

# TEKTON WINDSOR, LLC

Location	Windsor, CO, USA	Slot	Slot #11
Field	Windsor Project	Well	RANCHO WATER VALLEY 11 #7-7-33-270-6-CH
Installation	Rancho Water Valley	Wellbore	RANCHO WATER VALLEY 11 #7-7-33-270-6-CH (PWB)

Scale 1 cm = 500 ft

East (feet) ->

-8000 -7000 -6000 -5000 -4000 -3000 -2000 -1000 0 1000 2000

2000

<- North(feet)

Scale 1 cm = 500 ft

RWV 11 - T2 Surface 0.00 N 0.00 E RWV 11 - T1

Tie on - 0.00 Inc, 16.00 MD, 16.00 TVD, 0.00 VS

DC Kick off Point - 0.00 Inc, 1616.00 MD, 1616.00 TVD, 0.00 VS

## WELL PROFILE DATA

Point	MD	Inc	Azi	TVD	North	East	deg/100ft	V. Sect
Tie on	16.00	0.00	0.00	16.00	0.00	0.00	0.00	0.00
KOP	1616.00	0.00	0.00	1616.00	0.00	0.00	0.00	0.00
End of Build	6502.59	18.52	18.51	6417.95	742.38	248.53	0.38	-163.38
Target RWV 11 - T1	7302.81	90.00	269.21	6921.00	894.84	-228.45	12.00	327.73
T.D. & Target RWV 11 -	14140.07	90.00	269.21	6921.00	800.39	-7065.06	0.00	7110.25

Created by admin

Date plotted 22-Oct-2012

Plot reference is RANCHO WATER VALLEY 11 #7-7-33-270-6-CH (PWB).

Ref wellpath is RANCHO WATER VALLEY 11 #7-7-33-270-6-CH (PWP#1).

Coordinates are in feet reference Slot #11.

True Vertical Depths are reference Rig Datum.

Measured Depths are reference Rig Datum.

Rig Datum: Planned Datum #1

Rig Datum to Mean Sea Level: 4791.00 ft.

Plot North is aligned to GRID North.

End of Build - 18.52 Inc, 6502.59 MD, 6417.95 TVD, -163.38 VS

RWV 11 - T1

T.D. & End of Hold - 6921.00 TVD, 800.39 N 7065.06 W

S/C Kick off Point - 90.00 Inc, 7302.81 MD, 6921.00 TVD, 327.73 VS

RWV 11 - T2

Scale 1 cm = 250 ft

Vertical Section (feet) ->

Azimuth 276.46 with reference 0.00 N, 0.00 E from Slot #11



SYSDRILL  
Well Design Combined Report  
Wellbore: RANCHO WATER VALLEY 11 #7-7-33-270-6-CH (PWB)  
Wellpath: RANCHO WATER VALLEY 11 #7-7-33-270-6-CH (PWP#1)

**Wellhead Details**

Name	Northing	Easting	Latitude	Longitude	North	East
Slot #11	1402073.4736	3170232.5164	N40 26 7.7356	W104 53 18.4200	0.00N	111.35W

**Site Details**

Name	Northing	Easting	Coord System Name	North Alignment
Rancho Water Valley	1402073.4733	3170343.8622	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid

**Summary Wellpath**

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
16.00	0.00	0.000	16.00	0.00N	0.00E		0.00	1402073.47	3170232.52
1616.00	0.00	0.000	1616.00	0.00N	0.00E	==>	0.00	1402073.47	3170232.52
6502.59	18.52	18.510	6417.95	742.38N	248.53E	0.38	-163.38	1402815.82	3170481.03
7302.81	90.00	269.210	6921.00	894.84N	228.45W	12.00	327.73	1402968.27	3170004.07
14140.07	90.00	269.210	6921.00	800.39N	7065.06W	==>	7110.25	1402873.83	3163167.74

