

DISTRICT I

1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II

611 S. First St., Artesia, N.M. 88210
Phone: (575) 748-1283 Fax: (575) 748-9780

DISTRICT III

1000 Rio Brazos Rd., Aztec, N.M. 87410
Phone: (505) 334-6176 Fax: (505) 334-6170

DISTRICT IV

1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3480 Fax: (505) 476-3482

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 1, 2011

Submit one copy to appropriate
District Office

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, NM 87505

☐ AMENDED REPORT

☒ AS-DRILLED

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-35658		² Pool Code 98173	³ Pool Name BLANCO WASH UNIT OIL POOL
⁴ Property Code 325180	⁵ Property Name BLANCO WASH UNIT		⁶ Well Number 403H
⁷ GRID No. 371838	⁸ Operator Name DJR OPERATING, LLC		⁹ Elevation 6892.4'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	24	24N	9W		1543'	SOUTH	76'	EAST	SAN JUAN

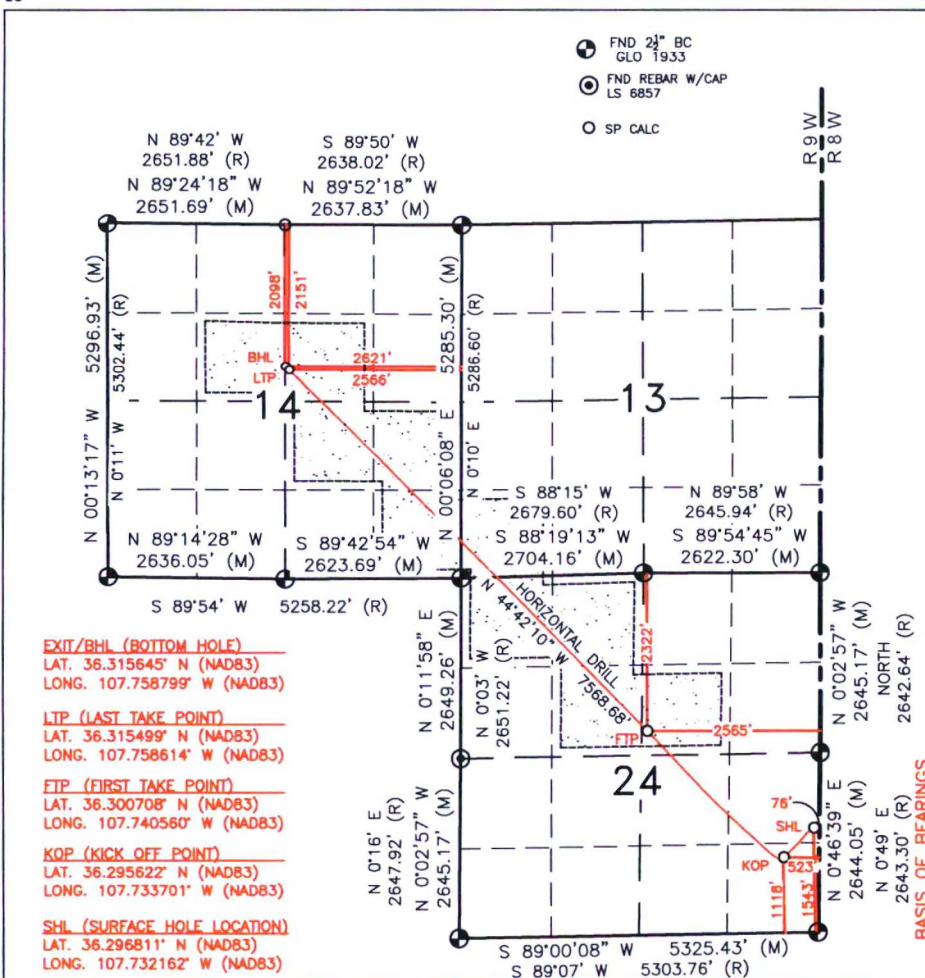
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	14	24N	9W		2098'	NORTH	2621'	EAST	SAN JUAN

¹² Dedicated Acres (40 AC); SEC 14: NW/SE, NE/SE, SE/SE, SW/NE, & SW/NW (200 AC); SEC 24: SW/NE, NW/NW, NE/NW & SE/NW (180 AC) = 400 ACRES TOTAL	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

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**17 OPERATOR CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Shaw-Marie Ford 11/20/19
Signature Date

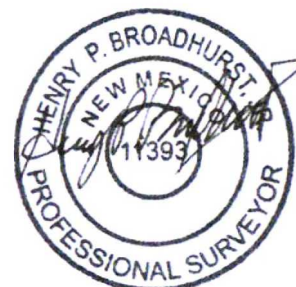
Shaw-Marie Ford
Printed Name

sford@djrlc.com
E-mail Address

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.
NOVEMBER 4, 2019

Date of Survey
Signature and Seal of Professional Surveyor:



