-1964.95	4694.81	667.19
1002.82	7253.18	-1933.18	4694.58	667.42
1034.71	7221.29	-1901.29	4694.61	667.39
1047.69	7208.31	-1888.31	4694.59	667.41
1131.65	7124.35	-1804.35	4695.25	666.75
1163.65	7092.35	-1772.35	4695.86	666.14
1195.64	7060.36	-1740.36	4696.48	665.52
1227.62	7028.38	-1708.38	4697.26	664.74
1259.59	6996.41	-1676.41	4698.29	663.71
1291.55	6964.45	-1644.45	4699.32	662.68
1322.52	6933.48	-1613.48	4700.14	661.86
1354.50	6901.50	-1581.50	4701.14	660.86
1386.48	6869.52	-1549.52	4702.03	659.97
1418.46	6837.54	-1517.54	4702.62	659.38
1450.45	6805.55	-1485.55	4703.07	658.93
1482.44	6773.56	-1453.56	4703.35	658.65
1514.43	6741.57	-1421.57	4703.74	658.26
1546.42	6709.58	-1389.58	4704.27	657.73
1578.41	6677.59	-1357.59	4705.10	656.90
1610.38	6645.62	-1325.62	4706.22	655.78
1642.35	6613.65	-1293.65	4707.34	654.66
1674.32	6581.68	-1261.68	4708.54	653.46
1706.29	6549.71	-1229.71	4709.77	652.23
1738.28	6517.72	-1197.72	4710.66	651.34
1770.27	6485.73	-1165.73	4711.13	650.87
1802.26	6453.74	-1133.74	4711.92	650.08
1834.23	6421.77	-1101.77	4713.26	648.74
1865.21	6390.79	-1070.79	4714.45	647.55
1898.19	6357.81	-1037.81	4715.42	646.58
1930.17	6325.83	-1005.83	4716.40	645.60
1961.16	6294.84	-974.84	4716.81	645.19
1993.16	6262.84	-942.84	4716.36	645.64
2025.15	6230.85	-910.85	4715.75	646.25
2057.13	6198.87	-878.87	4714.63	647.37
2089.08	6166.92	-846.92	4712.79	649.21
2121.02	6134.98	-814.98	4710.92	651.08
2152.96	6103.04	-783.04	4709.05	652.95
2184.90	6071.10	-751.10	4707.35	654.65
2216.86	6039.14	-719.14	4706.04	655.96
2248.83	6007.17	-687.17	4704.89	657.11
2280.81	5975.19	-655.19	4703.83	658.17
2312.80	5943.20	-623.20	4703.22	658.78
2344.79	5911.21	-591.21	4703.36	658.64
2375.79	5880.21	-560.21	4704.03	657.97

2407.77	5848.23	-528.23	4704.84	657.16
2439.77	5816.23	-496.23	4705.32	656.68
2471.76	5784.24	-464.24	4705.82	656.18
2503.74	5752.26	-432.26	4706.82	655.18
2535.72	5720.28	-400.28	4707.97	654.03
2567.71	5688.29	-368.29	4708.92	653.08
2599.70	5656.30	-336.30	4709.53	652.47
2631.70	5624.30	-304.30	4709.89	652.11
2663.68	5592.32	-272.32	4710.73	651.27
2695.63	5560.37	-240.37	4712.27	649.73
2727.56	5528.44	-208.44	4714.14	647.86
2759.49	5496.51	-176.51	4716.20	645.80
2791.43	5464.57	-144.57	4718.15	643.85
2822.38	5433.62	-113.62	4719.86	642.14
2854.32	5401.68	-81.68	4721.20	640.80
2886.23	5369.77	-49.77	4721.61	640.39
2918.09	5337.91	-17.91	4721.42	640.58
2949.96	5306.04	13.96	4720.84	641.16
2981.87	5274.13	45.87	4719.86	642.14
3013.83	5242.17	77.83	4718.83	643.17
3045.80	5210.20	109.80	4717.94	644.06
3077.79	5178.21	141.79	4717.01	644.99
3109.78	5146.22	173.78	4716.15	645.85
3141.76	5114.24	205.76	4715.31	646.69
3173.74	5082.26	237.74	4714.22	647.78
3205.72	5050.28	269.72	4713.33	648.67
3237.71	5018.29	301.71	4712.80	649.20
3268.68	4987.32	332.68	4712.37	649.63
3300.64	4955.36	364.64	4711.75	650.25
3332.60	4923.40	396.60	4711.31	650.69
3364.56	4891.44	428.56	4711.14	650.86
3396.53	4859.47	460.53	4710.83	651.17
3428.51	4827.49	492.51	4710.64	651.36
3460.51	4795.49	524.51	4710.89	651.11
3492.50	4763.50	556.50	4711.42	650.58
3524.50	4731.50	588.50	4711.92	650.08
3556.49	4699.51	620.49	4712.17	649.83
3587.48	4668.52	651.48	4712.44	649.56
3619.45	4636.55	683.45	4712.92	649.08
3651.43	4604.57	715.43	4713.61	648.39
3683.40	4572.60	747.40	4714.51	647.49
3715.38	4540.62	779.38	4715.49	646.51
3747.35	4508.65	811.35	4716.52	645.48
3779.31	4476.69	843.31	4717.72	644.28
3811.28	4444.72	875.28	4718.92	643.08
3843.26	4412.74	907.26	4719.98	642.02
3875.23	4380.77	939.23	4721.18	640.82
3907.20	4348.80	971.20	4722.55	639.45
3939.17	4316.83	1003.17	4723.75	638.25
3971.17	4284.83	1035.17	4724.36	637.64
4002.17	4253.83	1066.17	4724.55	637.45
4034.16	4221.84	1098.16	4724.94	637.06
4066.14	4189.86	1130.14	4725.53	636.47
4098.10	4157.90	1162.10	4726.06	635.94
4130.06	4125.94	1194.06	4726.62	635.38

