



Ursa Operating Company, LLC

Rockies Region

Yater

YATER 43C-18-07-95

Wellbore #1

Design: Actual

End of Well Report

06 April, 2015



Company:	Ursa Operating Company, LLC	Local Co-ordinate Reference:	Well YATER 43C-18-07-95
Project:	Rockies Region	TVD Reference:	YATER 43C-18-07-95 @ 5536.0usft (Capstar 321)
Site:	Yater	MD Reference:	YATER 43C-18-07-95 @ 5536.0usft (Capstar 321)
Well:	YATER 43C-18-07-95	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		Yater			
Site Position:		Northing:		1,593,358.14 usft	
From:	Lat/Long	Easting:		2,286,525.77 usft	
Position Uncertainty:		Slot Radius:		13-3/16 "	
				Latitude: 39° 26' 7.071 N	
				Longitude: 108° 1' 35.041 W	
				Grid Convergence: -1.59 °	

Well		YATER 43C-18-07-95, SHL LAT: 39.435090319 LONG: -108.026473646				
Well Position	+N/-S	0.0 usft	Northing:	1,593,283.26 usft	Latitude:	39° 26' 6.325 N
	+E/-W	0.0 usft	Easting:	2,286,502.94 usft	Longitude:	108° 1' 35.305 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	5,536.0 usft	Ground Level:	5,519.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/23/2014	9.93	65.59	51,878

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	272.56

Survey Program		Date	4/6/2015		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
206.0	6,890.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

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Site:	Yater	MD Reference:	YATER 43C-18-07-95 @ 5536.0usft (Capstar 321)
Well:	YATER 43C-18-07-95	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)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
206.0	1.58	76.81	206.0	-2.7	0.6	2.8	0.77	0.77	0.00	
235.0	1.19	82.70	235.0	-3.4	0.8	3.5	1.43	-1.34	20.31	
268.0	0.88	81.52	268.0	-4.0	0.9	4.0	0.94	-0.94	-3.58	
298.0	0.44	58.53	298.0	-4.3	1.0	4.4	1.68	-1.47	-76.63	
328.0	0.97	269.78	328.0	-4.2	1.0	4.2	4.55	1.77	-495.83	
358.0	1.49	269.34	357.9	-3.5	1.0	3.6	1.73	1.73	-1.47	
388.0	2.11	269.73	387.9	-2.6	1.0	2.6	2.07	2.07	1.30	
418.0	3.02	266.14	417.9	-1.2	0.9	1.3	3.08	3.03	-11.97	
448.0	3.91	267.49	447.8	0.6	0.8	-0.5	2.98	2.97	4.50	
478.0	5.01	268.90	477.8	2.9	0.8	-2.9	3.68	3.67	4.70	
508.0	5.98	268.68	507.6	5.8	0.7	-5.7	3.23	3.23	-0.73	
538.0	6.81	269.95	537.4	9.1	0.7	-9.1	2.81	2.77	4.23	
568.0	7.82	271.27	567.2	12.9	0.7	-12.9	3.41	3.37	4.40	
598.0	8.66	272.46	596.9	17.2	0.9	-17.2	2.86	2.80	3.97	
628.0	9.71	272.77	626.5	22.0	1.1	-22.0	3.50	3.50	1.03	
658.0	10.72	273.12	656.0	27.3	1.4	-27.3	3.37	3.37	1.17	
688.0	11.78	274.17	685.4	33.2	1.7	-33.1	3.60	3.53	3.50	
718.0	12.83	273.29	714.8	39.6	2.1	-39.5	3.56	3.50	-2.93	
748.0	13.89	272.46	743.9	46.5	2.5	-46.4	3.59	3.53	-2.77	
778.0	15.03	273.03	773.0	54.0	2.9	-53.9	3.83	3.80	1.90	
808.0	16.00	273.43	801.9	62.0	3.3	-61.9	3.25	3.23	1.33	
838.0	16.96	272.33	830.7	70.5	3.7	-70.4	3.36	3.20	-3.67	
868.0	17.93	271.36	859.3	79.5	4.0	-79.4	3.38	3.23	-3.23	
898.0	19.03	271.36	887.7	89.0	4.2	-88.9	3.67	3.67	0.00	
928.0	20.06	271.24	916.0	99.0	4.5	-98.9	3.44	3.43	-0.40	
958.0	20.92	271.71	944.1	109.5	4.7	-109.4	2.92	2.87	1.57	