Certificate Number 11393

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OIL CONSERVATION DIVISION

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Santa Fe, NM 87505

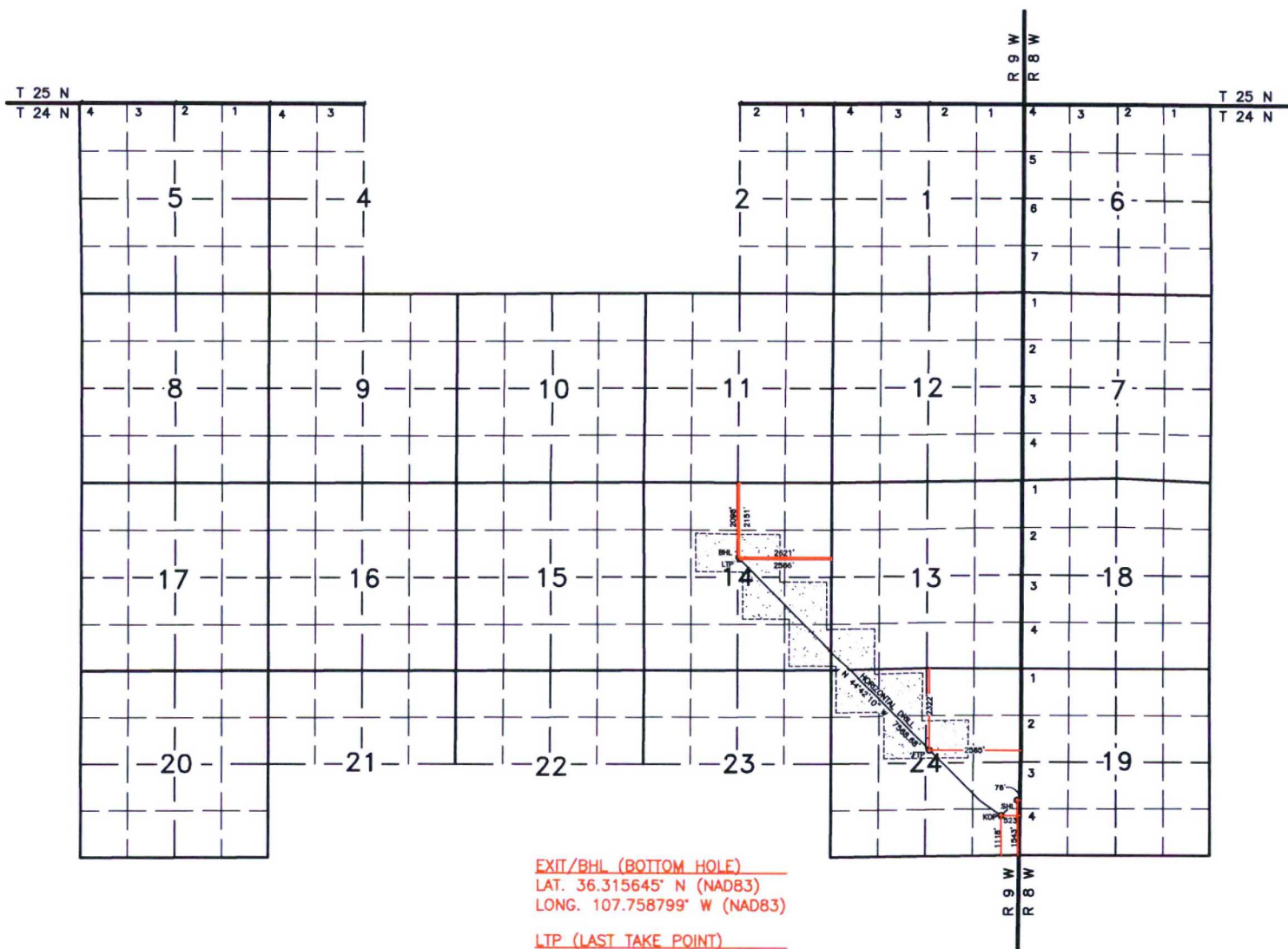
DJR OPERATING, LLC
BLANCO WASH UNIT #403H

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EXIT/BHL (BOTTOM HOLE)
LAT. 36.315645° N (NAD83)
LONG. 107.758799° W (NAD83)

LTP (LAST TAKE POINT)
LAT. 36.315499° N (NAD83)
LONG. 107.758614° W (NAD83)

FIP (FIRST TAKE POINT)
LAT. 36.300708° N (NAD83)
LONG. 107.740560° W (NAD83)

KOP (KICK OFF POINT)
LAT. 36.295622° N (NAD83)
LONG. 107.733701° W (NAD83)

SHL (SURFACE HOLE LOCATION)
LAT. 36.296811° N (NAD83)
LONG. 107.732162° W (NAD83)

PROJECT AREA: SEC 13: SW/SW (40 AC); SEC 14:
NW/SE, NE/SE, SE/SE, SW/NE, & SW/NW (200 AC);
SEC 24: SW/NE, NW/NW, NE/NW & SE/NW (160 AC)
= 400 ACRES TOTAL

TOTAL 13128.47 ACRES: ALL OF SEC. 6, 7, 18, & 19, IN
T24N R8W. ALL OF SECTIONS 1, 5, 8 - 17, 20, & 21, E/2
SECTION 2, W/2 SECTION 4, N/2 SECTIONS 21 - 23, IN T24N
R9W, - UNDIVIDED UNIT



Scientific Drilling

Directional Survey Certification

2948 I-70 Business Loop
Grand Junction, CO 81504
(970)-245-9447 Fax (970)-245-9454

Operator	DJR Operating
Well Name & No.	Blanco Wash I24A 2409 403H
County & State	San Juan, NM
SDI Job No.	OP.021512
Rig	Aztec 920

I, Janie Collins, having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 441 feet to a measured depth of 15,629 feet is true and correct as determined from all available records.


