



Ursa Operating Company, LLC

Rockies Region

Watson Ranch B

WATSON RANCH B 33B-17-07-95

Wellbore #1

Design: Actual

End of Well Report

04 May, 2015



Company:	Ursa Operating Company, LLC	Local Co-ordinate Reference:	Well WATSON RANCH B 33B-17-07-95
Project:	Rockies Region	TVD Reference:	WATSON RANCH B 33B-17-07-95 @ 5602.0usft (Caps)
Site:	Watson Ranch B	MD Reference:	WATSON RANCH B 33B-17-07-95 @ 5602.0usft (Caps)
Well:	WATSON RANCH B 33B-17-07-95	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual	Database:	EDM 5000.1 Single User Db

Project	Rockies Region		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site	Watson Ranch B		
Site Position:		Northing:	1,592,643.01 usft
From:	Lat/Long	Easting:	2,287,301.12 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	39° 26' 0.219 N
		Longitude:	108° 1' 24.909 W
		Grid Convergence:	-1.59 °

Well	WATSON RANCH B 33B-17-07-95, SHL LAT: 39.433393452 LONG: -108.023630036		
Well Position	+N/-S	0.0 usft	Northing: 1,592,643.11 usft
	+E/-W	0.0 usft	Easting: 2,287,288.62 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	5,602.0 usft
		Latitude:	39° 26' 0.216 N
		Longitude:	108° 1' 25.068 W
		Ground Level:	5,585.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/3/2015	9.88	65.58	51,841

Design	Actual			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	54.23

Survey Program	Date	5/4/2015		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
185.0	7,045.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard

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Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual	Database:	EDM 5000.1 Single User Db

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
185.0	0.35	90.08	185.0	0.5	0.0	0.6	0.19	0.19	0.00	
213.0	0.53	99.97	213.0	0.6	0.0	0.8	0.70	0.64	35.32	
246.0	0.66	95.84	246.0	0.9	-0.1	1.1	0.41	0.39	-12.52	
276.0	0.66	67.10	276.0	1.2	0.0	1.4	1.09	0.00	-95.80	
306.0	1.14	59.32	306.0	1.6	0.2	1.9	1.65	1.60	-25.93	
336.0	1.93	53.96	336.0	2.4	0.6	2.5	2.67	2.63	-17.87	
366.0	2.50	58.13	366.0	3.6	1.3	3.5	1.97	1.90	13.90	
396.0	2.86	56.20	395.9	5.0	2.1	4.7	1.24	1.20	-6.43	
426.0	3.30	55.01	425.9	6.6	3.0	6.0	1.48	1.47	-3.97	
456.0	3.87	56.90	455.8	8.5	4.0	7.6	1.94	1.90	6.30	
486.0	4.83	53.47	485.7	10.8	5.3	9.4	3.31	3.20	-11.43	
516.0	5.67	53.03	515.6	13.5	7.0	11.6	2.80	2.80	-1.47	
546.0	6.37	53.30	545.4	16.6	8.8	14.1	2.34	2.33	0.90	
576.0	7.29	53.08	575.2	20.2	11.0	17.0	3.07	3.07	-0.73	
606.0	8.39	52.95	604.9	24.3	13.4	20.3	3.67	3.67	-0.43	
636.0	9.71	53.39	634.6	29.0	16.3	24.0	4.41	4.40	1.47	
666.0	10.94	53.30	664.1	34.4	19.5	28.4	4.10	4.10	-0.30	
696.0	12.01	54.98	693.5	40.4	23.0	33.2	3.74	3.57	5.60	
726.0	13.18	54.97	722.8	46.9	26.7	38.5	3.90	3.90	-0.03	
756.0	14.11	55.54	751.9	54.0	30.8	44.4	3.13	3.10	1.90	
786.0	15.12	55.28	780.9	61.5	35.1	50.6	3.37	3.37	-0.87	
816.0	16.00	55.45	809.8	69.6	39.6	57.2	2.94	2.93	0.57	
846.0	16.66	56.07	838.6	78.0	44.4	64.2	2.28	2.20	2.07	
876.0	17.49	55.71	867.3	86.8	49.3	71.5	2.79	2.77	-1.20	
906.0	18.24	55.10	895.9	96.0	54.5	79.1	2.58	2.50	-2.03	
936.0	18.81	54.84	924.3	105.6	60.0	86.9	1.92	1.90	-0.87	

