

30-015-39239

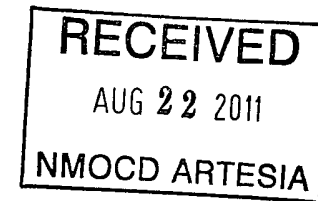


Job Number: ☐
 Company: ☐
 Lease/Well: ☐
 Location: ☐
 Rig Name: ☐
 RKB: ☐
 G.L. or M.S.L.: ☐

State/Country: ☐
 Declination: 7.66
 Grid: ☐
 File name: C:\WINSERVE\201102.SVY
 Date/Time: 14-Aug-11 / 09:37
 Curve Name: SHRIKE 10 COM 2-H

WellPath Solutions Inc

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 269.84
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead



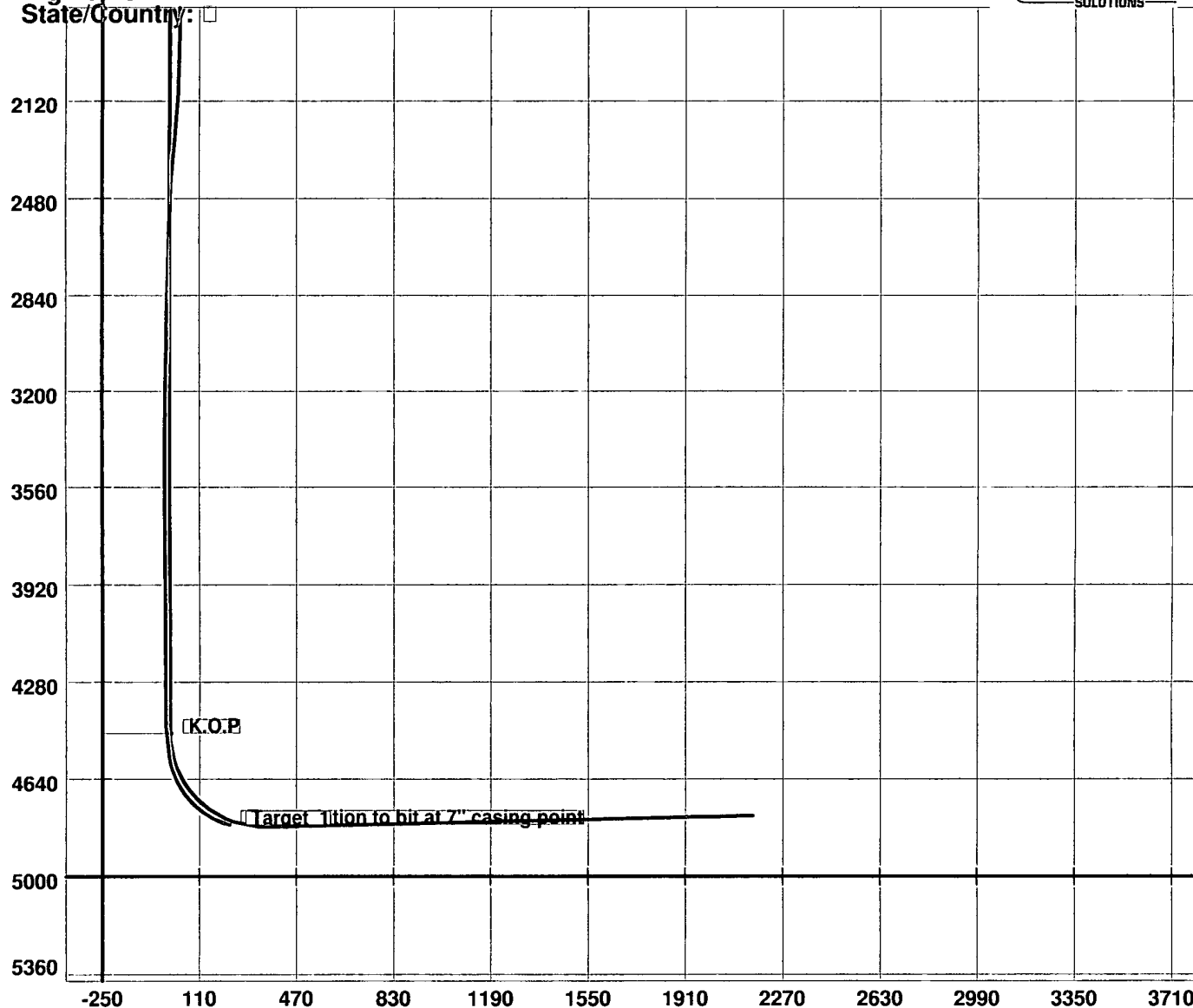
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
100.00	.40	345.98	100.00	.34	-.08	.08	.35	345.98	.40
200.00	.30	345.60	200.00	.93	-.23	.23	.96	345.88	.10
300.00	.55	344.71	299.99	1.65	-.43	.42	1.70	345.51	.25
400.00	.42	314.88	399.99	2.37	-.81	.81	2.50	341.08	.28
500.00	.90	314.61	499.98	3.18	-1.63	1.62	3.57	332.84	.48
600.00	1.03	316.53	599.97	4.38	-2.81	2.80	5.21	327.35	.13
700.00	1.62	317.33	699.94	6.07	-4.38	4.37	7.49	324.18	.59
800.00	2.22	317.33	799.89	8.54	-6.66	6.63	10.83	322.06	.60
900.00	2.86	312.82	899.79	11.66	-9.80	9.77	15.23	319.95	.67
1000.00	3.23	313.25	999.65	15.28	-13.68	13.64	20.51	318.17	.37
1100.00	3.47	313.43	1099.48	19.29	-17.93	17.88	26.34	317.10	.24
1200.00	3.11	310.52	1199.31	23.14	-22.19	22.13	32.06	316.20	.40