Signature

4-Nov-19
Date

Janie Collins
Colorado District Well Planner
Scientific Drilling International



Scientific Drilling, Intl
Survey Report



Company: DJR Operating
Project: Blanco Wash Unit
Site: I24A 2409
Well: # 403H
Wellbore: Original drilling
Design: Original drilling

Local Co-ordinate Reference: Well # 403H
TVD Reference: GL 6892' & RKB 14' @ 6906.00usft (Aztec 920)
MD Reference: GL 6892' & RKB 14' @ 6906.00usft (Aztec 920)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Grand Junction District

Project	Blanco Wash Unit		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site	I24A 2409		
Site Position:		Northing:	1,927,380.66 usft
From:	Lat/Long	Easting:	2,752,918.75 usft
Position Uncertainty:	0.00 usft	Slot Radius:	16 "
		Latitude:	36° 17' 48.779 N
		Longitude:	107° 43' 55.607 W
		Grid Convergence:	0.06 °

Well	# 403H		
Well Position	+N/-S	0.00 usft	Northing: 1,927,354.44 usft
	+E/-W	0.00 usft	Easting: 2,752,904.34 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	36° 17' 48.520 N
		Longitude:	107° 43' 55.783 W
		Ground Level:	6,892.00 usft

Wellbore	Original drilling				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	10/6/2019	8.77	62.83	49,466

Design	Original drilling				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	311.08	

Survey Program	Date	11/4/2019			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
441.00	4,615.00	Survey #1 - Surface MWD Survey (Original)	MWD+HDGM	OWSG MWD + HDGM	
4,679.00	5,865.00	Survey #2 - Curve MWD Survey (Original)	MWD+HDGM	OWSG MWD + HDGM	
5,953.00	15,629.00	Survey #3 - Lateral MWD Survey (Original)	MWD+HDGM	OWSG MWD + HDGM	

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
441.00	1.51	234.92	440.95	-3.34	-4.76	1.39	0.34	0.34	0.00	
501.00	3.86	225.94	500.88	-5.20	-6.85	1.75	3.97	3.92	-14.97	
563.00	4.89	236.08	562.70	-8.12	-10.55	2.61	2.07	1.66	16.35	
623.00	6.16	230.60	622.42	-11.60	-15.16	3.80	2.29	2.12	-9.13	
684.00	6.79	229.77	683.03	-16.00	-20.44	4.89	1.04	1.03	-1.36	
745.00	6.90	234.31	743.60	-20.47	-26.17	6.27	0.90	0.18	7.44	
806.00	7.33	233.31	804.13	-24.93	-32.26	7.94	0.73	0.70	-1.64	
867.00	7.19	232.84	864.64	-29.56	-38.43	9.54	0.25	-0.23	-0.77	



Scientific Drilling, Intl
Survey Report



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MD Reference: GL 6892' & RKB 14' @ 6906.00usft (Aztec 920)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Grand Junction District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
928.00	7.70	234.36	925.12	-34.25	-44.79	11.25	0.90	0.84	2.49
990.00	7.08	235.16	986.61	-38.85	-51.30	13.14	1.01	-1.00	1.29
1,050.00	7.17	235.56	1,046.14	-43.08	-57.42	14.97	0.17	0.15	0.67
1,111.00	7.65	234.01	1,106.63	-47.62	-63.85	16.83	0.85	0.79	-2.54
1,171.00	8.25	232.52	1,166.06	-52.59	-70.50	18.58	1.06	1.00	-2.48
1,232.00	8.27	231.79	1,226.42	-57.96	-77.42	20.26	0.18	0.03	-1.20
1,293.00	8.03	229.42	1,286.81	-63.45	-84.10	21.69	0.68	-0.39	-3.89
1,354.00	8.14	227.63	1,347.20	-69.13	-90.53	22.80	0.45	0.18	-2.93
1,414.00	7.30	222.17	1,406.66	-74.82	-96.22	23.36	1.86	-1.40	-9.10
1,476.00	6.24	217.42	1,468.23	-80.41	-100.92	23.22	1.93	-1.71	-7.66
1,537.00	6.40	220.75	1,528.86	-85.62	-105.15	22.99	0.66	0.26	5.46
1,598.00	6.51	222.43	1,589.47	-90.75	-109.70	23.05	0.36	0.18	2.75
1,659.00	6.60	218.65	1,650.07	-96.04	-114.22	22.98	0.72	0.15	-6.20
1,721.00	7.47	216.45	1,711.60	-102.07	-118.84	22.50	1.47	1.40	-3.55
1,781.00	8.62	219.79	1,771.01	-108.66	-124.04	22.09	2.07	1.92	5.57
1,843.00	8.44	227.88	1,832.33	-115.28	-130.39	22.52	1.96	-0.29	13.05
1,904.00	8.19	223.15	1,892.69	-121.45	-136.68	23.21	1.19	-0.41	-7.75
1,966.00	9.53	223.65	1,953.95	-128.39	-143.24	23.60	2.16	2.16	0.81
2,029.00	9.76	219.88	2,016.06	-136.26	-150.27	23.72	1.07	0.37	-5.98
2,092.00	9.58	220.50	2,078.16	-144.34	-157.10	23.55	0.33	-0.29	0.98
2,155.00	9.32	220.06	2,140.31	-152.24	-163.78	23.41	0.43	-0.41	-0.70
2,218.00	8.79	220.46	2,202.52	-159.80	-170.19	23.26	0.85	-0.84	0.63
2,281.00	8.87	219.61	2,264.77	-167.21	-176.41	23.09	0.24	0.13	-1.35
2,345.00	9.01	218.07	2,328.00	-174.95	-182.65	22.70	0.43	0.22	-2.41
2,408.00	8.10	216.59	2,390.30	-182.40	-188.33	22.09	1.49	-1.44	-2.35
2,471.00	9.13	220.38	2,452.58	-189.77	-194.22	21.68	1.87	1.63	6.02
2,534.00	9.56	221.88	2,514.75	-197.47	-200.95	21.69	0.78	0.68	2.38
2,597.00	9.67	219.00	2,576.86	-205.48	-207.77	21.57	0.78	0.17	-4.57
2,660.00	9.21	220.08	2,639.01	-213.45	-214.35	21.29	0.78	-0.73	1.71
2,722.00	9.58	219.35	2,700.18	-221.24	-220.81	21.05	0.63	0.60	-1.18
2,785.00	9.80	221.82	2,762.28	-229.29	-227.71	20.96	0.75	0.35	3.92
2,848.00	9.99	223.00	2,824.34	-237.28	-235.01	21.21	0.44	0.30	1.87
2,912.00	9.87	219.40	2,887.38	-245.58	-242.28	21.23	0.99	-0.19	-5.63
2,975.00	9.29	218.05	2,949.51	-253.75	-248.84	20.81	0.99	-0.92	-2.14
3,038.00	9.32	219.59	3,011.68	-261.69	-255.23	20.40	0.40	0.05	2.44
3,101.00	9.44	221.33	3,073.83	-269.50	-261.89	20.29	0.49	0.19	2.76
3,164.00	9.16	224.25	3,136.01	-276.97	-268.80	20.59	0.87	-0.44	4.63
3,227.00	9.79	228.18	3,198.15	-284.14	-276.29	21.53	1.43	1.00	6.24
3,290.00	8.78	224.93	3,260.32	-291.11	-283.68	22.52	1.81	-1.60	-5.16
3,353.00	9.49	230.79	3,322.52	-297.80	-291.10	23.71	1.86	1.13	9.30
3,416.00	9.32	236.33	3,384.68	-303.91	-299.37	25.93	1.46	-0.27	8.79
3,479.00	9.40	237.32	3,446.84	-309.52	-307.95	28.71	0.29	0.13	1.57
3,542.00	9.42	235.14	3,508.99	-315.24	-316.51	31.40	0.57	0.03	-3.46



