



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

Survey SEAN 3119 2-18H

Step #1 - Create a Deviation Survey

Step

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

Wellbores - Step #2

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

Description	Date 7/12/2012	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)
255	0.5	252.20	rig	Incl	255	0	-0.34	-1.06	0.20
558	1.0	252.20	rig	Incl	558	-2	-1.55	-4.84	0.17
720	1.4	252.20	rig	Incl	720	-3	-2.59	-8.07	0.25
1,050	1.4	252.20	rig	Incl	1,050	-6	-5.05	-15.74	0.00
1,362	0.4	252.20	drill rite	Incl	1,362	-7	-6.55	-20.41	0.32
1,833	1.2	271.10	drill rite	Incl	1,833	-8	-6.96	-26.91	0.18
2,309	0.3	356.20	drill rite	Incl	2,309	-7	-5.62	-31.97	0.25
2,783	0.4	43.50	drill rite	Incl	2,783	-4	-3.18	-30.91	0.06
3,257	0.9	87.70	drill rite	Incl	3,257	-3	-1.83	-26.06	0.14
3,732	0.8	109.30	drill rite	Incl	3,732	-3	-2.78	-19.20	0.07
4,145	0.6	137.70	drill rite	Incl	4,145	-6	-5.33	-15.02	0.10
4,239	0.3	124.90	drill rite	Incl	4,239	-6	-5.84	-14.49	0.33
4,271	0.3	106.30	drill rite	Incl	4,271	-6	-5.91	-14.34	0.30
4,302	1.2	13.60	drill rite	Incl	4,302	-6	-5.62	-14.19	4.03
4,398	7.6	355.10	drill rite	Incl	4,397	1	1.69	-14.49	6.74
4,431	9.5	354.70	drill rite	Incl	4,430	6	6.58	-14.93	5.76
4,463	11.3	355.80	drill rite	Incl	4,461	12	12.34	-15.40	5.66
4,494	13.9	0.20	drill rite	Incl	4,492	19	19.09	-15.61	8.93
4,526	16.8	1.30	drill rite	Incl	4,522	27	27.56	-15.49	9.11
4,558	18.6	2.90	drill rite	Incl	4,553	37	37.28	-15.13	5.83
4,590	20.3	3.60	drill rite	Incl	4,583	47	47.92	-14.52	5.36
4,622	22.1	3.00	drill rite	Incl	4,613	59	59.47	-13.86	5.67
4,654	23.9	1.90	drill rite	Incl	4,642	72	71.96	-13.33	5.78
4,686	25.6	1.00	drill rite	Incl	4,671	85	85.35	-13.00	5.44
4,718	27.4	359.30	drill rite	Incl	4,700	99	99.63	-12.96	6.10
4,750	29.4	358.60	drill rite	Incl	4,728	114	114.85	-13.25	6.34
4,782	31.4	358.40	drill rite	Incl	4,756	131	131.03	-13.67	6.26
4,814	32.9	358.90	drill rite	Incl	4,783	148	148.06	-14.07	4.76
4,846	34.3	359.80	drill rite	Incl	4,810	165	165.76	-14.27	4.64
4,878	36.0	0.40	drill rite	Incl	4,836	184	184.19	-14.24	5.42
4,910	37.7	0.80	drill rite	Incl	4,861	203	203.37	-14.03	5.37
4,942	39.8	1.50	drill rite	Incl	4,886	223	223.40	-13.63	6.70
4,974	42.6	1.60	drill rite	Incl	4,910	244	244.47	-13.06	8.75
5,007	46.0	2.10	drill rite	Incl	4,934	267	267.50	-12.31	10.36
5,038	48.9	2.20	drill rite	Incl	4,955	290	290.32	-11.45	9.36
5,070	49.2	2.40	drill rite	Incl	4,976	314	314.47	-10.48	1.05
5,102	49.2	1.60	drill rite	Incl	4,997	338	338.68	-9.64	1.89
5,134	48.9	1.20	drill rite	Incl	5,018	362	362.84	-9.05	1.33
5,166	48.8	1.00	drill rite	Incl	5,039	387	386.93	-8.58	0.56
5,198	48.8	0.90	drill rite	Incl	5,060	411	411.00	-8.19	0.24
5,230	51.3	1.90	drill rite	Incl	5,081	435	435.52	-7.58	8.17
5,262	54.2	2.10	drill rite	Incl	5,100	461	460.98	-6.69	9.08
5,294	57.0	1.80	drill rite	Incl	5,118	487	487.36	-5.80	8.78
5,325	60.9	1.40	drill rite	Incl	5,134	514	513.91	-5.06	12.63
5,357	64.1	1.60	drill rite	Incl	5,149	542	542.28	-4.31	10.02



