

Wellbores - Step #2

Actual Deviation Survey: <des>, Proposed? No
 Deviation Surveys - Step #1

Wellbore Name: Original Hole

Des:	Date: 2012/08/21	VS Dir (°):	
Tie-in Data	Convergence (°):	Decl (°):	
Azm North Typ:	Incl (°)	Azm (°)	
Survey Data			
MD (ftKB)			
15		0	0
912		0.4	170.97
1,370		0.4	176.98
1,742		0.6	150.08
1,837		0.7	129.46
1,932		0.8	132.33
2,027		0.9	126.25
2,122		1.1	121.38
2,217		0.9	112.73
2,312		0.3	60.17
2,407		0.9	142.33
2,597		1.4	127.38
2,692		2	134.36
2,787		3.5	128.28
2,882		2.3	119.77
2,977		0.3	99.41
3,072		0.3	144.75
3,168		0.4	341.05
3,263		0.2	8.18
3,358		0.1	20.01
3,452		0.6	126.81
3,546		0.9	127.74
3,735		0.4	187.19
3,767		0.3	145.53
3,830		4.1	171.72
3,861		6.8	178.18
3,893		8.4	181.21
3,924		9	186.48
3,956		10.4	186.23
3,987		13.1	181.81
4,019		17.2	177.23
4,050		20.1	174.85
4,081		23.4	173.91
4,113		26.6	173.53
4,144		26.6	171.59
4,176		26.1	171.17
4,207		27.3	173.04
4,239		27.7	175.85
4,270		28.8	178.71

4,302	31	179.74
4,333	33.4	179.8
4,365	36.3	179.94
4,397	38.9	179.79
4,428	41	180.13
4,459	43.4	180.2
4,491	45.4	179.91
4,901	65.8	181.24
4,933	68.1	181.24
5,024	76.9	180.88
5,056	80.7	181.39
5,088	82.3	0
5,120	83.2	183.11
5,151	85.9	181.26
5,215	90.3	181.7
5,310	90.4	181.65
5,405	181.6	92.04
5,500	86.7	179.5
5,595	89.9	181.13
5,627	90.8	181.11
5,658	91.2	180.42
5,690	91.5	179.93
5,722	91.9	180.29
5,785	92.3	180.04
5,848	92.5	179.62
5,912	91.2	179.58
5,975	90.9	179.6
6,039	90.3	179.29
6,102	89.7	178.84
6,165	89.9	178.8
6,229	90.3	178.02
6,292	90.7	177.54
6,355	90.2	177.09
6,450	85.9	177.17
6,514	87.2	177.79
6,577	88.1	178.01
6,640	89.5	176.87
6,704	90.6	179.11
6,799	91.6	178.18
6,862	92.7	179.25
6,925	94	179.22
6,988	92	179.17
7,052	91.8	179.24
7,141	91.3	178.97
7,236	91.2	179.74
7,330	90.4	180.73
7,425	90.3	181.9

7,520	90.8	182.69
7,615	91	181.47
7,710	91.3	181.11
7,806	90.2	181.01
7,901	88.5	180.63
7,996	89.3	180.76
8,091	89.9	181.07
8,186	90.6	181.16
8,281	91.2	180.54
8,376	91.1	181.03
8,471	91.9	180
8,566	91.8	178.99
8,661	92.4	179.14
8,756	91.4	178.3
8,850	90.15	177.82
8,894	89.72	178.08

Com:

MD Tie In (ftKB):	Azimuth Tie In (°):	Inclination Tie In (°):	TVDTie In (ftKB):	NSTie In (ft):
Survey Company	Method	TVD (ftKB)	VS (ft)	NS (ft)
Baker Hughes INTEQ	MWD	15	0	0
Baker Hughes INTEQ	MWD	912	3	-3.09
Baker Hughes INTEQ	MWD	1,370	6	-6.07
Baker Hughes INTEQ	MWD	1,742	9	-8.83
Baker Hughes INTEQ	MWD	1,837	10	-9.62
Baker Hughes INTEQ	MWD	1,932	10	-10.43
Baker Hughes INTEQ	MWD	2,027	11	-11.29
Baker Hughes INTEQ	MWD	2,122	12	-12.17
Baker Hughes INTEQ	MWD	2,217	13	-12.93
Baker Hughes INTEQ	MWD	2,312	13	-13.08
Baker Hughes INTEQ	MWD	2,407	14	-13.51
Baker Hughes INTEQ	MWD	2,597	16	-16.06
Baker Hughes INTEQ	MWD	2,692	18	-17.9
Baker Hughes INTEQ	MWD	2,787	21	-20.82
Baker Hughes INTEQ	MWD	2,882	24	-23.56
Baker Hughes INTEQ	MWD	2,977	25	-24.55
Baker Hughes INTEQ	MWD	3,072	25	-24.78
Baker Hughes INTEQ	MWD	3,168	25	-24.7
Baker Hughes INTEQ	MWD	3,263	24	-24.3
Baker Hughes INTEQ	MWD	3,358	24	-24.12
Baker Hughes INTEQ	MWD	3,452	25	-24.37
Baker Hughes INTEQ	MWD	3,546	25	-25.14
Baker Hughes INTEQ	MWD	3,735	27	-26.68
Baker Hughes INTEQ	MWD	3,767	27	-26.85
Baker Hughes INTEQ	MWD	3,829	29	-29.23
Baker Hughes INTEQ	MWD	3,860	32	-32.17
Baker Hughes INTEQ	MWD	3,892	37	-36.39
Baker Hughes INTEQ	MWD	3,923	41	-41.06
Baker Hughes INTEQ	MWD	3,954	47	-46.43
Baker Hughes INTEQ	MWD	3,985	53	-52.74
Baker Hughes INTEQ	MWD	4,015	61	-61.09
Baker Hughes INTEQ	MWD	4,045	71	-70.97
Baker Hughes INTEQ	MWD	4,074	83	-82.39
Baker Hughes INTEQ	MWD	4,103	96	-95.82
Baker Hughes INTEQ	MWD	4,130	110	-109.57
Baker Hughes INTEQ	MWD	4,159	124	-123.61
Baker Hughes INTEQ	MWD	4,187	138	-137.41
Baker Hughes INTEQ	MWD	4,215	152	-152.11
Baker Hughes INTEQ	MWD	4,242	167	-166.76

Baker Hughes INTEQ	MWD	4,270	183	-182.72
Baker Hughes INTEQ	MWD	4,296	199	-199.26
Baker Hughes INTEQ	MWD	4,323	218	-217.54
Baker Hughes INTEQ	MWD	4,348	237	-237.05
Baker Hughes INTEQ	MWD	4,372	257	-256.94
Baker Hughes INTEQ	MWD	4,395	278	-277.75
Baker Hughes INTEQ	MWD	4,418	300	-300.14
Baker Hughes INTEQ	MWD	4,648	637	-636.61
Baker Hughes INTEQ	MWD	4,661	666	-666.05
Baker Hughes INTEQ	MWD	4,688	753	-752.74
Baker Hughes INTEQ	MWD	4,694	784	-784.11
Baker Hughes INTEQ	MWD	4,716	784	-783.78
Baker Hughes INTEQ	MWD	4,738	784	-783.82
Baker Hughes INTEQ	MWD	4,741	815	-814.66
Baker Hughes INTEQ	MWD	4,743	879	-878.59
Baker Hughes INTEQ	MWD	4,742	974	-973.54
Baker Hughes INTEQ	MWD	4,682	1,034	-1,033.77
Baker Hughes INTEQ	MWD	4,623	1,096	-1,095.44
Baker Hughes INTEQ	MWD	4,626	1,190	-1,190.38
Baker Hughes INTEQ	MWD	4,626	1,222	-1,222.37
Baker Hughes INTEQ	MWD	4,625	1,253	-1,253.37
Baker Hughes INTEQ	MWD	4,625	1,285	-1,285.36
Baker Hughes INTEQ	MWD	4,624	1,317	-1,317.34
Baker Hughes INTEQ	MWD	4,621	1,380	-1,380.30
Baker Hughes INTEQ	MWD	4,619	1,443	-1,443.25
Baker Hughes INTEQ	MWD	4,617	1,507	-1,507.21
Baker Hughes INTEQ	MWD	4,616	1,570	-1,570.20
Baker Hughes INTEQ	MWD	4,615	1,634	-1,634.19
Baker Hughes INTEQ	MWD	4,615	1,697	-1,697.18
Baker Hughes INTEQ	MWD	4,615	1,760	-1,760.17
Baker Hughes INTEQ	MWD	4,615	1,824	-1,824.14
Baker Hughes INTEQ	MWD	4,614	1,887	-1,887.09
Baker Hughes INTEQ	MWD	4,614	1,950	-1,950.02
Baker Hughes INTEQ	MWD	4,617	2,045	-2,044.83
Baker Hughes INTEQ	MWD	4,621	2,109	-2,108.65
Baker Hughes INTEQ	MWD	4,624	2,172	-2,171.55
Baker Hughes INTEQ	MWD	4,625	2,235	-2,234.47
Baker Hughes INTEQ	MWD	4,625	2,299	-2,298.42
Baker Hughes INTEQ	MWD	4,623	2,394	-2,393.38
Baker Hughes INTEQ	MWD	4,621	2,457	-2,456.32
Baker Hughes INTEQ	MWD	4,617	2,519	-2,519.20
Baker Hughes INTEQ	MWD	4,614	2,582	-2,582.10
Baker Hughes INTEQ	MWD	4,612	2,646	-2,646.06
Baker Hughes INTEQ	MWD	4,609	2,735	-2,735.02
Baker Hughes INTEQ	MWD	4,607	2,830	-2,829.99
Baker Hughes INTEQ	MWD	4,606	2,924	-2,923.98
Baker Hughes INTEQ	MWD	4,605	3,019	-3,018.95