Scientific Drilling, Intl
Survey Report



Company: DJR Operating
Project: Blanco Wash Unit
Site: I24A 2409
Well: # 403H
Wellbore: Original drilling
Design: Original drilling

Local Co-ordinate Reference: Well # 403H
TVD Reference: GL 6892' & RKB 14' @ 6906.00usft (Aztec 920)
MD Reference: GL 6892' & RKB 14' @ 6906.00usft (Aztec 920)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Grand Junction District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,605.00	8.64	234.90	3,571.21	-320.91	-324.61	33.78	1.24	-1.24	-0.38
3,668.00	8.35	231.59	3,633.52	-326.47	-332.07	35.75	0.90	-0.46	-5.25
3,732.00	8.77	233.12	3,696.81	-332.29	-339.61	37.61	0.75	0.66	2.39
3,795.00	8.46	233.02	3,759.10	-337.96	-347.15	39.57	0.49	-0.49	-0.16
3,858.00	9.74	227.61	3,821.30	-344.34	-354.79	41.14	2.44	2.03	-8.59
3,921.00	10.17	225.18	3,883.35	-351.85	-362.67	42.14	0.95	0.68	-3.86
3,984.00	10.77	222.76	3,945.31	-360.09	-370.62	42.71	1.18	0.95	-3.84
4,047.00	11.30	228.46	4,007.14	-368.51	-379.23	43.67	1.92	0.84	9.05
4,110.00	10.41	231.01	4,069.01	-376.18	-388.28	45.45	1.60	-1.41	4.05
4,173.00	10.02	231.65	4,131.02	-383.17	-397.00	47.43	0.64	-0.62	1.02
4,236.00	10.25	228.18	4,193.03	-390.30	-405.47	49.13	1.04	0.37	-5.51
4,300.00	10.40	228.39	4,256.00	-397.94	-414.04	50.57	0.24	0.23	0.33
4,363.00	10.85	231.84	4,317.92	-405.38	-422.95	52.40	1.24	0.71	5.48
4,426.00	9.83	228.60	4,379.89	-412.60	-431.65	54.21	1.86	-1.62	-5.14
4,489.00	9.75	226.04	4,441.98	-419.86	-439.52	55.37	0.70	-0.13	-4.06
4,552.00	8.41	225.94	4,504.19	-426.76	-446.67	56.22	2.13	-2.13	-0.16
4,615.00	8.26	223.20	4,566.52	-433.27	-453.08	56.78	0.67	-0.24	-4.35
4,679.00	8.35	224.00	4,629.85	-439.96	-459.46	57.19	0.23	0.14	1.25
4,742.00	8.67	223.01	4,692.16	-446.72	-465.87	57.58	0.56	0.51	-1.57
4,805.00	8.82	228.66	4,754.42	-453.39	-472.74	58.38	1.38	0.24	8.97
4,855.00	8.67	235.13	4,803.84	-458.07	-478.71	59.80	1.99	-0.30	12.94
4,918.00	11.87	268.32	4,865.88	-460.98	-489.09	65.71	10.47	5.08	52.68
4,981.00	15.89	289.32	4,927.07	-458.31	-503.72	78.49	10.13	6.38	33.33
5,044.00	19.82	295.35	4,987.02	-450.88	-521.52	96.79	6.89	6.24	9.57
5,108.00	23.16	300.17	5,046.57	-439.91	-542.22	119.60	5.90	5.22	7.53
5,171.00	26.66	301.68	5,103.70	-426.26	-564.96	145.72	5.65	5.56	2.40
5,234.00	30.77	302.46	5,158.94	-410.18	-590.60	175.61	6.55	6.52	1.24
5,297.00	36.24	303.31	5,211.46	-391.29	-619.78	210.02	8.71	8.68	1.35
5,360.00	40.66	308.54	5,260.80	-368.26	-651.42	249.00	8.71	7.02	8.30
5,423.00	45.49	310.13	5,306.80	-340.97	-684.67	291.99	7.86	7.67	2.52
5,487.00	50.66	312.09	5,349.55	-309.65	-720.51	339.59	8.39	8.08	3.06
5,550.00	57.47	313.54	5,386.50	-274.99	-757.89	390.54	10.97	10.81	2.30
5,613.00	65.73	312.99	5,416.44	-237.04	-798.21	445.87	13.13	13.11	-0.87
5,676.00	71.86	313.22	5,439.22	-196.93	-841.07	504.54	9.74	9.73	0.37
5,739.00	77.03	312.09	5,456.11	-155.82	-885.70	565.19	8.39	8.21	-1.79
5,802.00	79.37	311.22	5,468.99	-114.84	-931.77	626.85	3.95	3.71	-1.38
5,865.00	80.81	311.79	5,479.83	-73.71	-978.25	688.91	2.45	2.29	0.90
5,953.00	83.98	311.73	5,491.48	-15.63	-1,043.30	776.12	3.60	3.60	-0.07
6,016.00	83.97	311.64	5,498.09	26.04	-1,090.09	838.77	0.14	-0.02	-0.14
6,078.00	84.23	311.01	5,504.46	66.76	-1,136.41	900.44	1.09	0.42	-1.02
6,142.00	85.29	310.95	5,510.31	108.56	-1,184.52	964.17	1.66	1.66	-0.09
6,203.00	87.07	311.40	5,514.37	148.63	-1,230.33	1,025.03	3.01	2.92	0.74
6,266.00	86.81	310.51	5,517.74	189.86	-1,277.84	1,087.94	1.47	-0.41	-1.41



