



123 Robert S. Kerr Ave.
Oklahoma City, OK 73102

Survey JENNIE 3510 2-10H

Step #1 - Create a Deviation Survey

Step

#2 - Attach the survey "Description" to the Wellbore - Deviation Survey

Wellbores - Step #2

Actual Deviation Survey Deviation Surveys, Proposed? No	Wellbore Name Original Hole
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Deviation Surveys - Step #1

Description Sidetrack 1 Surveys	Date 8/17/2012	VS Dir (°)	Comment
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Tie-in Data

Azimuth North Type	Convergence (°)	Declination (°)	MD Tie In (ftKB)	Azimuth Tie In (°)	Inclination Tie In (°)	TVDTie In (ftKB)	NSTie In (ft)	EWTie In (ft)
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Survey Data

MD (ftKB)	Incl (°)	Azm (°)	Survey Company	Method	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
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Actual Deviation Survey Sidetrack 1 Surveys, Proposed? <proposed>	Wellbore Name Sidetrack 1
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Deviation Surveys - Step #1

Description Sidetrack 1 Surveys	Date 8/17/2012	VS Dir (°)	Comment
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Tie-in Data

Azimuth North Type	Convergence (°)	Declination (°)	MD Tie In (ftKB)	Azimuth Tie In (°)	Inclination Tie In (°)	TVDTie In (ftKB)	NSTie In (ft)	EWTie In (ft)
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Survey Data

MD (ftKB)	Incl (°)	Azm (°)	Survey Company	Method	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
1,604	1.4	43.50			1,604	-14	14.21	13.49	0.09
2,080	1.0	39.70			2,080	-21	21.63	20.14	0.09
2,556	0.7	43.00			2,556	-27	26.95	24.78	0.06
3,032	0.5	346.80			3,032	-31	31.10	26.29	0.12
3,509	1.0	2.70			3,509	-37	37.28	26.01	0.11
3,890	0.2	311.10			3,890	-41	41.04	25.67	0.23
3,921	0.2	283.70			3,921	-41	41.09	25.57	0.31
3,953	2.6	199.10			3,953	-40	40.42	25.28	8.09
3,984	6.0	196.90			3,983	-38	38.20	24.58	10.98
4,016	9.0	196.50			4,015	-34	34.20	23.38	9.38
4,048	12.5	196.70			4,047	-28	28.48	21.68	10.94
4,080	15.1	196.20			4,078	-21	21.16	19.52	8.13
4,111	17.4	192.50			4,107	-13	12.76	17.39	8.13
4,143	19.6	189.80			4,138	-3	2.80	15.44	7.38
4,175	21.3	189.40			4,168	8	-8.23	13.57	5.33
4,206	22.7	186.70			4,197	20	-19.72	11.96	5.57
4,238	24.6	185.00			4,226	33	-32.49	10.66	6.31
4,270	27.1	184.60			4,255	46	-46.40	9.49	7.83
4,302	29.6	182.30			4,283	62	-61.56	8.59	8.52
4,333	32.1	181.00			4,309	78	-77.45	8.14	8.35
4,365	34.5	179.00			4,336	95	-95.01	8.15	8.25
4,397	37.1	179.90			4,362	114	-113.73	8.32	8.29
4,429	38.9	179.00			4,387	134	-133.43	8.52	5.89
4,460	41.2	178.60			4,411	153	-153.37	8.93	7.47
4,492	43.2	178.80			4,435	175	-174.86	9.42	6.26
4,524	44.5	179.20			4,458	197	-197.02	9.81	4.15
4,556	45.3	180.20			4,481	220	-219.61	9.92	3.33
4,587	46.1	179.70			4,502	242	-241.80	9.94	2.83
4,619	47.8	179.50			4,524	265	-265.18	10.11	5.33
4,651	49.4	180.20			4,545	289	-289.18	10.17	5.26
4,683	49.7	181.10			4,566	314	-313.53	9.89	2.34
4,746	48.8	179.60			4,607	361	-361.25	9.60	2.30
4,778	48.5	179.40			4,628	385	-385.27	9.81	1.05
4,810	48.0	178.40			4,650	409	-409.14	10.26	2.81
4,841	47.4	178.30			4,670	432	-432.06	10.92	1.95
4,873	49.0	178.00			4,692	456	-455.90	11.69	5.05



