



Ursa Operating Company, LLC

Rockies Region

Watson Ranch B

WATSON RANCH B 32C-17-07-95

Wellbore #1

Design: Actual

End of Well Report

20 April, 2015



Company:	Ursa Operating Company, LLC	Local Co-ordinate Reference:	Well WATSON RANCH B 32C-17-07-95
Project:	Rockies Region	TVD Reference:	WATSON RANCH B 32C-17-07-95 @ 5602.0usft (Caps
Site:	Watson Ranch B	MD Reference:	WATSON RANCH B 32C-17-07-95 @ 5602.0usft (Caps
Well:	WATSON RANCH B 32C-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	Latitude:		39° 26' 0.219 N	
From:	Lat/Long	Easting:		2,287,301.12	usft	Longitude:		108° 1' 24.909 W	
Position Uncertainty:		0.0	usft	Slot Radius:		13-3/16	"	Grid Convergence:	-1.59 °

Well		WATSON RANCH B 32C-17-07-95, SHL LAT: 39.433395841 LONG: -108.023453127				
Well Position	+N/-S	0.0 usft	Northing:	1,592,642.59 usft	Latitude:	39° 26' 0.225 N
	+E/-W	0.0 usft	Easting:	2,287,338.60 usft	Longitude:	108° 1' 24.431 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	5,602.0 usft	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	33.99

Survey Program		Date	4/20/2015		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
248.0	7,356.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

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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)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
248.0	1.11	227.80	248.0	-2.3	-1.6	-1.8	0.45	0.45	0.00	
278.0	0.70	242.75	278.0	-2.8	-1.9	-2.2	1.57	-1.37	49.83	
308.0	0.48	335.30	308.0	-2.9	-1.9	-2.4	2.89	-0.73	308.50	
338.0	1.54	10.98	338.0	-2.4	-1.4	-2.3	3.95	3.53	118.93	
368.0	2.99	16.12	368.0	-1.3	-0.2	-2.1	4.88	4.83	17.13	
398.0	4.31	21.17	397.9	0.5	1.6	-1.4	4.52	4.40	16.83	
428.0	5.61	23.29	427.8	3.1	4.0	-0.4	4.38	4.33	7.07	
458.0	6.90	21.57	457.6	6.3	7.0	0.8	4.34	4.30	-5.73	
488.0	8.20	22.71	487.3	10.1	10.7	2.3	4.36	4.33	3.80	
518.0	9.02	26.44	517.0	14.6	14.7	4.2	3.31	2.73	12.43	
548.0	9.89	25.57	546.6	19.4	19.2	6.3	2.94	2.90	-2.90	
578.0	10.81	30.50	576.1	24.8	23.9	8.9	4.25	3.07	16.43	
608.0	11.60	34.01	605.5	30.6	28.9	12.0	3.48	2.63	11.70	
668.0	13.71	35.28	664.1	43.8	39.7	19.5	3.55	3.52	2.12	
698.0	14.77	37.76	693.1	51.1	45.6	23.9	4.08	3.53	8.27	
728.0	15.69	39.37	722.1	59.0	51.7	28.8	3.37	3.07	5.37	
758.0	16.61	37.65	750.9	67.3	58.3	34.0	3.46	3.07	-5.73	
788.0	17.60	35.62	779.6	76.1	65.4	39.2	3.85	3.30	-6.77	
818.0	18.50	35.06	808.1	85.4	72.9	44.6	3.06	3.00	-1.87	
848.0	19.38	35.98	836.5	95.1	80.9	50.3	3.10	2.93	3.07	
878.0	20.08	38.09	864.7	105.3	88.9	56.4	3.33	2.33	7.03	
908.0	20.60	37.12	892.9	115.7	97.2	62.7	2.07	1.73	-3.23	
938.0	21.05	35.98	920.9	126.3	105.8	69.1	2.02	1.50	-3.80	
968.0	21.93	36.64	948.8	137.3	114.6	75.6	3.04	2.93	2.20	
998.0	22.80	36.59	976.5	148.7	123.8	82.4	2.90	2.90	-0.17	
1,028.0	23.99	36.42	1,004.1	160.6	133.4	89.5	3.97	3.97	-0.57	