**Interpolated Wellpath**

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
0.00	0.00	0.000	0.00	0.00N	0.00E		0.00	1402073.47	3170232.52
16.00	0.00	0.000	16.00	0.00N	0.00E	==>	0.00	1402073.47	3170232.52
100.00	0.00	0.000	100.00	0.00N	0.00E	==>	0.00	1402073.47	3170232.52
200.00	0.00	0.000	200.00	0.00N	0.00E	==>	0.00	1402073.47	3170232.52
300.00	0.00	0.000	300.00	0.00N	0.00E	==>	0.00	1402073.47	3170232.52
400.00	0.00	0.000	400.00	0.00N	0.00E	==>	0.00	1402073.47	3170232.52
500.00	0.00	0.000	500.00	0.00N	0.00E	==>	0.00	1402073.47	3170232.52
600.00	0.00	0.000	600.00	0.00N	0.00E	==>	0.00	1402073.47	3170232.52
700.00	0.00	0.000	700.00	0.00N	0.00E	==>	0.00	1402073.47	3170232.52
800.00	0.00	0.000	800.00	0.00N	0.00E	==>	0.00	1402073.47	3170232.52
900.00	0.00	0.000	900.00	0.00N	0.00E	==>	0.00	1402073.47	3170232.52
1000.00	0.00	0.000	1000.00	0.00N	0.00E	==>	0.00	1402073.47	3170232.52
1100.00	0.00	0.000	1100.00	0.00N	0.00E	==>	0.00	1402073.47	3170232.52
1200.00	0.00	0.000	1200.00	0.00N	0.00E	==>	0.00	1402073.47	3170232.52
1300.00	0.00	0.000	1300.00	0.00N	0.00E	==>	0.00	1402073.47	3170232.52
1400.00	0.00	0.000	1400.00	0.00N	0.00E	==>	0.00	1402073.47	3170232.52
1500.00	0.00	0.000	1500.00	0.00N	0.00E	==>	0.00	1402073.47	3170232.52
1600.00	0.00	0.000	1600.00	0.00N	0.00E	==>	0.00	1402073.47	3170232.52
1616.00	0.00	0.000	1616.00	0.00N	0.00E	==>	0.00	1402073.47	3170232.52
1700.00	0.32	18.510	1700.00	0.22N	0.07E	0.38	-0.05	1402073.69	3170232.59
1800.00	0.70	18.510	1800.00	1.06N	0.36E	0.38	-0.23	1402074.54	3170232.87
1900.00	1.08	18.510	1899.98	2.53N	0.85E	0.38	-0.56	1402076.00	3170233.36
2000.00	1.46	18.510	1999.96	4.62N	1.55E	0.38	-1.02	1402078.10	3170234.06
2100.00	1.83	18.510	2099.92	7.35N	2.46E	0.38	-1.62	1402080.82	3170234.98
2200.00	2.21	18.510	2199.85	10.69N	3.58E	0.38	-2.35	1402084.17	3170236.10
2300.00	2.59	18.510	2299.77	14.67N	4.91E	0.38	-3.23	1402088.14	3170237.43
2400.00	2.97	18.510	2399.65	19.27N	6.45E	0.38	-4.24	1402092.75	3170238.97
2500.00	3.35	18.510	2499.50	24.50N	8.20E	0.38	-5.39	1402097.97	3170240.72