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Step

#2 - Attach the survey "Description" to the Wellbore - Deviation Survey

Survey Data									
MD (RKB)	Incl (°)	Azm (°)	Survey Company	Method	TVD (RKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
4,905	52.1	179.30			4,712	481	-480.60	12.27	10.18
4,937	55.7	180.60			4,731	507	-506.45	12.29	11.72
4,968	59.0	181.30			4,748	533	-532.55	11.85	10.81
5,000	62.9	181.60			4,763	561	-560.51	11.14	12.22
5,032	66.2	181.10			4,777	589	-589.39	10.46	10.41
5,064	69.5	180.20			4,789	619	-619.02	10.13	10.64
5,095	72.1	179.70			4,799	648	-648.30	10.16	8.52
5,127	74.6	179.60			4,808	679	-678.95	10.34	7.82
5,159	77.5	179.00			4,816	710	-710.00	10.72	9.24
5,191	79.8	178.30			4,822	741	-741.36	11.46	7.50
5,222	81.5	178.60			4,827	772	-771.94	12.29	5.57
5,254	81.9	178.80			4,832	804	-803.60	13.01	1.39
5,285	83.7	179.96			4,836	834	-834.35	13.34	7.00
5,453	88.2	191.30			4,848	1,001	-1,000.80	-3.11	7.24
5,485	88.3	188.40			4,849	1,032	-1,032.31	-8.58	9.06
5,580	88.9	187.80			4,851	1,126	-1,126.34	-21.97	0.89
5,675	88.9	189.00			4,853	1,220	-1,220.30	-35.84	1.26
5,769	89.7	185.80			4,854	1,313	-1,313.50	-47.95	3.51
5,864	89.1	184.60			4,855	1,408	-1,408.10	-56.55	1.41
5,959	90.5	184.10			4,855	1,502	-1,502.82	-63.76	1.56
5,991	90.6	184.20			4,855	1,534	-1,534.74	-66.08	0.44
6,023	91.1	183.90			4,855	1,566	-1,566.65	-68.34	1.82
6,054	91.4	183.90			4,854	1,597	-1,597.57	-70.44	0.97
6,086	92.0	183.60			4,853	1,629	-1,629.49	-72.54	2.10
6,117	92.1	183.60			4,852	1,660	-1,660.41	-74.48	0.32
6,149	92.0	183.60			4,851	1,692	-1,692.33	-76.49	0.31
6,180	91.3	183.40			4,850	1,722	-1,723.26	-78.38	2.35
6,212	91.4	182.30			4,849	1,754	-1,755.21	-79.97	3.45
6,244	91.2	180.80			4,848	1,786	-1,787.19	-80.84	4.73
6,276	91.3	181.10			4,848	1,818	-1,819.17	-81.37	0.99
6,308	91.6	179.80			4,847	1,850	-1,851.16	-81.62	4.17
6,339	92.0	179.40			4,846	1,881	-1,882.15	-81.40	1.82
6,371	92.1	179.00			4,845	1,913	-1,914.12	-80.96	1.29
6,395	91.7	178.20			4,844	1,937	-1,938.10	-80.37	3.73
6,426	91.7	177.40			4,843	1,968	-1,969.06	-79.18	2.58
6,456	91.6	177.20			4,842	1,998	-1,999.02	-77.77	0.75
6,487	91.1	176.80			4,841	2,029	-2,029.97	-76.15	2.07
6,517	90.4	176.40			4,841	2,059	-2,059.91	-74.37	2.69
6,548	89.9	176.30			4,841	2,090	-2,090.85	-72.39	1.64
6,639	89.5	176.20			4,841	2,181	-2,181.65	-66.44	0.45
6,730	90.1	175.70			4,842	2,272	-2,272.42	-60.01	0.86
6,823	89.1	176.40			4,842	2,365	-2,365.20	-53.61	1.31
6,914	91.4	177.40			4,842	2,456	-2,456.06	-48.69	2.76
7,005	91.0	177.50			4,840	2,546	-2,546.95	-44.64	0.45
7,101	90.1	177.20			4,839	2,642	-2,642.84	-40.20	0.99
7,196	89.7	177.10			4,839	2,737	-2,737.72	-35.48	0.43
7,291	90.7	177.00			4,839	2,832	-2,832.59	-30.59	1.06
7,386	91.0	177.40			4,838	2,927	-2,927.47	-25.95	0.53
7,482	91.5	176.90			4,835	3,023	-3,023.33	-21.18	0.74
7,577	89.5	176.30			4,835	3,118	-3,118.15	-15.54	2.20
7,671	90.0	175.80			4,835	3,212	-3,211.93	-9.07	0.75
7,766	90.1	176.70			4,835	3,307	-3,306.72	-2.85	0.95



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Survey Data

MD (ftKB)	Incl (°)	Azm (°)	Survey Company	Method	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)
7,861	90.6	175.80			4,834	3,401	-3,401.52	3.36	1.08
7,957	90.6	177.80			4,833	3,497	-3,497.36	8.72	2.08
8,052	91.5	177.60			4,832	3,592	-3,592.26	12.53	0.97
8,147	92.1	176.40			4,829	3,687	-3,687.08	17.50	1.41
8,241	89.7	176.40			4,827	3,781	-3,780.88	23.40	2.55
8,337	89.2	177.30			4,828	3,877	-3,876.73	28.67	1.07
8,432	90.1	179.80			4,829	3,972	-3,971.69	31.08	2.80
8,527	90.0	180.00			4,829	4,067	-4,066.69	31.24	0.24
8,622	90.7	179.40			4,828	4,162	-4,161.68	31.74	0.97
8,718	91.7	179.70			4,826	4,258	-4,257.66	32.49	1.09
8,813	87.9	178.50			4,826	4,353	-4,352.63	33.99	4.19
8,908	89.3	177.40			4,829	4,448	-4,447.53	37.38	1.87
9,003	90.5	175.80			4,829	4,543	-4,542.36	43.02	2.11
9,098	90.4	174.80			4,828	4,637	-4,637.04	50.80	1.06
9,161	88.8	174.50			4,828	4,700	-4,699.76	56.68	2.58