Scientific Drilling, Intl
Survey Report



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Design: Original drilling

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Database: Grand Junction District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,329.00	87.61	312.21	5,520.80	231.44	-1,325.07	1,150.86	2.98	1.27	2.70
6,392.00	88.82	313.47	5,522.76	274.25	-1,371.24	1,213.80	2.77	1.92	2.00
6,455.00	89.83	316.01	5,523.51	318.59	-1,415.98	1,276.66	4.34	1.60	4.03
6,517.00	91.01	316.36	5,523.05	363.33	-1,458.90	1,338.41	1.99	1.90	0.56
6,579.00	91.01	315.63	5,521.96	407.92	-1,501.97	1,400.17	1.18	0.00	-1.18
6,642.00	90.94	315.42	5,520.89	452.86	-1,546.10	1,462.98	0.35	-0.11	-0.33
6,705.00	90.84	314.95	5,519.91	497.55	-1,590.50	1,525.81	0.76	-0.16	-0.75
6,768.00	91.08	314.59	5,518.85	541.91	-1,635.22	1,588.67	0.69	0.38	-0.57
6,830.00	89.87	312.90	5,518.34	584.78	-1,680.01	1,650.59	3.35	-1.95	-2.73
6,893.00	90.10	313.44	5,518.36	627.88	-1,725.95	1,713.55	0.93	0.37	0.86
6,956.00	91.18	315.77	5,517.65	672.11	-1,770.80	1,776.42	4.08	1.71	3.70
7,019.00	91.25	315.89	5,516.32	717.29	-1,814.69	1,839.19	0.22	0.11	0.19
7,081.00	90.87	315.40	5,515.17	761.61	-1,858.03	1,900.99	1.00	-0.61	-0.79
7,144.00	91.45	315.71	5,513.89	806.58	-1,902.13	1,963.78	1.04	0.92	0.49
7,207.00	91.71	315.86	5,512.16	851.72	-1,946.05	2,026.55	0.48	0.41	0.24
7,270.00	91.35	314.72	5,510.47	896.47	-1,990.35	2,089.35	1.90	-0.57	-1.81
7,332.00	92.35	315.43	5,508.47	940.35	-2,034.11	2,151.17	1.98	1.61	1.15
7,395.00	93.46	317.44	5,505.28	985.94	-2,077.47	2,213.81	3.64	1.76	3.19
7,458.00	92.93	318.96	5,501.77	1,032.83	-2,119.40	2,276.23	2.55	-0.84	2.41
7,520.00	92.86	319.59	5,498.64	1,079.75	-2,159.79	2,337.51	1.02	-0.11	1.02
7,582.00	91.58	319.79	5,496.24	1,126.99	-2,199.87	2,398.77	2.09	-2.06	0.32
7,645.00	87.78	317.37	5,496.59	1,174.22	-2,241.54	2,461.21	7.15	-6.03	-3.84
7,707.00	90.77	317.60	5,497.37	1,219.92	-2,283.43	2,522.81	4.84	4.82	0.37
7,770.00	88.52	315.56	5,497.76	1,265.67	-2,326.73	2,585.52	4.82	-3.57	-3.24
7,833.00	89.63	314.47	5,498.78	1,310.22	-2,371.26	2,648.36	2.47	1.76	-1.73
7,896.00	90.00	315.86	5,498.98	1,354.90	-2,415.67	2,711.20	2.28	0.59	2.21
7,958.00	89.36	315.18	5,499.33	1,399.13	-2,459.11	2,773.01	1.51	-1.03	-1.10
8,021.00	89.63	315.23	5,499.88	1,443.84	-2,503.50	2,835.84	0.44	0.43	0.08
8,083.00	88.82	314.23	5,500.72	1,487.46	-2,547.54	2,897.71	2.08	-1.31	-1.61
8,146.00	89.19	315.75	5,501.82	1,532.00	-2,592.09	2,960.55	2.48	0.59	2.41
8,209.00	90.67	316.43	5,501.89	1,577.38	-2,635.78	3,023.31	2.59	2.35	1.08
8,272.00	89.03	315.06	5,502.06	1,622.50	-2,679.74	3,086.10	3.39	-2.60	-2.17
8,335.00	90.44	316.21	5,502.35	1,667.54	-2,723.79	3,148.90	2.89	2.24	1.83
8,397.00	88.72	315.02	5,502.80	1,711.84	-2,767.16	3,210.70	3.37	-2.77	-1.92
8,461.00	89.09	314.23	5,504.03	1,756.79	-2,812.70	3,274.56	1.36	0.58	-1.23
8,524.00	90.74	316.63	5,504.12	1,801.67	-2,856.90	3,337.38	4.62	2.62	3.81
8,586.00	88.49	315.12	5,504.54	1,846.17	-2,900.06	3,399.15	4.37	-3.63	-2.44
8,649.00	89.56	315.86	5,505.61	1,891.09	-2,944.22	3,461.96	2.06	1.70	1.17
8,711.00	90.44	316.18	5,505.61	1,935.70	-2,987.28	3,523.72	1.51	1.42	0.52
8,775.00	89.73	315.16	5,505.51	1,981.48	-3,032.00	3,587.52	1.94	-1.11	-1.59
8,838.00	88.66	314.25	5,506.40	2,025.79	-3,076.77	3,650.38	2.23	-1.70	-1.44
8,901.00	90.10	315.79	5,507.08	2,070.35	-3,121.29	3,713.23	3.35	2.29	2.44
8,964.00	90.87	315.55	5,506.55	2,115.42	-3,165.32	3,776.02	1.28	1.22	-0.38
9,027.00	88.32	312.94	5,506.99	2,159.36	-3,210.44	3,838.92	5.79	-4.05	-4.14