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Well:	WATSON RANCH B 33B-17-07-95	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Actual	Database:	EDM 5000.1 Single User Db

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)
966.0	19.73	53.74	952.6	115.5	65.8	94.9	3.30	3.07	-3.67
996.0	20.39	53.69	980.8	125.8	71.9	103.2	2.20	2.20	-0.17
1,026.0	21.09	53.21	1,008.9	136.4	78.2	111.7	2.40	2.33	-1.60
1,056.0	21.71	53.69	1,036.8	147.3	84.7	120.5	2.15	2.07	1.60
1,086.0	22.68	53.64	1,064.6	158.7	91.4	129.7	3.23	3.23	-0.17
1,116.0	23.77	52.90	1,092.1	170.5	98.5	139.1	3.76	3.63	-2.47
1,146.0	24.74	53.30	1,119.5	182.8	105.9	149.0	3.28	3.23	1.33
1,176.0	25.71	53.52	1,146.6	195.6	113.5	159.3	3.25	3.23	0.73
1,206.0	26.02	53.35	1,173.6	208.7	121.3	169.8	1.06	1.03	-0.57
1,236.0	26.19	54.18	1,200.6	221.9	129.1	180.4	1.34	0.57	2.77
1,266.0	27.03	53.65	1,227.4	235.3	137.1	191.3	2.91	2.80	-1.77
1,296.0	27.47	53.61	1,254.1	249.0	145.2	202.3	1.47	1.47	-0.13
1,326.0	27.81	53.63	1,280.6	263.0	153.5	213.5	1.13	1.13	0.07
1,356.0	27.89	54.51	1,307.2	277.0	161.7	224.9	1.40	0.27	2.93
1,386.0	28.21	54.57	1,333.6	291.1	169.9	236.4	1.07	1.07	0.20
1,416.0	28.87	54.09	1,360.0	305.4	178.2	248.0	2.33	2.20	-1.60
1,446.0	29.14	53.43	1,386.2	320.0	186.8	259.8	1.40	0.90	-2.20
1,476.0	28.96	53.96	1,412.5	334.5	195.4	271.5	1.05	-0.60	1.77
1,506.0	29.05	53.83	1,438.7	349.1	204.0	283.2	0.37	0.30	-0.43
1,536.0	29.49	53.25	1,464.9	363.7	212.7	295.0	1.74	1.47	-1.93
1,566.0	29.18	53.43	1,491.0	378.4	221.5	306.8	1.07	-1.03	0.60
1,596.0	29.00	53.83	1,517.2	393.0	230.2	318.6	0.88	-0.60	1.33
1,626.0	29.22	52.77	1,543.4	407.6	238.9	330.3	1.87	0.73	-3.53
1,656.0	29.18	53.56	1,569.6	422.2	247.7	342.0	1.29	-0.13	2.63
1,686.0	29.22	54.13	1,595.8	436.9	256.3	353.8	0.94	0.13	1.90
1,716.0	28.92	54.44	1,622.0	451.5	264.8	365.6	1.12	-1.00	1.03
1,746.0	29.08	54.70	1,648.3	466.0	273.2	377.5	0.68	0.53	0.87

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Design:	Actual	Database:	EDM 5000.1 Single User Db