2600.00	3.73	18.510	2599.31	30.36N	10.16E	0.38	-6.68	1402103.83	3170242.68
2700.00	4.11	18.510	2699.07	36.84N	12.33E	0.38	-8.11	1402110.31	3170244.85
2800.00	4.49	18.510	2798.79	43.94N	14.71E	0.38	-9.67	1402117.41	3170247.23
2900.00	4.87	18.510	2898.46	51.67N	17.30E	0.38	-11.37	1402125.14	3170249.81
3000.00	5.25	18.510	2998.07	60.03N	20.10E	0.38	-13.21	1402133.50	3170252.61
3100.00	5.62	18.510	3097.62	69.01N	23.10E	0.38	-15.19	1402142.48	3170255.62
3200.00	6.00	18.510	3197.10	78.62N	26.32E	0.38	-17.30	1402152.09	3170258.83
3300.00	6.38	18.510	3296.52	88.84N	29.74E	0.38	-19.55	1402162.31	3170262.26
3400.00	6.76	18.510	3395.86	99.70N	33.38E	0.38	-21.94	1402173.17	3170265.89
3500.00	7.14	18.510	3495.13	111.17N	37.22E	0.38	-24.47	1402184.64	3170269.73
3600.00	7.52	18.510	3594.31	123.27N	41.27E	0.38	-27.13	1402196.74	3170273.78
3700.00	7.90	18.510	3693.41	135.99N	45.53E	0.38	-29.93	1402209.46	3170278.04
3800.00	8.28	18.510	3792.41	149.33N	49.99E	0.38	-32.86	1402222.80	3170282.51
3900.00	8.66	18.510	3891.32	163.29N	54.67E	0.38	-35.94	1402236.76	3170287.18
4000.00	9.03	18.510	3990.13	177.87N	59.55E	0.38	-39.15	1402251.34	3170292.06
4100.00	9.41	18.510	4088.84	193.07N	64.64E	0.38	-42.49	1402266.54	3170297.15
4200.00	9.79	18.510	4187.44	208.89N	69.93E	0.38	-45.97	1402282.36	3170302.44
4300.00	10.17	18.510	4285.92	225.33N	75.43E	0.38	-49.59	1402298.80	3170307.95
4400.00	10.55	18.510	4384.29	242.39N	81.14E	0.38	-53.34	1402315.85	3170313.66
4500.00	10.93	18.510	4482.54	260.06N	87.06E	0.38	-57.23	1402333.52	3170319.57
4600.00	11.31	18.510	4580.66	278.35N	93.18E	0.38	-61.26	1402351.81	3170325.69
4700.00	11.69	18.510	4678.66	297.25N	99.51E	0.38	-65.42	1402370.71	3170332.02
4800.00	12.07	18.510	4776.52	316.76N	106.04E	0.38	-69.71	1402390.23	3170338.56
4900.00	12.45	18.510	4874.24	336.89N	112.78E	0.38	-74.14	1402410.35	3170345.29
5000.00	12.82	18.510	4971.81	357.64N	119.73E	0.38	-78.71	1402431.10	3170352.24
5100.00	13.20	18.510	5069.25	378.99N	126.88E	0.38	-83.41	1402452.45	3170359.39