Scientific Drilling, Intl
Survey Report



Company: DJR Operating
Project: Blanco Wash Unit
Site: I24A 2409
Well: # 403H
Wellbore: Original drilling
Design: Original drilling

Local Co-ordinate Reference: Well # 403H
TVD Reference: GL 6892' & RKB 14' @ 6906.00usft (Aztec 920)
MD Reference: GL 6892' & RKB 14' @ 6906.00usft (Aztec 920)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Grand Junction District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,090.00	90.84	315.87	5,507.46	2,203.44	-3,255.44	3,901.80	6.13	4.00	4.65
9,153.00	91.68	316.59	5,506.07	2,248.92	-3,299.01	3,964.53	1.76	1.33	1.14
9,216.00	90.54	315.61	5,504.85	2,294.30	-3,342.68	4,027.27	2.39	-1.81	-1.56
9,279.00	90.67	315.52	5,504.18	2,339.29	-3,386.79	4,090.08	0.25	0.21	-0.14
9,342.00	90.60	314.60	5,503.49	2,383.88	-3,431.28	4,152.92	1.46	-0.11	-1.46
9,406.00	90.50	313.52	5,502.87	2,428.38	-3,477.27	4,216.83	1.69	-0.16	-1.69
9,468.00	90.91	314.77	5,502.11	2,471.56	-3,521.76	4,278.74	2.12	0.66	2.02
9,530.00	90.54	314.86	5,501.32	2,515.25	-3,565.74	4,340.60	0.61	-0.60	0.15
9,593.00	90.00	315.16	5,501.03	2,559.81	-3,610.27	4,403.45	0.98	-0.86	0.48
9,655.00	89.87	315.02	5,501.10	2,603.72	-3,654.05	4,465.30	0.31	-0.21	-0.23
9,717.00	90.27	314.67	5,501.02	2,647.44	-3,698.01	4,527.16	0.86	0.65	-0.56
9,779.00	89.63	315.37	5,501.08	2,691.30	-3,741.83	4,589.02	1.53	-1.03	1.13
9,840.00	88.89	315.44	5,501.86	2,734.73	-3,784.65	4,649.84	1.22	-1.21	0.11
9,905.00	89.43	314.89	5,502.82	2,780.82	-3,830.48	4,714.67	1.19	0.83	-0.85
9,968.00	89.03	314.82	5,503.66	2,825.25	-3,875.13	4,777.52	0.64	-0.63	-0.11
10,031.00	89.23	315.51	5,504.62	2,869.92	-3,919.55	4,840.36	1.14	0.32	1.10
10,093.00	89.13	315.09	5,505.51	2,913.98	-3,963.15	4,902.18	0.70	-0.16	-0.68
10,156.00	89.43	314.59	5,506.30	2,958.40	-4,007.82	4,965.04	0.93	0.48	-0.79
10,220.00	89.09	313.80	5,507.13	3,003.01	-4,053.70	5,028.94	1.34	-0.53	-1.23
10,282.00	89.19	314.28	5,508.06	3,046.11	-4,098.27	5,090.85	0.79	0.16	0.77
10,345.00	89.33	315.44	5,508.87	3,090.54	-4,142.92	5,153.71	1.85	0.22	1.84
10,407.00	89.36	314.75	5,509.58	3,134.45	-4,186.68	5,215.55	1.11	0.05	-1.11
10,468.00	88.05	315.28	5,510.96	3,177.59	-4,229.79	5,276.39	2.32	-2.15	0.87
10,528.00	88.22	317.52	5,512.91	3,221.01	-4,271.15	5,336.10	3.74	0.28	3.73
10,588.00	88.05	318.79	5,514.86	3,265.68	-4,311.15	5,395.61	2.13	-0.28	2.12
10,650.00	88.02	317.94	5,516.99	3,311.99	-4,352.32	5,457.07	1.37	-0.05	-1.37
10,710.00	87.48	317.15	5,519.34	3,356.23	-4,392.79	5,516.65	1.59	-0.90	-1.32
10,770.00	87.42	317.00	5,522.01	3,400.12	-4,433.61	5,576.26	0.27	-0.10	-0.25
10,831.00	88.86	317.77	5,523.99	3,444.98	-4,474.89	5,636.86	2.68	2.36	1.26
10,892.00	89.46	317.31	5,524.89	3,489.98	-4,516.06	5,697.46	1.24	0.98	-0.75
10,953.00	89.43	316.89	5,525.48	3,534.67	-4,557.58	5,758.12	0.69	-0.05	-0.69
11,013.00	88.65	316.33	5,526.48	3,578.26	-4,598.80	5,817.84	1.60	-1.30	-0.93
11,074.00	88.96	315.55	5,527.76	3,622.09	-4,641.21	5,878.60	1.38	0.51	-1.28
11,135.00	88.66	315.24	5,529.02	3,665.51	-4,684.03	5,939.42	0.71	-0.49	-0.51
11,197.00	87.85	314.09	5,530.91	3,709.07	-4,728.11	6,001.27	2.27	-1.31	-1.85
11,257.00	88.45	314.73	5,532.85	3,751.03	-4,770.95	6,061.13	1.46	1.00	1.07
11,317.00	88.89	314.41	5,534.24	3,793.13	-4,813.68	6,121.00	0.91	0.73	-0.53
11,377.00	90.74	316.65	5,534.43	3,835.94	-4,855.70	6,180.82	4.84	3.08	3.73
11,437.00	91.38	315.85	5,533.32	3,879.27	-4,897.19	6,240.56	1.71	1.07	-1.33
11,497.00	89.50	315.68	5,532.86	3,922.26	-4,939.04	6,300.36	3.15	-3.13	-0.28
11,558.00	89.50	315.13	5,533.40	3,965.70	-4,981.87	6,361.18	0.90	0.00	-0.90
11,618.00	89.73	314.27	5,533.80	4,007.90	-5,024.51	6,421.06	1.48	0.38	-1.43
11,679.00	89.16	313.52	5,534.39	4,050.19	-5,068.47	6,481.98	1.54	-0.93	-1.23