Baker Hughes INTEQ	MWD	4,604	3,114	-3,113.87
Baker Hughes INTEQ	MWD	4,603	3,209	-3,208.79
Baker Hughes INTEQ	MWD	4,601	3,304	-3,303.75
Baker Hughes INTEQ	MWD	4,600	3,400	-3,399.72
Baker Hughes INTEQ	MWD	4,601	3,495	-3,494.70
Baker Hughes INTEQ	MWD	4,603	3,590	-3,589.68
Baker Hughes INTEQ	MWD	4,603	3,685	-3,684.66
Baker Hughes INTEQ	MWD	4,603	3,780	-3,779.64
Baker Hughes INTEQ	MWD	4,602	3,875	-3,874.62
Baker Hughes INTEQ	MWD	4,600	3,970	-3,969.59
Baker Hughes INTEQ	MWD	4,597	4,065	-4,064.56
Baker Hughes INTEQ	MWD	4,594	4,160	-4,159.50
Baker Hughes INTEQ	MWD	4,591	4,255	-4,254.43
Baker Hughes INTEQ	MWD	4,588	4,349	-4,349.35

EW Tie In (ft):

EW (ft)	DLS (°/100ft)
0	0
0.49	0.04
0.82	0.01
1.82	0.08
2.5	0.27
3.44	0.1
4.49	0.11
5.83	0.27
7.28	0.26
8.2	0.78
8.87	0.92
11.6	0.33
13.69	0.62
17.11	1.63
21.04	1.31
22.96	2.13
23.34	0.24
23.38	0.65
23.31	0.24
23.34	0.09
23.76	0.67
24.77	0.34
25.9	0.43
25.94	0.77
26.36	6.13
26.58	8.76
26.59	5.15
26.27	3.3
25.67	4.38
25.25	9.21
25.37	13.19
26.07	9.7
27.2	10.61
28.68	10.17
30.47	2.81
32.6	1.46
34.51	4.62
35.94	4.27
36.63	5.63

36.84	7.15
36.9	7.71
36.94	8.88
36.99	8.1
37	6.87
36.94	7.71
36.92	6.38
33.07	4.98
32.43	7.22
30.83	9.63
30.21	12.07
28.41	509.26
23.8	516.35
22.62	10.46
20.97	6.83
18.19	0.19
14.74	94.3
13.52	98.3
13	3.77
12.37	3
11.96	2.51
11.86	1.83
11.8	1.59
11.62	0.75
11.81	0.73
12.25	2.03
12.7	0.43
13.32	1
14.35	1.25
15.65	0.35
17.43	1.39
19.87	0.96
22.82	1.06
27.57	4.58
30.38	2.32
32.68	1.36
35.5	2.93
37.74	3.87
39.99	1.49
41.4	2.41
42.24	2.03
43.12	3.11
44.01	0.35
45.4	0.7
46.47	0.81
46.08	1.36
43.9	1.24

40.1	1
36.65	1.31
34.51	0.47
32.74	1.12
31.38	1.83
30.23	0.85
28.71	0.65
26.86	0.74
25.45	0.95
24.15	0.54
23.3	1.39
24.13	1.06
25.68	0.65
27.8	1.39