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
1300.00	2.75	312.54	1299.18	26.52	-26.02	25.95	37.15	315.55	.37
1400.00	2.36	312.88	1399.08	29.55	-29.30	29.21	41.61	315.24	.39
1500.00	1.74	304.48	1499.02	31.81	-32.06	31.97	45.16	314.78	.69
1600.00	1.46	290.44	1598.98	33.11	-34.50	34.41	47.82	313.82	.48
1700.00	1.43	276.01	1698.95	33.69	-36.94	36.84	49.99	312.36	.36
1800.00	.14	246.87	1798.93	33.77	-38.29	38.19	51.05	311.41	1.31
1900.00	1.83	110.77	1898.92	33.15	-36.91	36.82	49.61	311.93	1.93
2000.00	1.73	116.40	1998.87	31.92	-34.06	33.97	46.68	313.14	.20
2100.00	3.06	109.55	2098.78	30.35	-30.20	30.11	42.81	315.15	1.36
2200.00	4.85	107.63	2198.54	28.18	-23.65	23.57	36.79	319.99	1.79
2300.00	5.52	108.04	2298.13	25.41	-15.05	14.98	29.53	329.36	.67
2400.00	4.67	105.21	2397.73	22.85	-6.55	6.48	23.77	344.01	.89
2500.00	2.49	121.44	2497.53	20.65	-.77	.71	20.66	357.88	2.38
2600.00	2.07	126.25	2597.45	18.45	2.54	-2.60	18.62	7.85	.46
2700.00	1.92	126.63	2697.39	16.38	5.35	-5.39	17.23	18.07	.15
2800.00	1.79	125.81	2797.34	14.47	7.96	-8.00	16.51	28.81	.13
2900.00	1.86	124.51	2897.29	12.63	10.56	-10.60	16.47	39.89	.08
3000.00	1.57	129.50	2997.25	10.84	12.95	-12.98	16.89	50.07	.33
3100.00	1.10	137.43	3097.22	9.27	14.66	-14.69	17.34	57.71	.50
3200.00	1.01	132.64	3197.20	7.96	15.96	-15.98	17.83	63.49	.13
3300.00	.75	139.27	3297.19	6.87	17.03	-17.05	18.37	68.04	.28
3400.00	.65	171.46	3397.18	5.81	17.55	-17.56	18.48	71.67	.40
3500.00	.70	184.86	3497.18	4.64	17.58	-17.59	18.18	75.21	.17
3600.00	.74	186.17	3597.17	3.39	17.46	-17.47	17.78	79.01	.04
3700.00	.59	195.04	3697.16	2.25	17.25	-17.26	17.40	82.56	.18
3800.00	.68	192.02	3797.15	1.17	17.00	-17.00	17.04	86.05	.10
3900.00	.54	192.14	3897.15	.13	16.77	-16.77	16.77	89.54	.14
4000.00	.55	197.24	3997.14	-.79	16.53	-16.53	16.55	92.72	.05
4100.00	.52	188.23	4097.14	-1.69	16.33	-16.32	16.41	95.92	.09
4200.00	.52	193.50	4197.14	-2.58	16.15	-16.15	16.36	99.09	.05
4300.00	.38	197.38	4297.13	-3.34	15.95	-15.94	16.30	101.83	.14
4400.00	.25	201.79	4397.13	-3.86	15.77	-15.76	16.23	103.75	.13
4427.00	.39	202.97	4424.13	-4.00	15.71	-15.70	16.21	104.28	.52
4454.00	3.20	273.50	4451.12	-4.04	14.92	-14.91	15.46	105.14	11.45

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
4485.00	8.90	287.80	4481.93	-3.25	11.77	-11.76	12.21	105.44	18.88
4530.00	5.80	280.00	4526.56	-1.79	6.22	-6.21	6.47	106.08	7.22
4561.00	9.30	272.30	4557.29	-1.42	2.17	-2.17	2.59	123.17	11.73
4593.00	14.10	267.80	4588.61	-1.47	-4.31	4.31	4.55	251.23	15.26
4624.00	19.60	265.10	4618.27	-2.05	-13.27	13.28	13.43	261.20	17.92
4655.00	25.50	263.90	4646.89	-3.21	-25.10	25.11	25.30	262.71	19.09
4687.00	31.60	263.40	4674.98	-4.91	-40.29	40.30	40.59	263.06	19.08
4718.00	37.80	262.80	4700.46	-7.03	-57.80	57.82	58.23	263.06	20.03
4750.00	43.60	262.00	4724.71	-9.80	-78.47	78.50	79.08	262.88	18.20
4781.00	49.60	261.40	4746.00	-13.06	-100.75	100.79	101.59	262.62	19.41
4812.00	55.20	263.60	4764.91	-16.24	-125.09	125.14	126.14	262.60	18.92
4844.00	60.20	265.30	4782.00	-18.85	-152.00	152.06	153.17	262.93	16.26
4853.00	61.90	265.80	4786.36	-19.46	-159.85	159.91	161.03	263.06	19.50
Extrapolation to bit at 7" casing point									
4900.00	70.00	269.00	4805.50	-21.36	-202.69	202.75	203.81	263.98	18.32

Job Number: ☐
Company: ☐
Lease/Well: ☐
Location: ☐
Rig Name: ☐
State/Country: ☐

File name: C:\WINSERVE\201102.SVY



° -- SHRIKE 10 COM 2-H ^ -- Shrike 10 COM 2-H ˇ -- EXTRAPOLATION TO BIT AT TD

[KOP->6706 TVD Begin Build @ 3.00% 100 Ft]