

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

DISTRICT II
811 S. First St., Artesia, N.M. 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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 30-043-21289		² Pool Code 42289	³ Pool Name LYBROOK GALLUP OIL POOL
⁴ Property Code 325271	⁵ Property Name VENADO CANYON UNIT		⁶ Well Number 203H
⁷ OGRIID No. 371838	⁸ Operator Name DJR OPERATING, LLC		⁹ Elevation 7040'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	WEST/West line	County
M	12	22N	6W		1320'	SOUTH	137'	WEST	SANDOVAL

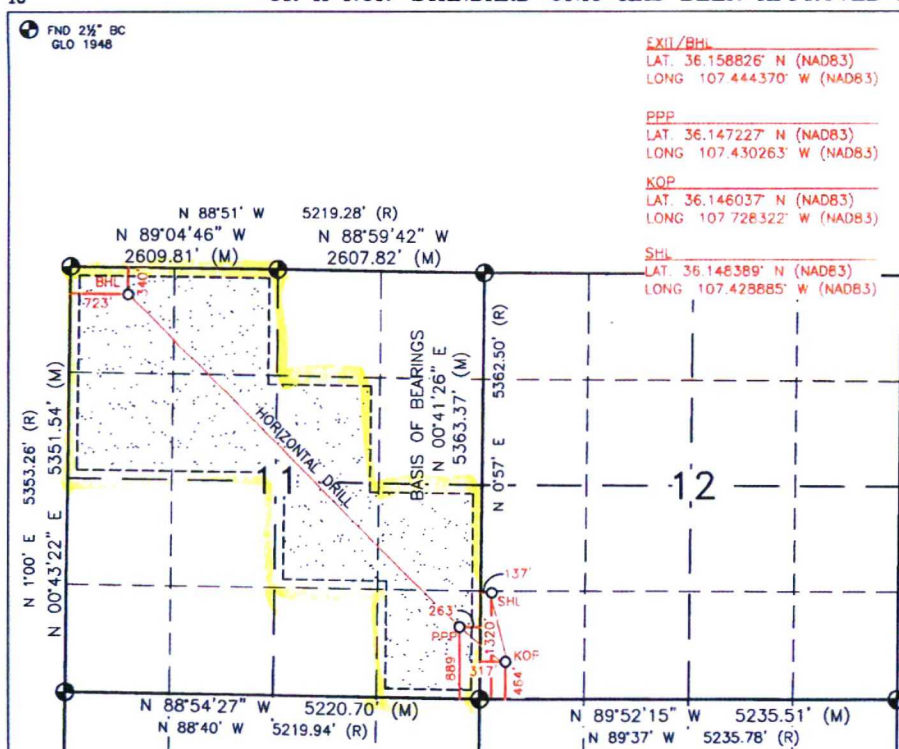
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	WEST/West line	County
D	11	22N	6W		340'	NORTH	723'	WEST	SANDOVAL

¹² Dedicated Acres PENETRATED SPACING UNIT; SEC 11: NW/4, SW/NE, SE/SE, NE/SE & NW/SE 320 ACRES	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. R-14067A (5280 ACRES)
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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

16



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 released 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.

Signature _____ Date 9/24/2019

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.

SEPTEMBER 24, 2019

Date of Survey

Signature and Seal of Professional Surveyor:



Certificate Number

11393

DISTRICT III

12

11

DISTRICT I

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State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

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

ENCANA OIL & GAS (USA) INC.
VENADO CANYON UNIT #203H

Form C-102
Revised August 1, 2011

Submit one copy to appropriate
District Office

☐ AMENDED REPORT

☒ AS-DRILLED

EXIT/BHL

LAT. 36.158826° N (NAD83)
LONG. 107.444370° W (NAD83)