All data is in Feet unless otherwise stated  
Coordinates are from Slot MD's are from Rig and TVD's are from Rig ( Planned Datum #1 4791.0ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 276.460 degrees  
Bottom hole distance is 7110.25 Feet on azimuth 276.46 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by Peterson Energy  
Date Printed: 22-Oct-2012



SYSDRILL  
Well Design Combined Report  
Wellbore: RANCHO WATER VALLEY 11 #7-7-33-270-6-CH (PWB)  
Wellpath: RANCHO WATER VALLEY 11 #7-7-33-270-6-CH (PWP#1)

**Interpolated Wellpath**

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
5200.00	13.58	18.510	5166.53	400.96N	134.23E	0.38	-88.24	1402474.41	3170366.74
5300.00	13.96	18.510	5263.65	423.53N	141.79E	0.38	-93.21	1402496.99	3170374.30
5400.00	14.34	18.510	5360.62	446.71N	149.55E	0.38	-98.31	1402520.17	3170382.06
5500.00	14.72	18.510	5457.42	470.51N	157.51E	0.38	-103.55	1402543.96	3170390.02
5600.00	15.10	18.510	5554.05	494.90N	165.68E	0.38	-108.92	1402568.36	3170398.19
5700.00	15.48	18.510	5650.51	519.91N	174.05E	0.38	-114.42	1402593.36	3170406.56
5800.00	15.86	18.510	5746.80	545.51N	182.62E	0.38	-120.05	1402618.97	3170415.13
5900.00	16.24	18.510	5842.90	571.73N	191.40E	0.38	-125.82	1402645.18	3170423.91
6000.00	16.61	18.510	5938.82	598.54N	200.37E	0.38	-131.72	1402671.99	3170432.88
6100.00	16.99	18.510	6034.55	625.95N	209.55E	0.38	-137.76	1402699.40	3170442.06
6200.00	17.37	18.510	6130.08	653.97N	218.93E	0.38	-143.92	1402727.41	3170451.44
6300.00	17.75	18.510	6225.42	682.58N	228.51E	0.38	-150.22	1402756.03	3170461.01
6400.00	18.13	18.510	6320.56	711.79N	238.29E	0.38	-156.65	1402785.23	3170470.79
6500.00	18.51	18.510	6415.49	741.60N	248.26E	0.38	-163.21	1402815.04	3170480.77
6502.59	18.52	18.510	6417.95	742.38N	248.53E	0.38	-163.38	1402815.82	3170481.03
6600.00	18.41	341.000	6510.67	771.69N	248.43E	12.00	-159.98	1402845.13	3170480.94
6700.00	24.70	312.640	6603.88	800.87N	227.85E	12.00	-136.24	1402874.32	3170460.35
6800.00	34.05	297.100	6691.05	827.88N	187.41E	12.00	-93.02	1402901.32	3170419.92
6900.00	44.58	287.920	6768.37	851.52N	128.88E	12.00	-32.21	1402924.96	3170361.39
7000.00	55.60	281.710	6832.47	870.76N	54.82E	12.00	43.55	1402944.20	3170287.34
7100.00	66.86	276.970	6880.54	884.77N	31.53W	12.00	130.92	1402958.20	3170200.99
7200.00	78.25	272.980	6910.49	892.92N	126.40W	12.00	226.11	1402966.36	3170106.12
7300.00	89.68	269.310	6920.99	894.87N	225.64W	12.00	324.94	1402968.31	3170006.88
7302.81	90.00	269.210	6921.00	894.84N	228.45W	12.00	327.73	1402968.27	3170004.07
7400.00	90.00	269.210	6921.00	893.49N	325.63W	==>	424.14	1402966.93	3169906.90
7500.00	90.00	269.210	6921.00	892.11N	425.62W	==>	523.34	1402965.55	3169806.91
7600.00	90.00	269.210	6921.00	890.73N	525.61W	==>	622.54	1402964.17	3169706.92
7700.00	90.00	269.210	6921.00	889.35N	625.60W	==>	721.74	1402962.79	3169606.94
7800.00	90.00	269.210	6921.00	887.97N	725.60W	==>	820.94	1402961.41	3169506.95
7900.00	90.00	269.210	6921.00	886.59N	825.59W	==>	920.14	1402960.03	3169406.96
8000.00	90.00	269.210	6921.00	885.21N	925.58W	==>	1019.34	1402958.64	3169306.98
8100.00	90.00	269.210	6921.00	883.82N	1025.57W	==>	1118.54	1402957.26	3169206.99
8200.00	90.00	269.210	6921.00	882.44N	1125.56W	==>	1217.74	1402955.88	3169107.00
8300.00	90.00	269.210	6921.00	881.06N	1225.55W	==>	1316.94	1402954.50	3169007.02