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Well:	WATSON RANCH B 32C-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)	
1,058.0	24.70	37.43	1,031.4	172.9	143.3	96.9	2.74	2.37	3.37	
1,088.0	25.53	36.03	1,058.6	185.7	153.5	104.5	3.40	2.77	-4.67	
1,118.0	26.10	35.24	1,085.6	198.7	164.1	112.1	2.22	1.90	-2.63	
1,148.0	26.94	34.93	1,112.4	212.1	175.0	119.8	2.84	2.80	-1.03	
1,178.0	27.95	33.87	1,139.0	225.9	186.4	127.6	3.74	3.37	-3.53	
1,208.0	28.70	33.57	1,165.5	240.2	198.3	135.5	2.54	2.50	-1.00	
1,238.0	29.71	34.09	1,191.6	254.8	210.4	143.7	3.47	3.37	1.73	
1,268.0	30.59	34.75	1,217.6	269.9	222.9	152.2	3.13	2.93	2.20	
1,298.0	31.11	33.65	1,243.3	285.3	235.6	160.8	2.56	1.73	-3.67	
1,328.0	31.25	32.73	1,269.0	300.8	248.6	169.3	1.65	0.47	-3.07	
1,358.0	31.29	33.17	1,294.6	316.4	261.7	177.8	0.77	0.13	1.47	
1,388.0	32.04	32.91	1,320.2	332.1	274.9	186.4	2.54	2.50	-0.87	
1,418.0	31.99	33.83	1,345.6	348.0	288.1	195.2	1.63	-0.17	3.07	
1,448.0	31.60	33.70	1,371.1	363.8	301.3	203.9	1.32	-1.30	-0.43	
1,478.0	31.55	32.82	1,396.7	379.5	314.4	212.6	1.54	-0.17	-2.93	
1,508.0	31.90	33.26	1,422.2	395.3	327.6	221.2	1.40	1.17	1.47	
1,538.0	32.26	32.47	1,447.6	411.2	341.0	229.8	1.84	1.20	-2.63	
1,568.0	32.34	32.95	1,473.0	427.3	354.5	238.5	0.90	0.27	1.60	
1,598.0	32.99	33.41	1,498.2	443.4	368.1	247.3	2.32	2.17	1.53	
1,628.0	33.22	33.17	1,523.4	459.8	381.8	256.3	0.88	0.77	-0.80	
1,658.0	33.49	33.04	1,548.4	476.3	395.6	265.3	0.93	0.90	-0.43	
1,688.0	33.66	33.04	1,573.4	492.9	409.5	274.4	0.57	0.57	0.00	
1,718.0	33.97	33.43	1,598.3	509.6	423.5	283.5	1.26	1.03	1.30	
1,748.0	34.33	33.02	1,623.2	526.4	437.5	292.8	1.42	1.20	-1.37	
1,778.0	34.58	33.04	1,647.9	543.4	451.8	302.0	0.83	0.83	0.07	
1,808.0	34.72	33.52	1,672.6	560.5	466.0	311.4	1.02	0.47	1.60	
1,889.0	34.89	32.91	1,739.1	606.7	504.7	336.7	0.48	0.21	-0.75	