PPP

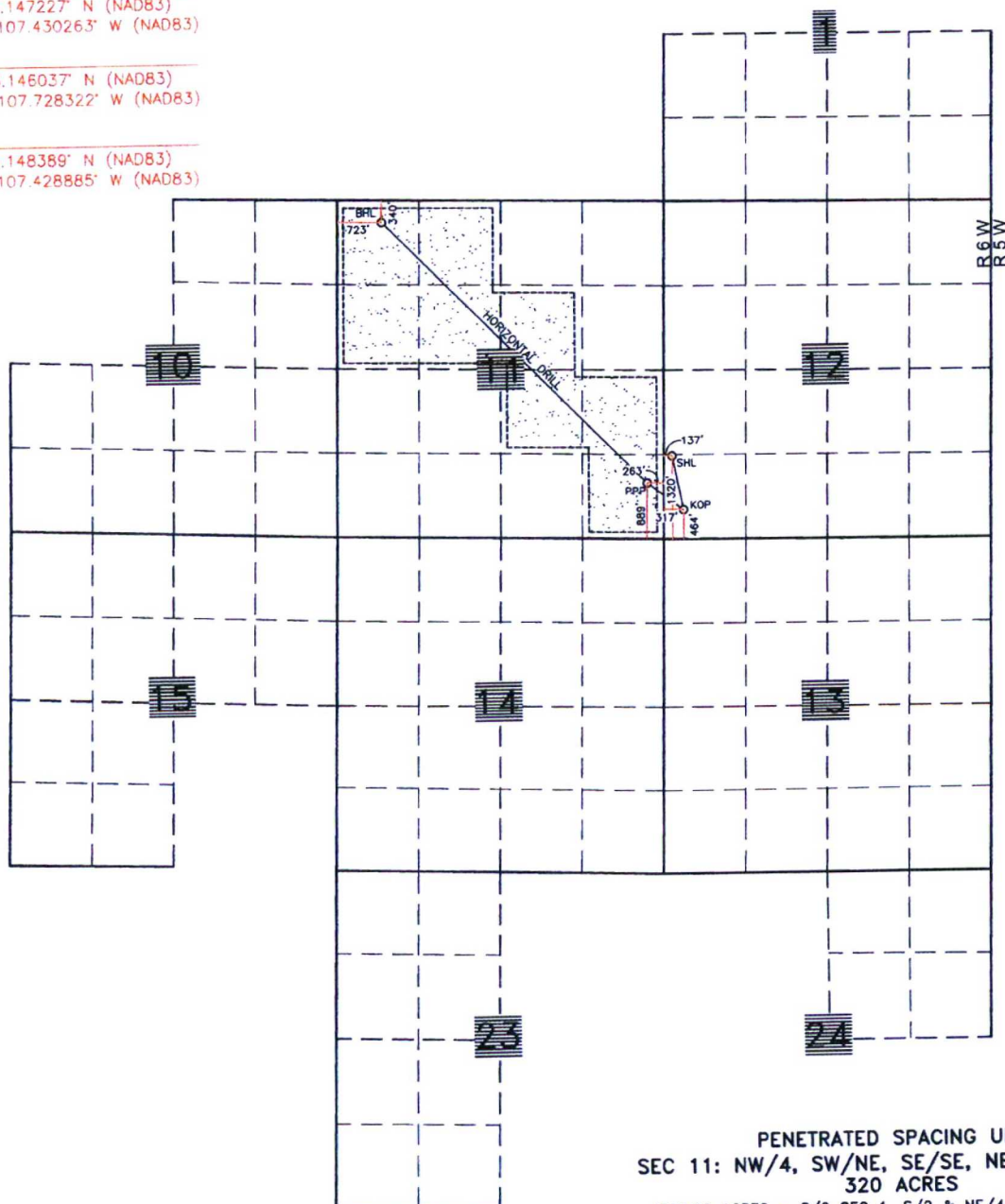
LAT. 36.147227° N (NAD83)
LONG. 107.430263° W (NAD83)

KOP

LAT. 36.146037° N (NAD83)
LONG. 107.728322° W (NAD83)

SHL

LAT. 36.148389° N (NAD83)
LONG. 107.428885° W (NAD83)