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Survey Data										
MD (ftKB)	Incl (°)	Azm (°)	Survey Company	Method	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	
5,389	67.1	1.30	drill rite	Incl	5,162	571	571.41	-3.58	9.41	
5,420	69.8	1.20	drill rite	Incl	5,173	600	600.23	-2.95	8.71	
5,452	72.7	1.20	drill rite	Incl	5,184	630	630.52	-2.31	9.06	
5,484	75.3	1.40	drill rite	Incl	5,192	661	661.27	-1.61	8.15	
5,515	78.6	1.40	drill rite	Incl	5,199	691	691.46	-0.88	10.65	
5,567	83.8	2.10	drill rite	Incl	5,207	743	742.80	0.69	10.09	
5,649	88.5	2.60	drill rite	Incl	5,213	824	824.53	4.05	5.76	
5,736	89.1	2.10	drill rite	Incl	5,215	911	911.43	7.62	0.90	
5,831	91.0	3.70	drill rite	Incl	5,215	1,006	1,006.30	12.42	2.61	
5,926	92.2	3.90	drill rite	Incl	5,212	1,101	1,101.06	18.71	1.28	
6,021	90.6	2.20	drill rite	Incl	5,210	1,196	1,195.89	23.77	2.46	
6,116	90.6	1.70	drill rite	Incl	5,209	1,291	1,290.83	27.00	0.53	
6,211	90.1	1.20	drill rite	Incl	5,208	1,386	1,385.79	29.40	0.74	
6,306	90.8	1.20	drill rite	Incl	5,207	1,481	1,480.77	31.39	0.74	
6,401	90.3	1.90	drill rite	Incl	5,206	1,576	1,575.73	33.96	0.91	
6,496	90.8	2.10	drill rite	Incl	5,205	1,671	1,670.67	37.28	0.57	
6,591	91.7	2.00	drill rite	Incl	5,203	1,766	1,765.58	40.68	0.95	
6,686	90.9	2.80	drill rite	Incl	5,201	1,861	1,860.47	44.65	1.19	
6,781	89.9	2.50	drill rite	Incl	5,201	1,956	1,955.37	49.04	1.10	
6,876	90.2	2.40	drill rite	Incl	5,201	2,051	2,050.28	53.11	0.33	
6,971	90.7	2.20	drill rite	Incl	5,200	2,146	2,145.20	56.92	0.57	
7,066	90.5	2.10	drill rite	Incl	5,199	2,241	2,240.13	60.48	0.24	
7,161	90.9	2.10	drill rite	Incl	5,198	2,336	2,335.06	63.96	0.42	
7,256	87.4	1.10	drill rite	Incl	5,199	2,431	2,429.99	66.61	3.83	
7,351	87.9	0.10	drill rite	Incl	5,203	2,526	2,524.91	67.61	1.18	
7,446	87.3	0.00	drill rite	Incl	5,207	2,621	2,619.82	67.69	0.64	
7,541	87.4	0.30	drill rite	Incl	5,211	2,716	2,714.72	67.94	0.33	
7,636	91.7	0.80	drill rite	Incl	5,212	2,811	2,809.69	68.85	4.56	
7,731	91.5	0.70	drill rite	Incl	5,209	2,905	2,904.65	70.09	0.24	
7,826	92.8	1.10	drill rite	Incl	5,206	3,000	2,999.57	71.59	1.43	
7,921	93.4	1.50	drill rite	Incl	5,201	3,095	3,094.40	73.74	0.76	
8,016	93.2	2.70	drill rite	Incl	5,195	3,190	3,189.18	77.21	1.28	
8,111	88.3	3.00	drill rite	Incl	5,194	3,285	3,284.02	81.93	5.17	
8,206	88.6	3.10	drill rite	Incl	5,197	3,380	3,378.86	86.99	0.33	
8,301	88.6	2.50	drill rite	Incl	5,199	3,475	3,473.71	91.63	0.63	
8,396	89.0	1.30	drill rite	Incl	5,201	3,570	3,568.64	94.78	1.33	
8,491	90.3	0.60	drill rite	Incl	5,201	3,665	3,663.62	96.35	1.55	
8,586	92.0	1.40	drill rite	Incl	5,200	3,760	3,758.58	98.01	1.98	
8,681	93.1	1.50	drill rite	Incl	5,195	3,855	3,853.46	100.41	1.16	
8,776	91.6	2.60	drill rite	Incl	5,191	3,950	3,948.31	103.81	1.96	
8,871	90.2	3.00	drill rite	Incl	5,190	4,045	4,043.18	108.45	1.53	
8,966	90.5	2.40	drill rite	Incl	5,189	4,140	4,138.08	112.92	0.71	
9,061	90.7	2.00	drill rite	Incl	5,188	4,235	4,233.00	116.57	0.47	
9,156	89.9	2.00	drill rite	Incl	5,188	4,330	4,327.94	119.88	0.84	
9,251	91.6	1.10	drill rite	Incl	5,187	4,425	4,422.89	122.45	2.02	
9,346	92.1	1.90	drill rite	Incl	5,184	4,520	4,517.81	124.94	0.99	
9,441	91.5	2.90	drill rite	Incl	5,181	4,614	4,612.68	128.91	1.23	
9,536	91.7	2.50	drill rite	Incl	5,178	4,709	4,707.54	133.39	0.47	
9,631	91.4	2.00	drill rite	Incl	5,175	4,804	4,802.43	137.12	0.61	
9,726	88.5	2.00	drill rite	Incl	5,175	4,899	4,897.36	140.43	3.05	
9,821	88.8	2.20	drill rite	Incl	5,178	4,994	4,992.27	143.91	0.38	
9,916	88.6	1.90	drill rite	Incl	5,180	5,089	5,087.18	147.31	0.38	



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Survey Data

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10,017	89.3	2.30	drill rite	Incl	5,182	5,190	5,188.10	151.01	0.80
10,066	89.3	2.30	drill rite	Incl	5,182	5,239	5,237.06	152.98	0.00