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Well:	YATER 43C-18-07-95	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)
988.0	21.84	271.32	972.0	120.5	5.0	-120.4	3.10	3.07	-1.30
1,018.0	22.63	271.71	999.8	131.8	5.3	-131.7	2.68	2.63	1.30
1,048.0	23.22	271.91	1,027.4	143.5	5.7	-143.4	1.98	1.97	0.67
1,078.0	23.91	272.33	1,054.9	155.5	6.1	-155.4	2.37	2.30	1.40
1,108.0	24.65	272.50	1,082.3	167.8	6.7	-167.7	2.48	2.47	0.57
1,138.0	25.27	271.67	1,109.5	180.5	7.1	-180.4	2.37	2.07	-2.77
1,168.0	26.10	272.11	1,136.5	193.5	7.6	-193.4	2.84	2.77	1.47
1,198.0	26.72	271.67	1,163.4	206.8	8.0	-206.7	2.17	2.07	-1.47
1,228.0	27.42	272.81	1,190.1	220.5	8.5	-220.3	2.90	2.33	3.80
1,258.0	28.13	272.06	1,216.6	234.5	9.1	-234.3	2.64	2.37	-2.50
1,288.0	28.96	272.28	1,243.0	248.8	9.7	-248.6	2.79	2.77	0.73
1,318.0	29.53	272.46	1,269.2	263.5	10.3	-263.3	1.92	1.90	0.60
1,348.0	29.79	272.55	1,295.2	278.3	10.9	-278.1	0.88	0.87	0.30
1,378.0	29.71	272.28	1,321.3	293.2	11.5	-293.0	0.52	-0.27	-0.90
1,408.0	29.93	272.24	1,347.3	308.1	12.1	-307.9	0.74	0.73	-0.13
1,438.0	30.94	272.94	1,373.2	323.3	12.8	-323.1	3.57	3.37	2.33
1,468.0	31.07	273.03	1,398.9	338.8	13.6	-338.5	0.46	0.43	0.30
1,498.0	31.11	271.93	1,424.6	354.3	14.3	-354.0	1.90	0.13	-3.67
1,528.0	31.20	273.03	1,450.3	369.8	15.0	-369.5	1.92	0.30	3.67
1,558.0	31.33	272.94	1,475.9	385.3	15.8	-385.0	0.46	0.43	-0.30
1,588.0	31.29	272.46	1,501.5	400.9	16.5	-400.6	0.84	-0.13	-1.60
1,618.0	31.33	272.64	1,527.2	416.5	17.2	-416.2	0.34	0.13	0.60
1,648.0	31.55	273.38	1,552.8	432.2	18.0	-431.8	1.48	0.73	2.47
1,678.0	31.55	273.03	1,578.3	447.9	18.9	-447.5	0.61	0.00	-1.17
1,708.0	31.77	272.99	1,603.9	463.6	19.7	-463.2	0.74	0.73	-0.13
1,738.0	31.99	272.81	1,629.3	479.5	20.5	-479.0	0.80	0.73	-0.60
1,768.0	31.90	272.90	1,654.8	495.3	21.3	-494.9	0.34	-0.30	0.30