8400.00	90.00	269.210	6921.00	879.68N	1325.54W	==>	1416.14	1402953.12	3168907.03
8500.00	90.00	269.210	6921.00	878.30N	1425.53W	==>	1515.34	1402951.74	3168807.04
8600.00	90.00	269.210	6921.00	876.92N	1525.52W	==>	1614.54	1402950.36	3168707.06
8700.00	90.00	269.210	6921.00	875.54N	1625.51W	==>	1713.74	1402948.97	3168607.07
8800.00	90.00	269.210	6921.00	874.16N	1725.50W	==>	1812.93	1402947.59	3168507.09
8900.00	90.00	269.210	6921.00	872.77N	1825.49W	==>	1912.13	1402946.21	3168407.10
9000.00	90.00	269.210	6921.00	871.39N	1925.48W	==>	2011.33	1402944.83	3168307.11
9100.00	90.00	269.210	6921.00	870.01N	2025.47W	==>	2110.53	1402943.45	3168207.13
9200.00	90.00	269.210	6921.00	868.63N	2125.46W	==>	2209.73	1402942.07	3168107.14
9300.00	90.00	269.210	6921.00	867.25N	2225.45W	==>	2308.93	1402940.69	3168007.15
9400.00	90.00	269.210	6921.00	865.87N	2325.44W	==>	2408.13	1402939.31	3167907.17
9500.00	90.00	269.210	6921.00	864.49N	2425.43W	==>	2507.33	1402937.92	3167807.18
9600.00	90.00	269.210	6921.00	863.10N	2525.42W	==>	2606.53	1402936.54	3167707.19
9700.00	90.00	269.210	6921.00	861.72N	2625.41W	==>	2705.73	1402935.16	3167607.21
9800.00	90.00	269.210	6921.00	860.34N	2725.40W	==>	2804.93	1402933.78	3167507.22
9900.00	90.00	269.210	6921.00	858.96N	2825.39W	==>	2904.13	1402932.40	3167407.23
10000.00	90.00	269.210	6921.00	857.58N	2925.39W	==>	3003.33	1402931.02	3167307.25
10100.00	90.00	269.210	6921.00	856.20N	3025.38W	==>	3102.53	1402929.64	3167207.26
10200.00	90.00	269.210	6921.00	854.82N	3125.37W	==>	3201.73	1402928.26	3167107.27
10300.00	90.00	269.210	6921.00	853.43N	3225.36W	==>	3300.93	1402926.87	3167007.29
10400.00	90.00	269.210	6921.00	852.05N	3325.35W	==>	3400.13	1402925.49	3166907.30
10500.00	90.00	269.210	6921.00	850.67N	3425.34W	==>	3499.32	1402924.11	3166807.32
10600.00	90.00	269.210	6921.00	849.29N	3525.33W	==>	3598.52	1402922.73	3166707.33
10700.00	90.00	269.210	6921.00	847.91N	3625.32W	==>	3697.72	1402921.35	3166607.34
10800.00	90.00	269.210	6921.00	846.53N	3725.31W	==>	3796.92	1402919.97	3166507.36
10900.00	90.00	269.210	6921.00	845.15N	3825.30W	==>	3896.12	1402918.59	3166407.37
11000.00	90.00	269.210	6921.00	843.76N	3925.29W	==>	3995.32	1402917.20	3166307.38
11100.00	90.00	269.210	6921.00	842.38N	4025.28W	==>	4094.52	1402915.82	3166207.40
11200.00	90.00	269.210	6921.00	841.00N	4125.27W	==>	4193.72	1402914.44	3166107.41
11300.00	90.00	269.210	6921.00	839.62N	4225.26W	==>	4292.92	1402913.06	3166007.42
11400.00	90.00	269.210	6921.00	838.24N	4325.25W	==>	4392.12	1402911.68	3165907.44
11500.00	90.00	269.210	6921.00	836.86N	4425.24W	==>	4491.32	1402910.30	3165807.45
11600.00	90.00	269.210	6921.00	835.48N	4525.23W	==>	4590.52	1402908.92	3165707.46
11700.00	90.00	269.210	6921.00	834.10N	4625.22W	==>	4689.72	1402907.54	3165607.48
11800.00	90.00	269.210	6921.00	832.71N	4725.21W	==>	4788.92	1402906.15	3165507.49
11900.00	90.00	269.210	6921.00	831.33N	4825.20W	==>	4888.12	1402904.77	3165407.51
12000.00	90.00	269.210	6921.00	829.95N	4925.19W	==>	4987.32	1402903.39	3165307.52
12100.00	90.00	269.210	6921.00	828.57N	5025.19W	==>	5086.52	1402902.01	3165207.53
12200.00	90.00	269.210	6921.00	827.19N	5125.18W	==>	5185.72	1402900.63	3165107.55
12300.00	90.00	269.210	6921.00	825.81N	5225.17W	==>	5284.91	1402899.25	3165007.56
12400.00	90.00	269.210	6921.00	824.43N	5325.16W	==>	5384.11	1402897.87	3164907.57