Scientific Drilling, Intl
Survey Report



Company: DJR Operating
Project: Blanco Wash Unit
Site: I24A 2409
Well: # 403H
Wellbore: Original drilling
Design: Original drilling

Local Co-ordinate Reference: Well # 403H
TVD Reference: GL 6892' & RKB 14' @ 6906.00usft (Aztec 920)
MD Reference: GL 6892' & RKB 14' @ 6906.00usft (Aztec 920)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Grand Junction District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,741.00	89.40	313.84	5,535.17	4,093.01	-5,113.30	6,543.92	0.65	0.39	0.52
11,801.00	89.26	314.52	5,535.87	4,134.82	-5,156.33	6,603.82	1.16	-0.23	1.13
11,862.00	89.09	313.57	5,536.75	4,177.22	-5,200.17	6,664.73	1.58	-0.28	-1.56
11,923.00	89.46	313.59	5,537.52	4,219.27	-5,244.36	6,725.67	0.61	0.61	0.03
11,983.00	89.06	314.92	5,538.30	4,261.14	-5,287.33	6,785.57	2.31	-0.67	2.22
12,043.00	89.23	317.74	5,539.19	4,304.53	-5,328.75	6,845.31	4.71	0.28	4.70
12,105.00	88.86	316.27	5,540.23	4,349.87	-5,371.02	6,906.97	2.44	-0.60	-2.37
12,166.00	89.70	315.88	5,540.99	4,393.80	-5,413.33	6,967.73	1.52	1.38	-0.64
12,227.00	89.33	315.49	5,541.51	4,437.44	-5,455.95	7,028.53	0.88	-0.61	-0.64
12,288.00	88.12	315.49	5,542.87	4,480.93	-5,498.70	7,089.34	1.98	-1.98	0.00
12,349.00	88.06	314.73	5,544.90	4,524.12	-5,541.72	7,150.15	1.25	-0.10	-1.25
12,410.00	88.46	314.50	5,546.75	4,566.95	-5,585.13	7,211.01	0.76	0.66	-0.38
12,471.00	90.13	316.15	5,547.50	4,610.32	-5,628.01	7,271.83	3.85	2.74	2.70
12,531.00	89.56	314.48	5,547.66	4,652.97	-5,670.20	7,331.67	2.94	-0.95	-2.78
12,592.00	89.63	314.42	5,548.09	4,695.69	-5,713.74	7,392.56	0.15	0.11	-0.10
12,653.00	90.17	314.44	5,548.20	4,738.39	-5,757.30	7,453.45	0.89	0.89	0.03
12,714.00	89.73	315.60	5,548.25	4,781.54	-5,800.42	7,514.31	2.03	-0.72	1.90
12,774.00	89.36	317.09	5,548.73	4,824.95	-5,841.84	7,574.05	2.56	-0.62	2.48
12,835.00	90.44	317.39	5,548.84	4,869.73	-5,883.25	7,634.70	1.84	1.77	0.49
12,896.00	90.74	317.27	5,548.21	4,914.58	-5,924.59	7,695.33	0.53	0.49	-0.20
12,957.00	88.69	317.44	5,548.51	4,959.45	-5,965.92	7,755.97	3.37	-3.36	0.28
13,017.00	89.46	317.26	5,549.48	5,003.57	-6,006.56	7,815.60	1.32	1.28	-0.30
13,079.00	88.96	316.67	5,550.34	5,048.89	-6,048.87	7,877.27	1.25	-0.81	-0.95
13,141.00	88.66	316.44	5,551.62	5,093.89	-6,091.49	7,938.97	0.61	-0.48	-0.37
13,202.00	89.66	316.76	5,552.52	5,138.21	-6,133.40	7,999.68	1.72	1.64	0.52
13,263.00	89.97	316.34	5,552.72	5,182.49	-6,175.35	8,060.40	0.86	0.51	-0.69
13,324.00	90.67	315.99	5,552.37	5,226.49	-6,217.60	8,121.16	1.28	1.15	-0.57
13,384.00	88.89	313.98	5,552.60	5,268.90	-6,260.03	8,181.02	4.47	-2.97	-3.35
13,445.00	88.35	314.46	5,554.07	5,311.43	-6,303.74	8,241.91	1.18	-0.89	0.79
13,506.00	89.63	314.37	5,555.15	5,354.12	-6,347.30	8,302.79	2.10	2.10	-0.15
13,567.00	90.87	314.25	5,554.88	5,396.73	-6,390.95	8,363.70	2.04	2.03	-0.20
13,628.00	91.07	314.08	5,553.85	5,439.22	-6,434.70	8,424.60	0.43	0.33	-0.28
13,689.00	89.40	314.95	5,553.60	5,481.98	-6,478.19	8,485.49	3.09	-2.74	1.43
13,750.00	90.20	313.96	5,553.81	5,524.70	-6,521.73	8,546.38	2.09	1.31	-1.62
13,810.00	90.47	313.98	5,553.46	5,566.36	-6,564.92	8,606.30	0.45	0.45	0.03
13,871.00	90.47	314.59	5,552.96	5,608.95	-6,608.58	8,667.20	1.00	0.00	1.00
13,933.00	89.36	314.85	5,553.05	5,652.58	-6,652.64	8,729.08	1.84	-1.79	0.42
13,994.00	88.22	316.19	5,554.34	5,696.09	-6,695.37	8,789.88	2.88	-1.87	2.20
14,055.00	88.83	315.47	5,555.91	5,739.83	-6,737.85	8,850.65	1.55	1.00	-1.18
14,116.00	88.22	315.07	5,557.48	5,783.15	-6,780.77	8,911.47	1.20	-1.00	-0.66
14,177.00	88.09	314.55	5,559.45	5,826.12	-6,824.02	8,972.31	0.88	-0.21	-0.85
14,238.00	88.32	314.43	5,561.36	5,868.84	-6,867.52	9,033.17	0.43	0.38	-0.20
14,300.00	88.49	313.87	5,563.08	5,912.01	-6,911.99	9,095.05	0.94	0.27	-0.90