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MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	
1,798.0	31.99	273.16	1,680.3	511.2	22.2	-510.7	0.55	0.30	0.87	
1,870.0	32.43	273.82	1,741.2	549.6	24.5	-549.0	0.78	0.61	0.92	
1,955.0	32.17	273.07	1,813.0	595.0	27.2	-594.4	0.56	-0.31	-0.88	
2,040.0	32.08	271.84	1,885.0	640.2	29.2	-639.5	0.78	-0.11	-1.45	
2,146.0	31.81	271.63	1,975.0	696.3	30.9	-695.6	0.28	-0.25	-0.20	
2,231.0	30.85	272.20	2,047.6	740.5	32.3	-739.8	1.18	-1.13	0.67	
2,316.0	30.54	273.91	2,120.6	783.8	34.7	-783.1	1.09	-0.36	2.01	
2,402.0	29.36	273.03	2,195.2	826.8	37.3	-825.9	1.46	-1.37	-1.02	
2,487.0	30.06	272.28	2,269.0	868.9	39.2	-868.0	0.93	0.82	-0.88	
2,573.0	31.11	274.74	2,343.0	912.6	41.9	-911.7	1.90	1.22	2.86	
2,658.0	30.01	273.69	2,416.2	955.8	45.1	-954.8	1.44	-1.29	-1.24	
2,744.0	31.25	274.31	2,490.2	999.6	48.1	-998.5	1.49	1.44	0.72	
2,829.0	30.50	274.00	2,563.2	1,043.2	51.3	-1,042.0	0.90	-0.88	-0.36	
2,915.0	29.58	273.91	2,637.6	1,086.3	54.3	-1,084.9	1.07	-1.07	-0.10	
3,000.0	30.15	272.11	2,711.3	1,128.6	56.5	-1,127.2	1.25	0.67	-2.12	
3,085.0	31.42	271.01	2,784.4	1,172.1	57.7	-1,170.7	1.63	1.49	-1.29	
3,171.0	30.81	270.35	2,858.0	1,216.5	58.2	-1,215.1	0.81	-0.71	-0.77	
3,256.0	30.19	270.09	2,931.2	1,259.6	58.4	-1,258.3	0.75	-0.73	-0.31	
3,342.0	31.25	271.98	3,005.2	1,303.5	59.2	-1,302.2	1.67	1.23	2.20	
3,427.0	30.22	271.30	3,078.2	1,347.0	60.4	-1,345.6	1.28	-1.21	-0.80	
3,512.0	30.32	274.50	3,151.6	1,389.8	62.6	-1,388.4	1.90	0.12	3.76	
3,598.0	29.27	273.21	3,226.3	1,432.5	65.5	-1,431.0	1.43	-1.22	-1.50	
3,683.0	27.64	272.94	3,301.0	1,473.0	67.6	-1,471.5	1.92	-1.92	-0.32	
3,769.0	25.14	273.21	3,378.0	1,511.2	69.7	-1,509.6	2.91	-2.91	0.31	
3,854.0	22.96	274.98	3,455.6	1,545.9	72.1	-1,544.2	2.70	-2.56	2.08	
3,939.0	20.70	273.69	3,534.5	1,577.4	74.5	-1,575.7	2.72	-2.66	-1.52	
4,025.0	18.76	273.65	3,615.5	1,606.5	76.4	-1,604.7	2.26	-2.26	-0.05	