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	
1,776.0	29.22	54.00	1,674.5	480.6	281.8	389.4	1.23	0.47	-2.33	
1,846.0	29.22	54.05	1,735.6	514.8	301.8	417.0	0.03	0.00	0.07	
1,931.0	28.56	52.99	1,810.0	555.8	326.2	450.0	0.98	-0.78	-1.25	
2,017.0	28.13	51.10	1,885.7	596.6	351.3	482.2	1.16	-0.50	-2.20	
2,102.0	27.90	54.06	1,960.7	636.5	375.6	513.9	1.66	-0.27	3.48	
2,187.0	28.70	54.40	2,035.6	676.8	399.2	546.6	0.96	0.94	0.40	
2,273.0	27.86	53.78	2,111.3	717.6	423.0	579.6	1.03	-0.98	-0.72	
2,358.0	27.69	56.11	2,186.5	757.2	445.8	612.0	1.29	-0.20	2.74	
2,443.0	27.77	55.76	2,261.8	796.7	467.9	644.8	0.21	0.09	-0.41	
2,529.0	28.04	55.71	2,337.8	836.9	490.6	678.1	0.32	0.31	-0.06	
2,614.0	27.23	54.95	2,413.1	876.4	513.0	710.5	1.04	-0.95	-0.89	
2,700.0	27.91	54.97	2,489.3	916.2	535.9	743.1	0.79	0.79	0.02	
2,785.0	27.21	54.79	2,564.6	955.5	558.5	775.3	0.83	-0.82	-0.21	
2,870.0	27.11	53.78	2,640.3	994.3	581.2	806.8	0.56	-0.12	-1.19	
2,956.0	27.64	53.21	2,716.6	1,033.8	604.7	838.5	0.69	0.62	-0.66	
3,041.0	27.09	52.26	2,792.1	1,072.9	628.3	869.6	0.83	-0.65	-1.12	
3,127.0	26.38	51.72	2,868.9	1,111.5	652.2	900.1	0.87	-0.83	-0.63	
3,212.0	26.06	54.70	2,945.2	1,149.1	674.7	930.2	1.59	-0.38	3.51	
3,298.0	27.16	56.20	3,022.1	1,187.6	696.5	961.9	1.50	1.28	1.74	
3,383.0	27.99	55.85	3,097.4	1,226.9	718.5	994.5	0.99	0.98	-0.41	
3,468.0	27.47	55.58	3,172.7	1,266.5	740.8	1,027.2	0.63	-0.61	-0.32	
3,554.0	26.02	55.54	3,249.5	1,305.1	762.6	1,059.1	1.69	-1.69	-0.05	
3,639.0	26.66	54.93	3,325.6	1,342.9	784.1	1,090.1	0.82	0.75	-0.72	
3,725.0	26.54	55.10	3,402.5	1,381.4	806.2	1,121.7	0.17	-0.14	0.20	
3,810.0	25.45	54.88	3,478.9	1,418.6	827.6	1,152.2	1.29	-1.28	-0.26	
3,896.0	24.21	54.62	3,557.0	1,454.7	848.4	1,181.7	1.45	-1.44	-0.30	
3,981.0	22.81	53.30	3,634.9	1,488.6	868.4	1,209.1	1.76	-1.65	-1.55	