PENETRATED SPACING UNIT;
SEC 11: NW/4, SW/NE, SE/SE, NE/SE & NW/SE
320 ACRES
4320.00 ACRES - S/2 SEC 1, S/2 & NE/4 SEC 10, ALL SEC
11-14, N/2 & SW/4 SEC 15, W/2 SEC 23, NE/4 SEC 24, T22N
R6W - UNDIVIDED UNIT



DJR Operating

Venado Canyon Unit
L12 2206 Pad
203H

Original drilling

Design: Original drilling

Standard Survey Report

16 September, 2019



www.scientificdrilling.com



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- 2. BHA Summary & Daily Activity Reports**
- 3. Drilling Records and Slide Sheets**
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- 5. Support Staff**



Company: DJR Operating
Project: Venado Canyon Unit
Site: L12 2206 Pad
Well: 203H
Wellbore: Original drilling

PROJECT DETAILS: Venado Canyon Unit

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Western Zone
System Datum: Mean Sea Level
Local North: True

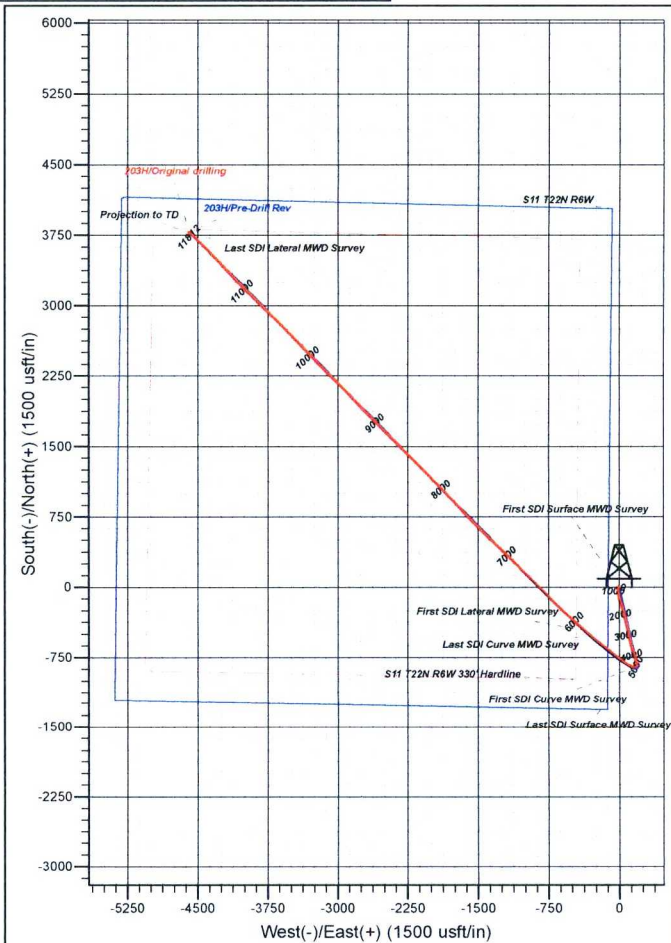
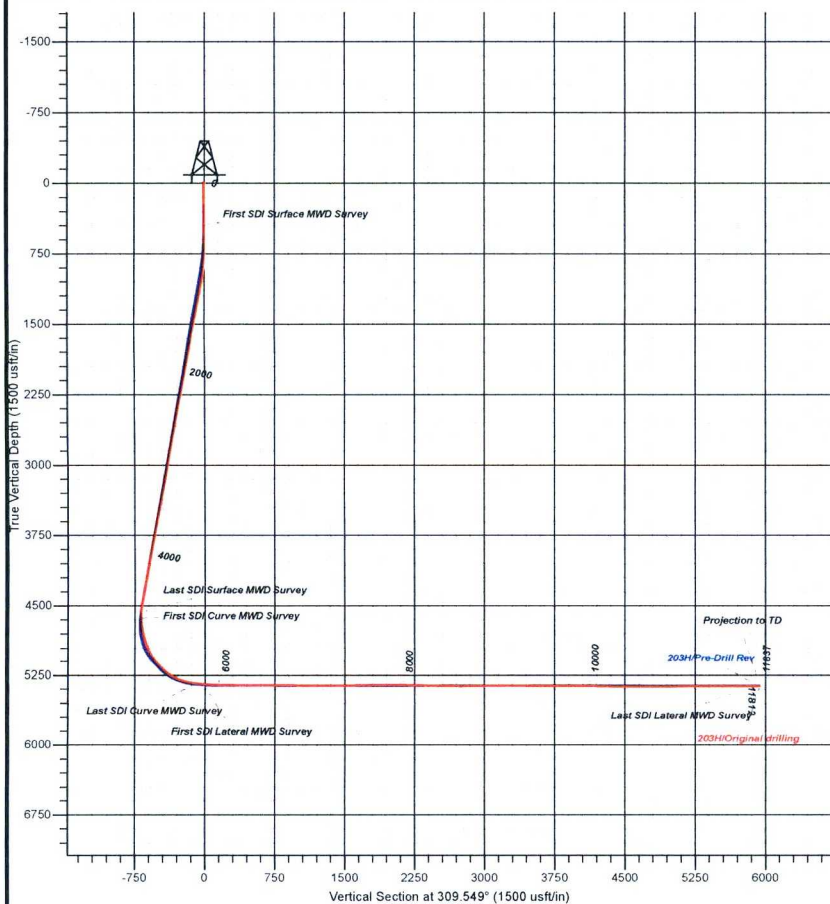