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4,110.0	16.35	272.15	3,696.5	1,632.1	77.7	-1,630.3	2.88	-2.84	-1.76	
4,196.0	14.41	270.18	3,779.4	1,654.9	78.2	-1,653.1	2.34	-2.26	-2.29	
4,281.0	12.39	268.42	3,862.1	1,674.6	78.0	-1,672.8	2.42	-2.38	-2.07	
4,367.0	10.59	271.18	3,946.4	1,691.7	77.9	-1,689.9	2.19	-2.09	3.21	
4,452.0	8.26	266.88	4,030.2	1,705.6	77.7	-1,703.8	2.86	-2.74	-5.06	
4,537.0	6.72	270.00	4,114.5	1,716.6	77.4	-1,714.9	1.87	-1.81	3.67	
4,623.0	4.88	280.59	4,200.1	1,725.3	78.1	-1,723.5	2.47	-2.14	12.31	
4,709.0	2.46	290.39	4,285.9	1,730.6	79.4	-1,728.8	2.90	-2.81	11.40	
4,794.0	2.11	283.36	4,370.8	1,733.9	80.4	-1,732.0	0.53	-0.41	-8.27	
4,880.0	1.83	271.26	4,456.8	1,736.8	80.8	-1,735.0	0.58	-0.33	-14.07	
4,965.0	1.85	275.49	4,541.7	1,739.6	80.9	-1,737.7	0.16	0.02	4.98	
5,050.0	1.93	268.37	4,626.7	1,742.4	81.0	-1,740.5	0.29	0.09	-8.38	
5,135.0	2.50	263.49	4,711.6	1,745.6	80.8	-1,743.7	0.71	0.67	-5.74	
5,221.0	1.10	261.25	4,797.6	1,748.3	80.4	-1,746.4	1.63	-1.63	-2.60	
5,306.0	0.26	314.69	4,882.6	1,749.2	80.4	-1,747.4	1.14	-0.99	62.87	
5,391.0	0.46	341.69	4,967.6	1,749.5	80.9	-1,747.6	0.30	0.24	31.76	
5,477.0	0.60	282.02	5,053.6	1,750.1	81.3	-1,748.2	0.63	0.16	-69.38	
5,562.0	0.70	274.13	5,138.6	1,751.0	81.5	-1,749.1	0.16	0.12	-9.28	
5,648.0	0.92	235.33	5,224.6	1,752.1	81.1	-1,750.2	0.67	0.26	-45.12	
5,733.0	1.54	235.81	5,309.5	1,753.5	80.1	-1,751.7	0.73	0.73	0.56	
5,818.0	0.85	254.70	5,394.5	1,755.1	79.3	-1,753.3	0.92	-0.81	22.22	
5,904.0	0.48	77.17	5,480.5	1,755.3	79.2	-1,753.5	1.55	-0.43	-206.43	
5,989.0	0.48	102.13	5,565.5	1,754.6	79.2	-1,752.8	0.24	0.00	29.36	
6,075.0	0.44	214.50	5,651.5	1,754.4	78.8	-1,752.7	0.89	-0.05	130.66	
6,160.0	0.79	234.01	5,736.5	1,755.1	78.2	-1,753.3	0.47	0.41	22.95	
6,246.0	0.75	306.12	5,822.5	1,756.0	78.2	-1,754.3	1.05	-0.05	83.85	
6,331.0	0.88	81.03	5,907.5	1,755.8	78.6	-1,754.1	1.77	0.15	158.72	

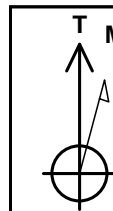
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6,417.0	1.10	84.15	5,993.5	1,754.4	78.8	-1,752.6	0.26	0.26	3.63	
6,502.0	0.79	85.96	6,078.5	1,753.0	78.9	-1,751.2	0.37	-0.36	2.13	
6,587.0	0.44	69.34	6,163.5	1,752.1	79.1	-1,750.3	0.46	-0.41	-19.55	
6,673.0	0.18	166.55	6,249.5	1,751.8	79.1	-1,750.0	0.58	-0.30	113.03	
6,758.0	0.18	163.26	6,334.5	1,751.7	78.8	-1,749.9	0.01	0.00	-3.87	
6,833.0	0.35	219.81	6,409.5	1,751.8	78.5	-1,750.0	0.39	0.23	75.40	
6,890.0	0.35	219.81	6,466.5	1,752.0	78.3	-1,750.2	0.00	0.00	0.00	