Scientific Drilling, Intl
Survey Report



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Project: Blanco Wash Unit
Site: I24A 2409
Well: # 403H
Wellbore: Original drilling
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Local Co-ordinate Reference: Well # 403H
TVD Reference: GL 6892' & RKB 14' @ 6906.00usft (Aztec 920)
MD Reference: GL 6892' & RKB 14' @ 6906.00usft (Aztec 920)
North Reference: True
Survey Calculation Method: Minimum Curvature
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Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,360.00	88.25	313.97	5,564.79	5,953.61	-6,955.19	9,154.96	0.43	-0.40	0.17
14,421.00	89.53	315.24	5,565.97	5,996.44	-6,998.61	9,215.83	2.96	2.10	2.08
14,481.00	89.97	314.91	5,566.23	6,038.92	-7,040.98	9,275.68	0.92	0.73	-0.55
14,542.00	89.23	313.79	5,566.66	6,081.56	-7,084.60	9,336.58	2.20	-1.21	-1.84
14,602.00	89.16	314.01	5,567.50	6,123.16	-7,127.82	9,396.50	0.38	-0.12	0.37
14,663.00	89.83	315.12	5,568.04	6,165.96	-7,171.28	9,457.38	2.13	1.10	1.82
14,724.00	88.62	314.05	5,568.86	6,208.78	-7,214.72	9,518.26	2.65	-1.98	-1.75
14,785.00	90.30	316.32	5,569.44	6,252.04	-7,257.71	9,579.10	4.63	2.75	3.72
14,846.00	88.52	315.15	5,570.07	6,295.72	-7,300.28	9,639.89	3.49	-2.92	-1.92
14,908.00	89.16	315.30	5,571.32	6,339.72	-7,343.94	9,701.72	1.06	1.03	0.24
14,968.00	90.00	315.65	5,571.76	6,382.50	-7,386.01	9,761.54	1.52	1.40	0.58
15,030.00	88.83	315.07	5,572.40	6,426.61	-7,429.57	9,823.36	2.11	-1.89	-0.94
15,091.00	90.20	315.65	5,572.91	6,470.01	-7,472.43	9,884.19	2.44	2.25	0.95
15,152.00	90.30	314.95	5,572.65	6,513.37	-7,515.34	9,945.02	1.16	0.16	-1.15
15,213.00	89.63	314.74	5,572.68	6,556.39	-7,558.59	10,005.89	1.15	-1.10	-0.34
15,274.00	88.76	314.46	5,573.54	6,599.21	-7,602.02	10,066.77	1.50	-1.43	-0.46
15,337.00	89.53	314.00	5,574.48	6,643.15	-7,647.15	10,129.66	1.42	1.22	-0.73
15,400.00	90.37	315.74	5,574.54	6,687.60	-7,691.80	10,192.52	3.07	1.33	2.76
15,462.00	90.07	314.98	5,574.30	6,731.71	-7,735.36	10,254.35	1.32	-0.48	-1.23
15,526.00	90.44	314.67	5,574.01	6,776.83	-7,780.76	10,318.21	0.75	0.58	-0.48
15,578.00	89.80	314.08	5,573.90	6,813.19	-7,817.92	10,370.13	1.67	-1.23	-1.13
15,629.00	89.80	314.08	5,574.08	6,848.67	-7,854.56	10,421.06	0.00	0.00	0.00

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
441.00	440.95	-3.34	-4.76	First SDI Surface MWD Survey
4,615.00	4,566.52	-433.27	-453.08	Last SDI Surface MWD Survey
4,679.00	4,629.85	-439.96	-459.46	First SDI Curve MWD Survey
5,865.00	5,479.83	-73.71	-978.25	Last SDI Curve MWD Survey
5,953.00	5,491.48	-15.63	-1,043.30	First SDI Lateral MWD Survey
15,578.00	5,573.90	6,813.19	-7,817.92	Last SDI Lateral MWD Survey
15,629.00	5,574.08	6,848.67	-7,854.56	Projection to TD

Checked By: _____ Approved By: _____ Date: _____