WELL DETAILS: 203H

GL 7040' & RKB 14' @ 7054.00usft (Aztec 920)
+N/-S +E/-W Northing Easting Latitude Longitude
0.00 0.00 1873558.70 2842498.17 36.1483890 -107.4288850

Design: Original drilling (203H/Original drilling)

Created By: Janie Collins Date: 11:57, September 16 2019





Scientific Drilling, Intl

Survey Report



Company: DJR Operating
Project: Venado Canyon Unit
Site: L12 2206 Pad
Well: 203H
Wellbore: Original drilling
Design: Original drilling

Local Co-ordinate Reference: Well 203H
TVD Reference: GL 7040' & RKB 14' @ 7054.00usft (Aztec 920)
MD Reference: GL 7040' & RKB 14' @ 7054.00usft (Aztec 920)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: Grand Junction District

Project	Venado Canyon 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		L12 2206 Pad			
Site Position:		Northing:	1,873,558.70 usft	Latitude:	36.1483890
From:	Lat/Long	Easting:	2,842,498.17 usft	Longitude:	-107.4288850
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence:	0.24 °

Well	203H					
Well Position	+N/-S	0.00 usft	Northing:	1,873,558.70 usft	Latitude:	36.1483890
	+E/-W	0.00 usft	Easting:	2,842,498.17 usft	Longitude:	-107.4288850
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	7,040.00 usft

Wellbore	Original drilling				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	9/4/2019	8.68	62.78	49,248

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	309.549	

Survey Program		Date	9/16/2019		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
442.00	4,665.00	Survey #1 - Surface MWD Survey (Original	MWD+HDGM	OWSG MWD + HDGM	
4,728.00	5,734.00	Survey #2 - Curve MWD Survey (Original	MWD+HDGM	OWSG MWD + HDGM	
5,816.00	11,812.00	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	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
442.00	0.55	270.090	441.99	0.00	-2.12	1.64	0.12	0.12	0.00
First SDI Surface MWD Survey									
504.00	0.62	263.010	503.99	-0.04	-2.75	2.10	0.16	0.11	-11.42
565.00	0.82	255.770	564.99	-0.18	-3.50	2.58	0.36	0.33	-11.87
626.00	0.71	234.710	625.98	-0.51	-4.23	2.94	0.49	-0.18	-34.52
688.00	2.23	200.170	687.96	-1.86	-4.96	2.64	2.73	2.45	-55.71
748.00	4.31	190.330	747.86	-5.18	-5.77	1.15	3.58	3.47	-16.40
809.00	6.51	186.850	808.58	-10.87	-6.59	-1.84	3.64	3.61	-5.70



Scientific Drilling, Intl

Survey Report



Company: DJR Operating
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Site: L12 2206 Pad
Well: 203H
Wellbore: Original drilling
Design: Original drilling