Checked By: _____ Approved By: _____ Date: _____

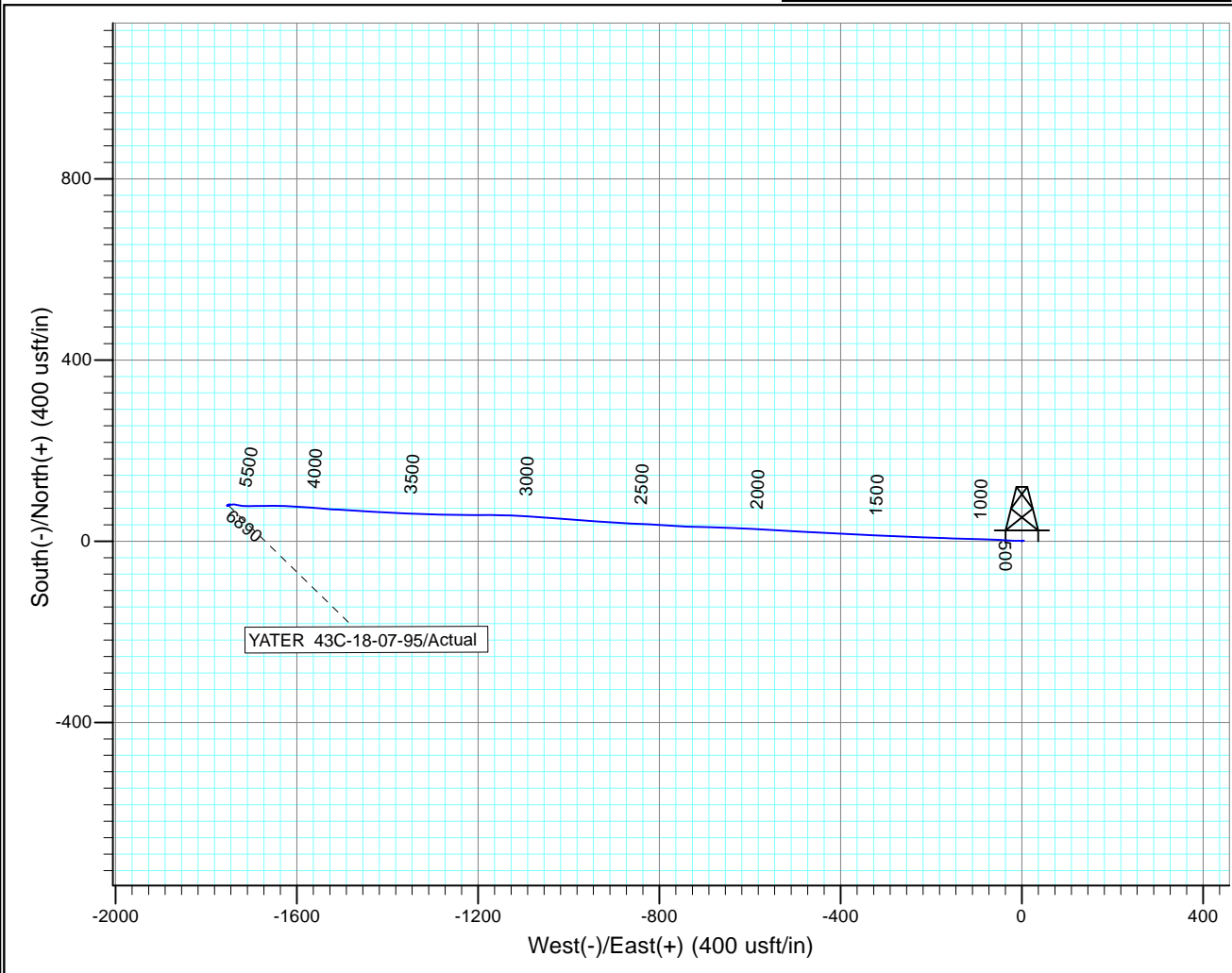
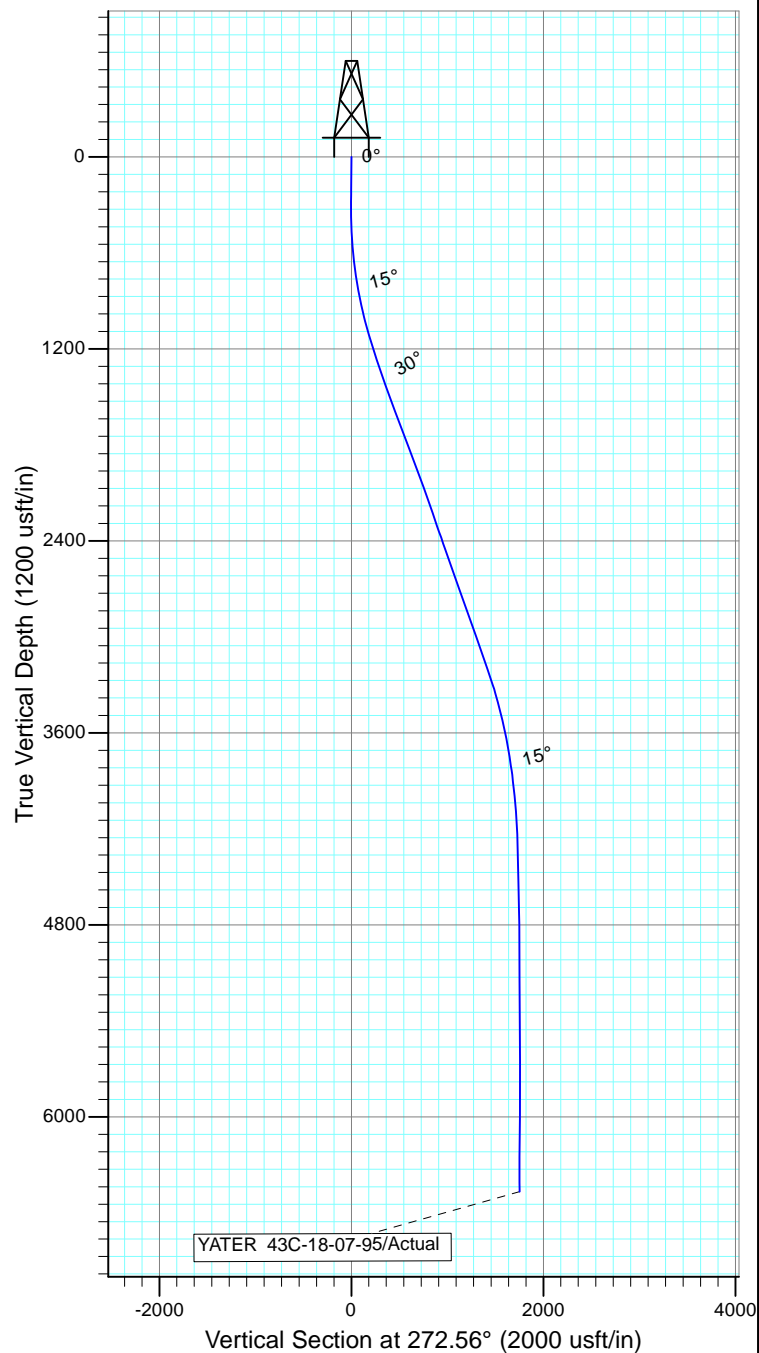


Project: Rockies Region
Site: Yater
Well: YATER 43C-18-07-95
Wellbore: Wellbore #1
Design: Actual



Azimuths to True North
Magnetic North: 9.93°

Magnetic Field
Strength: 51878.2snT
Dip Angle: 65.59°
Date: 10/23/2014
Model: IGRF2010



Design: Actual (YATER 43C-18-07-95/Wellbore #1)

Created By: Matthew Linton

Date: 5:41, April 06 2015

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