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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)	
1,974.0	33.97	35.32	1,809.2	654.7	544.5	363.6	1.93	-1.08	2.84	
2,060.0	33.35	34.97	1,880.8	702.4	583.5	391.1	0.76	-0.72	-0.41	
2,145.0	32.65	34.97	1,952.1	748.7	621.4	417.6	0.82	-0.82	0.00	
2,230.0	31.46	34.49	2,024.1	793.8	658.5	443.3	1.43	-1.40	-0.56	
2,316.0	32.52	35.06	2,097.0	839.4	695.9	469.3	1.28	1.23	0.66	
2,401.0	31.46	35.54	2,169.1	884.4	732.7	495.3	1.28	-1.25	0.56	
2,487.0	31.95	34.71	2,242.3	929.6	769.6	521.3	0.76	0.57	-0.97	
2,572.0	32.74	34.27	2,314.1	975.0	807.1	547.1	0.97	0.93	-0.52	
2,658.0	31.68	34.18	2,386.9	1,020.9	845.0	572.8	1.23	-1.23	-0.10	
2,743.0	32.43	34.08	2,458.9	1,066.0	882.3	598.2	0.88	0.88	-0.12	
2,829.0	31.68	33.92	2,531.8	1,111.6	920.2	623.7	0.88	-0.87	-0.19	
2,914.0	32.52	33.48	2,603.8	1,156.8	957.8	648.7	1.03	0.99	-0.52	
3,000.0	32.12	33.30	2,676.5	1,202.8	996.2	674.0	0.48	-0.47	-0.21	
3,085.0	31.11	32.38	2,748.9	1,247.3	1,033.6	698.2	1.32	-1.19	-1.08	
3,170.0	31.77	33.87	2,821.4	1,291.6	1,070.7	722.4	1.20	0.78	1.75	
3,256.0	31.16	33.73	2,894.7	1,336.5	1,108.0	747.4	0.71	-0.71	-0.16	
3,341.0	31.03	35.72	2,967.5	1,380.4	1,144.1	772.4	1.22	-0.15	2.34	
3,427.0	32.30	35.37	3,040.7	1,425.6	1,180.8	798.7	1.49	1.48	-0.41	
3,512.0	31.60	35.85	3,112.9	1,470.5	1,217.4	824.8	0.88	-0.82	0.56	
3,597.0	32.43	33.87	3,184.9	1,515.6	1,254.4	850.6	1.57	0.98	-2.33	
3,683.0	31.33	33.04	3,258.0	1,561.0	1,292.3	875.6	1.38	-1.28	-0.97	
3,768.0	30.54	32.69	3,330.9	1,604.7	1,329.0	899.3	0.95	-0.93	-0.41	
3,854.0	30.76	32.51	3,404.8	1,648.5	1,365.9	923.0	0.28	0.26	-0.21	
3,939.0	31.95	34.09	3,477.4	1,692.7	1,402.9	947.3	1.70	1.40	1.86	
4,024.0	30.14	33.66	3,550.3	1,736.6	1,439.2	971.7	2.15	-2.13	-0.51	
4,110.0	30.38	34.38	3,624.5	1,779.9	1,475.2	995.9	0.51	0.28	0.84	
4,195.0	31.90	33.74	3,697.3	1,823.8	1,511.6	1,020.6	1.83	1.79	-0.75	