Local Co-ordinate Reference: Well 203H
TVD Reference: GL 7040' & RKB 14' @ 7054.00usft (Aztec 920)
MD Reference: GL 7040' & RKB 14' @ 7054.00usft (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)
869.00	8.16	187.240	868.09	-18.47	-7.54	-5.95	2.75	2.75	0.65
929.00	9.42	184.450	927.38	-27.59	-8.45	-11.05	2.22	2.10	-4.65
991.00	10.55	181.600	988.44	-38.32	-9.01	-17.46	1.99	1.82	-4.60
1,051.00	12.09	175.390	1,047.28	-50.08	-8.65	-25.21	3.27	2.57	-10.35
1,112.00	12.79	170.210	1,106.85	-63.10	-6.99	-34.78	2.16	1.15	-8.49
1,173.00	13.92	166.540	1,166.20	-76.89	-4.14	-45.77	2.31	1.85	-6.02
1,234.00	13.85	163.550	1,225.42	-91.03	-0.36	-57.68	1.18	-0.11	-4.90
1,295.00	13.90	163.840	1,284.64	-105.07	3.75	-69.79	0.14	0.08	0.48
1,356.00	13.34	164.300	1,343.92	-118.88	7.69	-81.62	0.94	-0.92	0.75
1,417.00	12.92	162.030	1,403.33	-132.14	11.70	-93.16	1.09	-0.69	-3.72
1,477.00	13.60	163.160	1,461.73	-145.27	15.81	-104.69	1.21	1.13	1.88
1,538.00	13.39	165.100	1,521.04	-158.96	19.70	-116.41	0.82	-0.34	3.18
1,599.00	13.41	165.010	1,580.38	-172.62	23.35	-127.92	0.05	0.03	-0.15
1,660.00	13.34	164.970	1,639.73	-186.25	27.00	-139.42	0.12	-0.11	-0.07
1,721.00	12.80	164.470	1,699.15	-199.56	30.64	-150.69	0.90	-0.89	-0.82
1,782.00	12.55	162.840	1,758.66	-212.40	34.40	-161.77	0.72	-0.41	-2.67
1,843.00	13.48	166.960	1,818.09	-225.66	37.96	-172.96	2.15	1.52	6.75
1,904.00	13.84	166.920	1,877.37	-239.69	41.22	-184.40	0.59	0.59	-0.07
1,966.00	14.10	167.390	1,937.53	-254.29	44.54	-196.26	0.46	0.42	0.76
2,030.00	13.88	166.980	1,999.64	-269.37	47.98	-208.51	0.38	-0.34	-0.64
2,093.00	13.82	164.710	2,060.80	-283.99	51.66	-220.67	0.87	-0.10	-3.60
2,156.00	13.02	164.700	2,122.08	-298.10	55.52	-232.62	1.27	-1.27	-0.02
2,219.00	12.33	163.880	2,183.55	-311.40	59.26	-243.98	1.13	-1.10	-1.30
2,282.00	11.56	163.770	2,245.18	-323.93	62.89	-254.75	1.22	-1.22	-0.17
2,345.00	12.52	165.020	2,306.80	-336.59	66.42	-265.53	1.58	1.52	1.98
2,408.00	13.19	166.640	2,368.22	-350.18	69.85	-276.83	1.21	1.06	2.57
2,471.00	13.72	167.480	2,429.49	-364.46	73.13	-288.45	0.90	0.84	1.33
2,534.00	13.01	167.970	2,490.78	-378.69	76.23	-299.90	1.14	-1.13	0.78
2,598.00	13.17	168.850	2,553.12	-392.89	79.14	-311.19	0.40	0.25	1.38
2,661.00	12.97	167.690	2,614.49	-406.84	82.03	-322.30	0.52	-0.32	-1.84
2,723.00	13.50	166.180	2,674.84	-420.66	85.24	-333.58	1.02	0.85	-2.44
2,786.00	14.14	166.730	2,736.02	-435.29	88.77	-345.62	1.04	1.02	0.87
2,847.00	12.90	167.070	2,795.32	-449.18	92.00	-356.95	2.04	-2.03	0.56
2,910.00	13.37	167.840	2,856.68	-463.16	95.11	-368.25	0.80	0.75	1.22
2,974.00	13.20	168.370	2,918.96	-477.55	98.14	-379.75	0.33	-0.27	0.83
3,037.00	12.30	166.380	2,980.41	-491.12	101.17	-390.72	1.59	-1.43	-3.16
3,100.00	13.13	170.040	3,041.87	-504.69	103.99	-401.54	1.84	1.32	5.81
3,162.00	13.00	168.870	3,102.26	-518.46	106.55	-412.29	0.48	-0.21	-1.89
3,226.00	13.80	167.990	3,164.52	-532.99	109.53	-423.83	1.29	1.25	-1.38
3,289.00	13.90	169.160	3,225.69	-547.78	112.52	-435.55	0.47	0.16	1.86
3,352.00	13.51	168.640	3,286.89	-562.42	115.39	-447.09	0.65	-0.62	-0.83
3,415.00	13.32	168.670	3,348.17	-576.75	118.27	-458.43	0.30	-0.30	0.05
3,478.00	13.02	169.230	3,409.52	-590.84	121.02	-469.53	0.52	-0.48	0.89