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Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	
4,066.0	22.06	52.77	3,713.5	1,521.1	887.9	1,235.0	0.91	-0.88	-0.62	
4,152.0	21.93	55.98	3,793.2	1,553.3	906.6	1,261.2	1.41	-0.15	3.73	
4,237.0	19.12	55.32	3,872.8	1,583.0	923.4	1,285.8	3.32	-3.31	-0.78	
4,323.0	16.96	53.52	3,954.6	1,609.7	938.9	1,307.5	2.59	-2.51	-2.09	
4,408.0	14.72	54.97	4,036.4	1,632.9	952.5	1,326.3	2.68	-2.64	1.71	
4,494.0	13.40	54.13	4,119.8	1,653.8	964.6	1,343.3	1.55	-1.53	-0.98	
4,579.0	10.94	56.99	4,202.9	1,671.7	974.8	1,358.1	2.98	-2.89	3.36	
4,664.0	8.57	52.90	4,286.6	1,686.1	983.0	1,369.9	2.90	-2.79	-4.81	
4,750.0	7.34	54.62	4,371.8	1,698.0	990.0	1,379.5	1.46	-1.43	2.00	
4,835.0	5.14	52.51	4,456.3	1,707.2	995.5	1,386.9	2.60	-2.59	-2.48	
4,921.0	3.43	67.27	4,542.1	1,713.5	998.8	1,392.3	2.35	-1.99	17.16	
5,006.0	2.72	66.79	4,626.9	1,718.0	1,000.6	1,396.5	0.84	-0.84	-0.56	
5,092.0	2.20	59.01	4,712.9	1,721.6	1,002.3	1,399.8	0.72	-0.60	-9.05	
5,177.0	1.54	55.01	4,797.8	1,724.4	1,003.8	1,402.2	0.79	-0.78	-4.71	
5,262.0	1.27	65.38	4,882.8	1,726.5	1,004.8	1,404.0	0.44	-0.32	12.20	
5,348.0	1.01	70.09	4,968.8	1,728.1	1,005.5	1,405.5	0.32	-0.30	5.48	
5,433.0	0.83	104.10	5,053.8	1,729.2	1,005.6	1,406.8	0.66	-0.21	40.01	
5,519.0	0.71	119.38	5,139.7	1,729.9	1,005.2	1,407.9	0.28	-0.14	17.77	
5,604.0	0.92	138.29	5,224.7	1,730.2	1,004.4	1,408.8	0.40	0.25	22.25	
5,689.0	0.92	127.08	5,309.7	1,730.4	1,003.5	1,409.8	0.21	0.00	-13.19	
5,775.0	0.75	134.25	5,395.7	1,730.7	1,002.7	1,410.8	0.23	-0.20	8.34	
5,860.0	0.95	146.92	5,480.7	1,730.8	1,001.7	1,411.6	0.32	0.24	14.91	
5,946.0	0.75	342.81	5,566.7	1,730.9	1,001.6	1,411.8	1.96	-0.23	-190.83	
6,031.0	0.70	295.39	5,651.7	1,730.9	1,002.4	1,411.1	0.69	-0.06	-55.79	
6,117.0	0.57	299.88	5,737.7	1,730.4	1,002.8	1,410.3	0.16	-0.15	5.22	
6,202.0	0.53	261.91	5,822.7	1,729.9	1,003.0	1,409.5	0.42	-0.05	-44.67	
6,287.0	0.83	269.95	5,907.7	1,729.1	1,002.9	1,408.5	0.37	0.35	9.46	

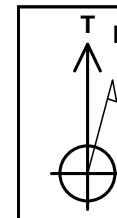
Company:	Ursa Operating Company, LLC	Local Co-ordinate Reference:	Well WATSON RANCH B 33B-17-07-95
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6,373.0	1.14	254.70	5,993.7	1,727.8	1,002.7	1,407.1	0.47	0.36	-17.73	
6,458.0	1.36	332.83	6,078.7	1,727.1	1,003.4	1,405.8	1.86	0.26	91.92	
6,544.0	1.49	345.40	6,164.6	1,727.7	1,005.3	1,405.1	0.39	0.15	14.62	
6,629.0	1.01	324.00	6,249.6	1,728.1	1,007.0	1,404.3	0.78	-0.56	-25.18	
6,714.0	0.96	318.52	6,334.6	1,728.0	1,008.2	1,403.4	0.13	-0.06	-6.45	
6,800.0	0.97	286.16	6,420.6	1,727.5	1,008.9	1,402.3	0.63	0.01	-37.63	
6,885.0	1.10	247.62	6,505.6	1,726.2	1,008.8	1,400.8	0.82	0.15	-45.34	
6,970.0	1.23	240.33	6,590.6	1,724.5	1,008.0	1,399.3	0.23	0.15	-8.58	
7,045.0	1.23	240.33	6,665.5	1,722.9	1,007.2	1,397.9	0.00	0.00	0.00	