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4,281.0	32.61	35.02	3,770.0	1,869.7	1,549.5	1,046.5	1.15	0.83	1.49	
4,366.0	31.05	34.46	3,842.2	1,914.6	1,586.3	1,072.0	1.87	-1.84	-0.66	
4,451.0	31.20	35.15	3,915.0	1,958.5	1,622.4	1,097.1	0.46	0.18	0.81	
4,537.0	32.04	36.12	3,988.2	2,003.6	1,659.0	1,123.4	1.14	0.98	1.13	
4,622.0	30.45	35.37	4,060.9	2,047.6	1,694.8	1,149.1	1.93	-1.87	-0.88	
4,708.0	30.37	35.50	4,135.1	2,091.1	1,730.3	1,174.4	0.12	-0.09	0.15	
4,793.0	28.87	35.06	4,209.0	2,133.1	1,764.5	1,198.6	1.78	-1.76	-0.52	
4,879.0	27.51	34.84	4,284.8	2,173.8	1,797.8	1,221.9	1.59	-1.58	-0.26	
4,964.0	26.06	34.27	4,360.6	2,212.1	1,829.4	1,243.6	1.73	-1.71	-0.67	
5,049.0	23.86	34.45	4,437.7	2,247.9	1,859.0	1,263.9	2.59	-2.59	0.21	
5,135.0	23.07	33.87	4,516.6	2,282.2	1,887.3	1,283.1	0.96	-0.92	-0.67	
5,220.0	19.95	33.57	4,595.6	2,313.3	1,913.2	1,300.4	3.67	-3.67	-0.35	
5,305.0	17.18	34.01	4,676.2	2,340.4	1,935.7	1,315.5	3.26	-3.26	0.52	
5,391.0	14.62	32.18	4,758.9	2,363.9	1,955.5	1,328.3	3.03	-2.98	-2.13	
5,476.0	11.56	35.05	4,841.7	2,383.2	1,971.5	1,339.0	3.68	-3.60	3.38	
5,562.0	7.91	36.86	4,926.5	2,397.7	1,983.3	1,347.5	4.26	-4.24	2.10	
5,647.0	5.01	36.82	5,010.9	2,407.3	1,991.0	1,353.2	3.41	-3.41	-0.05	
5,732.0	1.76	55.06	5,095.7	2,412.2	1,994.7	1,356.5	3.98	-3.82	21.46	
5,818.0	1.36	68.27	5,181.7	2,414.3	1,995.8	1,358.5	0.62	-0.47	15.36	
5,903.0	1.45	77.12	5,266.7	2,415.9	1,996.4	1,360.5	0.28	0.11	10.41	
5,989.0	1.14	88.19	5,352.7	2,417.2	1,996.7	1,362.4	0.46	-0.36	12.87	
6,074.0	1.10	120.05	5,437.7	2,417.7	1,996.3	1,364.0	0.72	-0.05	37.48	
6,160.0	1.01	136.40	5,523.6	2,417.6	1,995.4	1,365.2	0.36	-0.10	19.01	
6,245.0	1.49	138.99	5,608.6	2,417.2	1,994.0	1,366.4	0.57	0.56	3.05	
6,330.0	0.73	142.30	5,693.6	2,416.7	1,992.7	1,367.5	0.90	-0.89	3.89	
6,416.0	0.48	325.14	5,779.6	2,416.7	1,992.6	1,367.6	1.41	-0.29	-206.00	
6,501.0	0.52	319.32	5,864.6	2,416.9	1,993.2	1,367.2	0.08	0.05	-6.85	

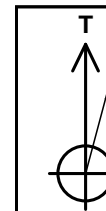
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6,587.0	1.41	326.42	5,950.6	2,417.4	1,994.3	1,366.3	1.04	1.03	8.26	
6,672.0	1.05	303.79	6,035.6	2,417.8	1,995.6	1,365.1	0.70	-0.42	-26.62	
6,757.0	1.45	342.02	6,120.5	2,418.5	1,997.1	1,364.1	1.06	0.47	44.98	
6,843.0	1.76	338.47	6,206.5	2,419.9	1,999.4	1,363.3	0.38	0.36	-4.13	
6,928.0	1.29	318.06	6,291.5	2,420.9	2,001.3	1,362.2	0.84	-0.55	-24.01	
7,014.0	1.46	284.76	6,377.5	2,420.7	2,002.3	1,360.5	0.94	0.20	-38.72	
7,099.0	1.85	278.21	6,462.4	2,419.8	2,002.8	1,358.1	0.51	0.46	-7.71	
7,185.0	1.80	269.07	6,548.4	2,418.4	2,002.9	1,355.4	0.34	-0.06	-10.63	
7,270.0	1.80	266.17	6,633.3	2,416.8	2,002.8	1,352.7	0.11	0.00	-3.41	
7,299.0	1.71	264.63	6,662.3	2,416.3	2,002.8	1,351.8	0.35	-0.31	-5.31	
7,356.0	1.71	264.63	6,719.3	2,415.2	2,002.6	1,350.1	0.00	0.00	0.00	