Scientific Drilling, Intl
Survey Report



Company: DJR Operating
Project: Venado Canyon Unit
Site: L12 2206 Pad
Well: 203H
Wellbore: Original drilling
Design: Original drilling

Local Co-ordinate Reference: Well 203H
TVD Reference: GL 7040' & RKB 14' @ 7054.00usft (Aztec 920)
MD Reference: GL 7040' & RKB 14' @ 7054.00usft (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)
3,541.00	13.21	168.830	3,470.87	-604.87	123.74	-480.56	0.33	0.30	-0.63
3,604.00	12.97	164.810	3,532.24	-618.76	126.99	-491.90	1.49	-0.38	-6.38
3,667.00	12.75	162.570	3,593.66	-632.22	130.92	-503.51	0.86	-0.35	-3.56
3,730.00	12.75	163.380	3,655.10	-645.51	134.99	-515.11	0.28	0.00	1.29
3,793.00	12.72	162.000	3,716.55	-658.77	139.12	-526.74	0.49	-0.05	-2.19
3,856.00	12.76	161.450	3,778.00	-671.96	143.48	-538.50	0.20	0.06	-0.87
3,919.00	12.70	163.000	3,839.46	-685.18	147.72	-550.18	0.55	-0.10	2.46
3,983.00	12.25	160.910	3,901.94	-698.32	151.99	-561.85	1.00	-0.70	-3.27
4,046.00	12.53	161.870	3,963.48	-711.13	156.31	-573.33	0.55	0.44	1.52
4,109.00	12.15	162.930	4,025.02	-723.97	160.38	-584.64	0.70	-0.60	1.68
4,172.00	12.15	158.860	4,086.61	-736.49	164.72	-595.96	1.36	0.00	-6.46
4,235.00	13.35	164.590	4,148.06	-749.68	169.04	-607.70	2.77	1.90	9.10
4,298.00	13.73	166.740	4,209.31	-763.97	172.69	-619.61	1.00	0.60	3.41
4,361.00	13.41	166.800	4,270.55	-778.36	176.07	-631.38	0.51	-0.51	0.10
4,424.00	12.57	168.410	4,331.94	-792.19	179.12	-642.53	1.45	-1.33	2.56
4,488.00	11.69	168.550	4,394.51	-805.37	181.80	-652.99	1.38	-1.38	0.22
4,551.00	11.51	169.080	4,456.22	-817.80	184.26	-662.80	0.33	-0.29	0.84
4,602.00	10.94	169.190	4,506.25	-827.55	186.13	-670.45	1.12	-1.12	0.22
4,665.00	10.75	190.190	4,568.14	-839.20	186.22	-677.94	6.24	-0.30	33.33
Last SDI Surface MWD Survey									
4,728.00	11.68	224.910	4,630.01	-849.52	180.67	-680.23	10.66	1.48	55.11
First SDI Curve MWD Survey									
4,791.00	11.87	255.480	4,691.74	-855.66	169.88	-675.83	9.79	0.30	48.52
4,854.00	12.03	274.460	4,753.40	-856.78	157.06	-666.65	6.22	0.25	30.13
4,917.00	14.74	287.020	4,814.70	-853.92	142.84	-653.87	6.29	4.30	19.94
4,980.00	18.20	294.070	4,875.11	-847.56	126.19	-636.98	6.33	5.49	11.19
5,043.00	21.12	298.820	4,934.44	-838.07	107.26	-616.34	5.28	4.63	7.54
5,106.00	25.86	302.170	4,992.20	-825.28	85.67	-591.54	7.81	7.52	5.32
5,170.00	29.66	304.050	5,048.83	-808.97	60.73	-561.93	6.09	5.94	2.94
5,232.00	35.40	310.190	5,101.09	-788.77	34.27	-528.66	10.67	9.26	9.90
5,296.00	42.47	307.820	5,150.84	-763.53	3.00	-488.48	11.29	11.05	-3.70
5,359.00	49.16	308.300	5,194.73	-735.68	-32.55	-443.34	10.63	10.62	0.76
5,422.00	55.41	310.240	5,233.25	-704.13	-71.08	-393.54	10.21	9.92	3.08
5,485.00	61.91	307.650	5,266.01	-670.36	-112.93	-339.77	10.90	10.32	-4.11
5,548.00	68.98	307.910	5,292.17	-635.28	-158.19	-282.53	11.23	11.22	0.41
5,611.00	74.47	309.640	5,311.92	-597.82	-204.80	-222.74	9.10	8.71	2.75
5,674.00	77.67	309.980	5,327.08	-558.67	-251.76	-161.60	5.11	5.08	0.54
5,734.00	83.23	310.460	5,337.03	-520.48	-296.92	-102.46	9.30	9.27	0.80
Last SDI Curve MWD Survey									
5,816.00	85.15	312.400	5,345.34	-466.50	-358.08	-20.93	3.32	2.34	2.37
First SDI Lateral MWD Survey									
5,879.00	86.57	310.500	5,349.88	-424.91	-405.18	41.87	3.76	2.25	-3.02
5,942.00	88.25	311.000	5,352.73	-383.83	-452.85	104.79	2.78	2.67	0.79
6,005.00	88.99	312.510	5,354.25	-341.89	-499.83	167.72	2.67	1.17	2.40