4162.03	4093.97	1226.03	4726.89	635.11
4194.02	4061.98	1258.02	4727.12	634.88
4226.02	4029.98	1290.02	4727.34	634.66
4258.02	3997.98	1322.02	4727.45	634.55
4290.02	3965.98	1354.02	4727.62	634.38
4322.01	3933.99	1386.01	4727.62	634.38
4354.01	3901.99	1418.01	4727.31	634.69
4386.01	3869.99	1450.01	4727.06	634.94
4418.00	3838.00	1482.00	4726.75	635.25
4432.00	3824.00	1496.00	4726.62	635.38
4464.00	3792.00	1528.00	4726.54	635.46
4496.00	3760.00	1560.00	4726.45	635.55
4528.00	3728.00	1592.00	4726.31	635.69
4559.99	3696.01	1623.99	4726.15	635.85
4591.99	3664.01	1655.99	4725.98	636.02
4623.99	3632.01	1687.99	4725.67	636.33
4655.98	3600.02	1719.98	4725.20	636.80
4687.98	3568.02	1751.98	4724.53	637.47
4719.97	3536.03	1783.97	4723.77	638.23
4751.96	3504.04	1815.96	4723.16	638.84
4783.95	3472.05	1847.95	4722.52	639.48
4815.94	3440.06	1879.94	4721.65	640.35
4847.92	3408.08	1911.92	4720.65	641.35
4878.90	3377.10	1942.90	4719.56	642.44
4910.88	3345.12	1974.88	4718.50	643.50
4942.86	3313.14	2006.86	4717.53	644.47
4974.84	3281.16	2038.84	4716.60	645.40
5006.82	3249.18	2070.82	4715.74	646.26
5038.82	3217.18	2102.82	4714.98	647.02
5070.81	3185.19	2134.81	4714.51	647.49
5102.81	3153.19	2166.81	4714.29	647.71
5134.81	3121.19	2198.81	4714.20	647.80
5166.80	3089.20	2230.80	4714.57	647.43
5198.78	3057.22	2262.78	4715.54	646.46
5230.76	3025.24	2294.76	4716.63	645.37
5261.75	2994.25	2325.75	4717.52	644.48
5293.74	2962.26	2357.74	4718.33	643.67
5325.72	2930.28	2389.72	4719.26	642.74
5357.70	2898.30	2421.70	4720.37	641.63
5389.67	2866.33	2453.67	4721.57	640.43
5421.64	2834.36	2485.64	4722.94	639.06
5453.60	2802.40	2517.60	4724.42	637.58
5485.55	2770.45	2549.55	4726.04	635.96
5517.46	2738.54	2581.46	4727.68	634.32
5549.36	2706.64	2613.36	4729.33	632.67
5581.27	2674.73	2645.27	4731.05	630.95
5613.21	2642.79	2677.21	4732.48	629.52
5645.17	2610.83	2709.17	4733.73	628.27
5677.14	2578.86	2741.14	4734.93	627.07
5709.11	2546.89	2773.11	4735.83	626.17
5741.09	2514.91	2805.09	4736.36	625.64
5772.08	2483.92	2836.08	4736.52	625.48
5804.08	2451.92	2868.08	4736.38	625.62
5836.08	2419.92	2900.08	4736.07	625.93
5869.08	2386.92	2933.08	4735.73	626.27

5900.08	2355.92	2964.08	4735.27	626.73
5932.07	2323.93	2996.07	4734.62	627.38
5964.06	2291.94	3028.06	4734.04	627.96
5996.06	2259.94	3060.06	4733.59	628.41
6028.05	2227.95	3092.05	4733.09	628.91
6060.05	2195.95	3124.05	4732.61	629.39
6092.05	2163.95	3156.05	4732.31	629.69
6124.04	2131.96	3188.04	4732.14	629.86
6156.04	2099.96	3220.04	4732.11	629.89
6188.03	2067.97	3252.03	4732.00	630.00
6220.03	2035.97	3284.03	4731.78	630.22
6252.03	2003.97	3316.03	4731.47	630.53
6284.02	1971.98	3348.02	4731.08	630.92
6316.01	1939.99	3380.01	4730.80	631.20
6347.99	1908.01	3411.99	4730.60	631.40
6379.98	1876.02	3443.98	4730.38	631.62
6411.96	1844.04	3475.96	4729.99	632.01
6443.94	1812.06	3507.94	4729.40	632.60
6474.94	1781.06	3538.94	4728.78	633.22
6506.93	1749.07	3570.93	4728.19	633.81
6538.93	1717.07	3602.93	4727.72	634.28
6570.92	1685.08	3634.92	4727.13	634.87
6602.87	1653.13	3666.87	4726.05	635.95
6634.82	1621.18	3698.82	4724.73	637.27
6728.69	1527.31	3792.69	4721.05	640.95
6775.62	1480.38	3839.62	4719.08	642.92

$$\frac{((D217-D216)/(\$B\$217-\$B\$216))*45}{((\$B\$60-\$B\$11)/((\$B\$60-\$B\$59)/(C60-C59)))-C60}*-1$$

trapolator

True Vert Depth (ft)	Northings (+ Southings (-) (ft)	Eastings (+ Westings (-) (ft)	Vertical Section (ft)	FNL	FSL	FNL	FSL	FWL	FEL
				4819.57	531.45	-7.34	531.41	2004.55	731.45
4834.83	559.57	-7.12	559.53	1976.43	759.57	7496.43	-2176.43	4694.88	667.12
4827.68	546.39	-7.22	546.35	1989.61	746.39	7509.61	-2189.61	4694.78	667.22