Checked By: _____	Approved By: _____	Date: _____
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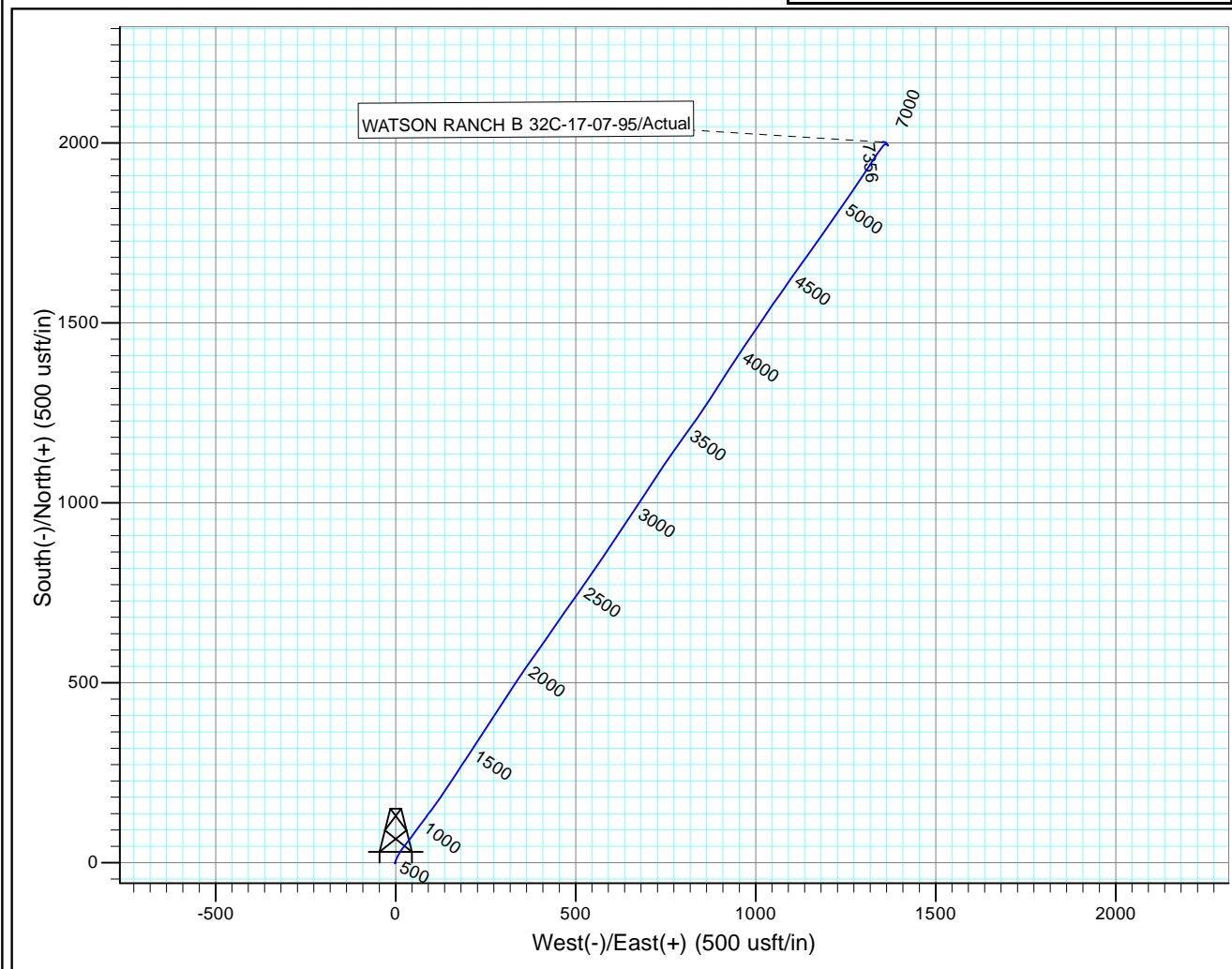
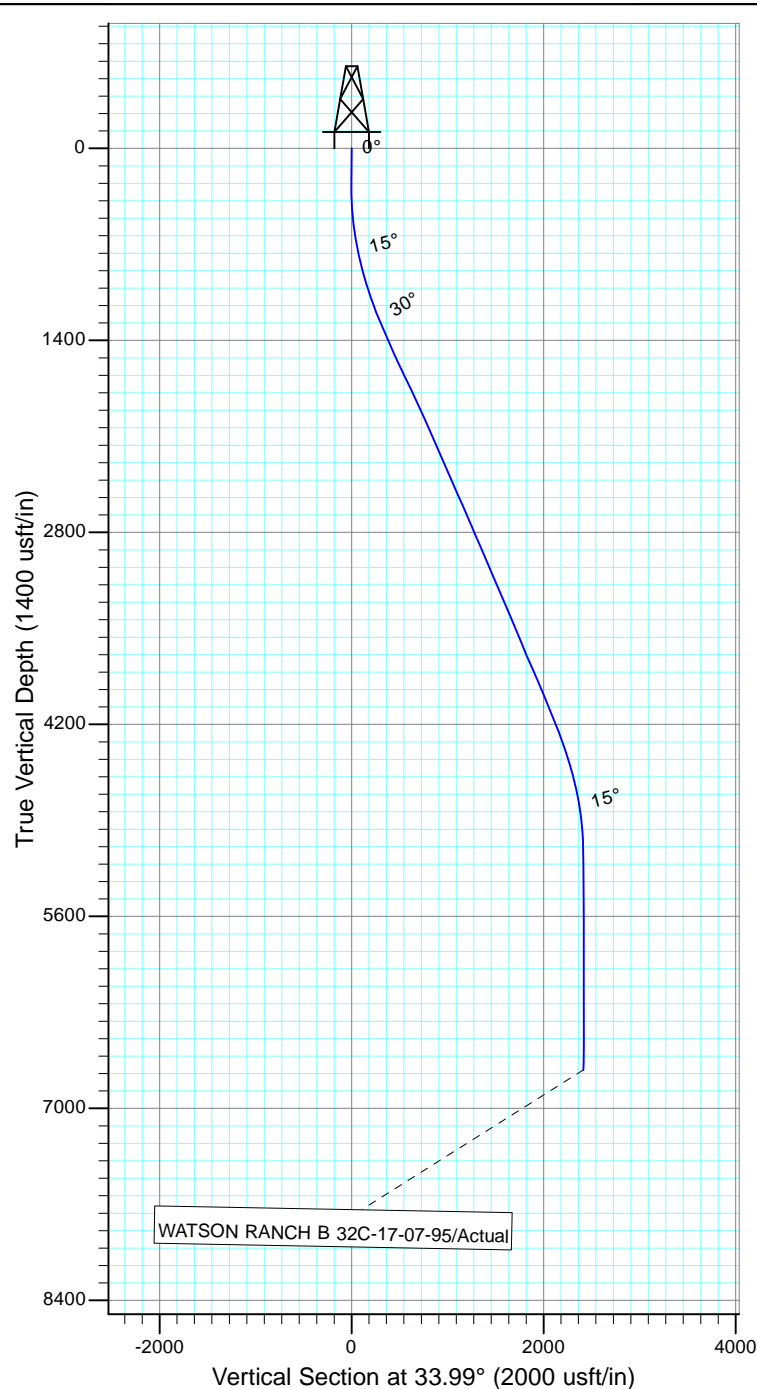


Project: Rockies Region
 Site: Watson Ranch B
 Well: WATSON RANCH B 32C-17-07-95
 Wellbore: Wellbore #1
 Design: Actual



Azimuths to True North
 Magnetic North: 9.88°

Magnetic Field
 Strength: 51841.1snT
 Dip Angle: 65.58°
 Date: 3/3/2015
 Model: IGRF2010



Design: Actual (WATSON RANCH B 32C-17-07-95/Wellbore #1)

Created By: *Matthew Linton*

Date: 11:52, April 20 2015

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