Checked By: _____ Approved By: _____ Date: _____

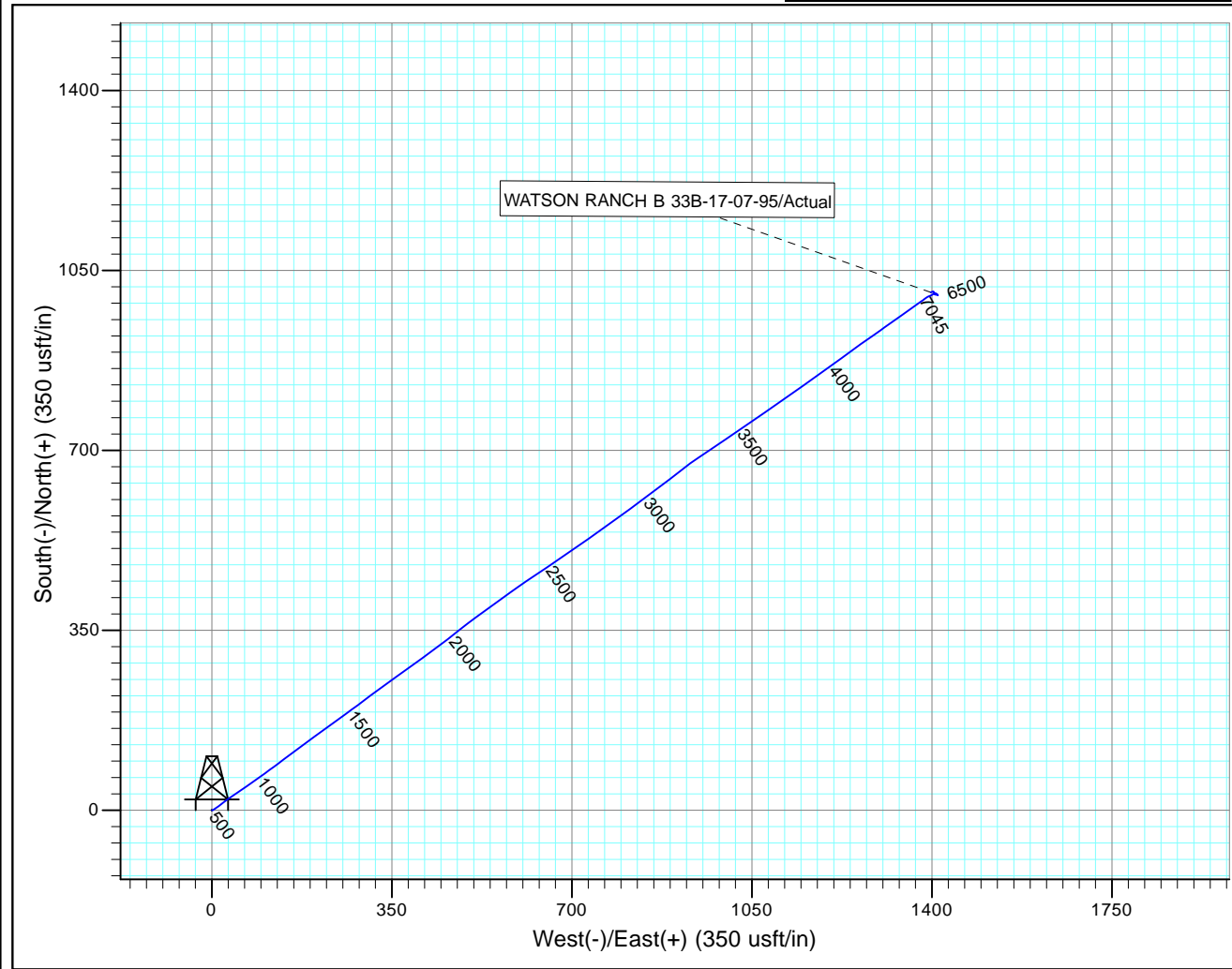
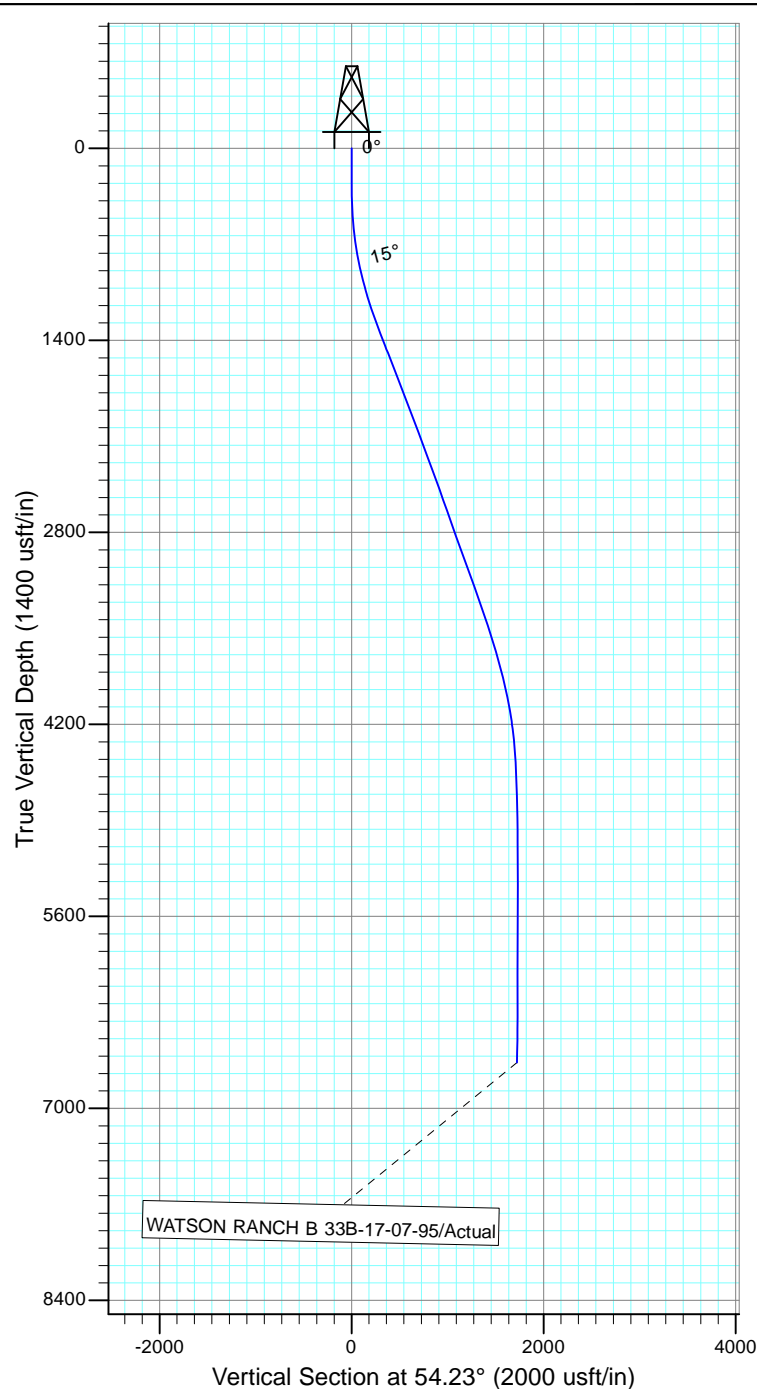


Project: Rockies Region
Site: Watson Ranch B
Well: WATSON RANCH B 33B-17-07-95
Wellbore: Wellbore #1
Design: Actual



Azimuths to True North
Magnetic North: 9.88°

Magnetic Field
Strength: 51841.0snT
Dip Angle: 65.58°
Date: 3/3/2015
Model: IGRF2010



Design: Actual (WATSON RANCH B 33B-17-07-95/Wellbore #1)

Created By: Matthew Linton

Date: 10:20, May 04 2015

THIS SURVEY IS CORRECT TO THE BEST OF
MY KNOWLEDGE AND IS SUPPORTED
BY ACTUAL FIELD DATA