All data is in Feet unless otherwise stated  
Coordinates are from Slot MD's are from Rig ( Planned Datum #1 4791.0ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 276.460 degrees  
Bottom hole distance is 7110.25 Feet on azimuth 276.46 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by Peterson Energy  
Date Printed: 22-Oct-2012



SYSDRILL  
Well Design Combined Report  
Wellbore: RANCHO WATER VALLEY 11 #7-7-33-270-6-CH (PWB)  
Wellpath: RANCHO WATER VALLEY 11 #7-7-33-270-6-CH (PWP#1)

**Interpolated Wellpath**

MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Northing	Easting
12500.00	90.00	269.210	6921.00	823.04N	5425.15W	==>	5483.31	1402896.48	3164807.59
12600.00	90.00	269.210	6921.00	821.66N	5525.14W	==>	5582.51	1402895.10	3164707.60
12700.00	90.00	269.210	6921.00	820.28N	5625.13W	==>	5681.71	1402893.72	3164607.61
12800.00	90.00	269.210	6921.00	818.90N	5725.12W	==>	5780.91	1402892.34	3164507.63
12900.00	90.00	269.210	6921.00	817.52N	5825.11W	==>	5880.11	1402890.96	3164407.64
13000.00	90.00	269.210	6921.00	816.14N	5925.10W	==>	5979.31	1402889.58	3164307.65
13100.00	90.00	269.210	6921.00	814.76N	6025.09W	==>	6078.51	1402888.20	3164207.67
13200.00	90.00	269.210	6921.00	813.37N	6125.08W	==>	6177.71	1402886.82	3164107.68
13300.00	90.00	269.210	6921.00	811.99N	6225.07W	==>	6276.91	1402885.43	3164007.69
13400.00	90.00	269.210	6921.00	810.61N	6325.06W	==>	6376.11	1402884.05	3163907.71
13500.00	90.00	269.210	6921.00	809.23N	6425.05W	==>	6475.31	1402882.67	3163807.72
13600.00	90.00	269.210	6921.00	807.85N	6525.04W	==>	6574.51	1402881.29	3163707.74
13700.00	90.00	269.210	6921.00	806.47N	6625.03W	==>	6673.71	1402879.91	3163607.75
13800.00	90.00	269.210	6921.00	805.09N	6725.02W	==>	6772.91	1402878.53	3163507.76
13900.00	90.00	269.210	6921.00	803.70N	6825.01W	==>	6872.11	1402877.15	3163407.78
14000.00	90.00	269.210	6921.00	802.32N	6925.00W	==>	6971.30	1402875.76	3163307.79
14100.00	90.00	269.210	6921.00	800.94N	7024.99W	==>	7070.50	1402874.38	3163207.80
14140.07	90.00	269.210	6921.00	800.39N	7065.06W	==>	7110.25	1402873.83	3163167.74

All data is in Feet unless otherwise stated  
Coordinates are from Slot MD's are from Rig and TVD's are from Rig ( Planned Datum #1 4791.0ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 276.460 degrees  
Bottom hole distance is 7110.25 Feet on azimuth 276.46 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by Peterson Energy  
Date Printed: 22-Oct-2012



SYSDRILL  
Well Design Combined Report  
Wellbore: RANCHO WATER VALLEY 11 #7-7-33-270-6-CH (PWB)  
Wellpath: RANCHO WATER VALLEY 11 #7-7-33-270-6-CH (PWP#1)

Targets

Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting	Last Revised
RWV 11 - T1	879.32N	228.76W	6921.00	N40 26 16.4400	W104 53 21.3000	1402952.76	3170003.76	19-Oct-2012
RWV 11 - T2	800.39N	7065.06W	6921.00	N40 26 16.1160	W104 54 49.7160	1402873.83	3163167.74	19-Oct-2012

Survey Tool Program

Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
5450	Planned	14140.07	6921.00	ISCWSA MWD	Rev 0

Notes

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Calculation method uses Minimum Curvature method  
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Date Printed: 22-Oct-2012



SYSDRILL  
Closest Approach + Clearance Factor Summary Report  
Wellbore: RANCHO WATER VALLEY 11 #7-7-33-270-6-CH (PWB)  
Wellpath: RANCHO WATER VALLEY 11 #7-7-33-270-6-CH (PWP#1)

Ellipse separations are reported ONLY if BOTH wells have uncertainty data  
Only Depth and Magnetic Reference Field error terms are correlated across tie points  
Cutoff is calculated on CENTRE to CENTRE distance

Summary data uses Closest Approach clearance calculation for all minima  
Hole size/Casings ARE included  
Hole size/Casings are NOT subtracted from Centre-Centre distance  
Confidence limit of 95.00% / 2.80 SD.

#### Wellbore

Name	Created	Last Revised
RANCHO WATER VALLEY 11 #7-7-33-270-6-CH (PWB)	17-Oct-2012	18-Oct-2012

#### Well

Name	Government ID	Last Revised
RANCHO WATER VALLEY 11 #7-7-33-270-6-CH		17-Oct-2012

#### Slot

Name	Grid Northing	Grid Easting	Latitude	Longitude	North	East
Slot #11	1402073.4736	3170232.5164	N40 26 7.7356	W104 53 18.4200	0.00N	111.35W

#### Installation

Name	Easting	Northing	Coord System Name	North Alignment
Rancho Water Valley	3170343.8622	1402073.4733	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid

#### Field

Name	Easting	Northing	Coord System Name	North Alignment
Windsor Project	3162710.0707	1407271.6545	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid

#### Clearance Summary

Offset WellName	Offset Wellbore	Offset Slot	Offset Structure	Separation [ft]	MD[ft]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[ft]	Clearance Factor	Clearance MD[ft]
RANCHO WATER VALLEY 10 #7-8-33-27 0-4-NH	RANCHO WATER VALLEY 10 #7-8-33-270-4 -NH (PWB)	Slot #10	Rancho Water Valley	16.04	2017.31	11413.68	13.01	2082.93	1.36	11413.68
RANCHO WATER VALLEY 12 #7-7-33-27 0-4-NH	RANCHO WATER VALLEY 12 #7-7-33-270-4 -NH (PWB)	Slot #12	Rancho Water Valley	16.19	1771.25	7333.93	-46.38	11515.34	0.84	11498.94
RANCHO WATER VALLEY 9 #8-7-33-00 0-4-CH	RANCHO WATER VALLEY 9 #8-7-33-000-4 -CH (PWB)	Slot #9	Rancho Water Valley	29.11	2148.55	7029.64	26.19	2164.95	2.37	7053.40
RANCHO WATER VALLEY 8 #7-8-33-27 0-5-CH	RANCHO WATER VALLEY 8 #7-8-33-270-5 -CH (PWB)	Slot #8	Rancho Water Valley	33.02	6856.55	6856.55	6.78	6856.55	1.26	6856.55
RANCHO WATER VALLEY 13 #7-6-33-27 0-6-CH	RANCHO WATER VALLEY 13 #7-6-33-270-6 -CH (PWB)	Slot #13	Rancho Water Valley	33.31	1492.38	1492.38	30.89	1525.19	1.28	14140.07
RANCHO WATER VALLEY 7 #8-7-33-00 0-4-NH	RANCHO WATER VALLEY 7 #8-7-33-000-4 -NH (PWB)	Slot #7	Rancho Water Valley	64.03	1616.00	12696.45	61.51	1616.00	1.27	12712.85
RANCHO WATER VALLEY #2-6-4	RANCHO WATER VALLEY #2-6-4 (AWB)	Slot #3	Rancho Water Valley	70.40	1000.43	8644.61	66.24	1000.43	11.54	8939.88
RANCHO WATER VALLEY 6 #0-7-4-270 -5-NH	RANCHO WATER VALLEY 6 #0-7-4-270-5 -NH (PWB)	Slot #6	Rancho Water Valley	77.47	2300.70	12696.45	74.08	2328.99	2.80	12716.00

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SYSDRILL  
Closest Approach + Clearance Factor Summary Report  
Wellbore: RANCHO WATER VALLEY 11 #7-7-33-270-6-CH (PWB)  
Wellpath: RANCHO WATER VALLEY 11 #7-7-33-270-6-CH (PWP#1)

**Clearance Summary**

Offset WellName	Offset Wellbore	Offset Slot	Offset Structure	Separation [ft]	MD[ft]	Diverging From[ft]	Ellipse Separation [ft]	Ellipse MD[ft]	Clearance Factor	Clearance MD[ft]
RANCHO WATER VALLEY 5 #7-2-4-270 -4-NH	RANCHO WATER VALLEY 5 #7-2-4-270-4-NH (PWB)	Slot #5	Rancho Water Valley	94.46	1783.65	11416.92	91.84	1783.65	4.92	11580.96
RANCHO WATER VALLEY 4 #7-1-4-270 -4-NH	RANCHO WATER VALLEY 4 #7-1-4-270-4-NH (PWB)	Slot #4	Rancho Water Valley	111.35	1500.00	11352.81	108.94	1500.00	3.13	11400.51
RANCHO WATER VALLEY 2-8-4	RANCHO WATER VALLEY 2-8-4 (AWB)	Slot #2	Rancho Water Valley	117.20	1738.44	7401.38	113.12	1754.85	25.66	1935.29
RANCHO WATER VALLEY #3-9-4	RANCHO WATER VALLEY #3-9-4 (AWB)	Slot #1	Rancho Water Valley	161.50	17.00	542.59	159.82	573.74	41.76	8857.86