Scientific Drilling, Intl
Survey Report



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Site: L12 2206 Pad
Well: 203H
Wellbore: Original drilling
Design: Original drilling

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MD Reference: GL 7040' & RKB 14' @ 7054.00usft (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)
6,068.00	88.86	312.640	5,355.43	-299.27	-546.22	230.62	0.29	-0.21	0.21
6,131.00	88.69	313.970	5,356.78	-256.07	-592.05	293.47	2.13	-0.27	2.11
6,194.00	88.18	314.010	5,358.50	-212.33	-637.36	356.26	0.81	-0.81	0.06
6,257.00	89.73	315.520	5,359.65	-167.98	-682.08	418.98	3.43	2.46	2.40
6,320.00	90.24	316.090	5,359.66	-122.81	-726.00	481.61	1.21	0.81	0.90
6,382.00	90.57	316.130	5,359.22	-78.13	-768.98	543.20	0.54	0.53	0.06
6,445.00	90.13	315.350	5,358.84	-33.01	-812.95	605.83	1.42	-0.70	-1.24
6,507.00	89.70	314.650	5,358.93	10.83	-856.79	667.55	1.33	-0.69	-1.13
6,571.00	89.29	313.940	5,359.50	55.52	-902.59	731.33	1.28	-0.64	-1.11
6,633.00	89.13	314.080	5,360.35	98.59	-947.18	793.13	0.34	-0.26	0.23
6,694.00	89.80	315.370	5,360.92	141.52	-990.52	853.88	2.38	1.10	2.11
6,755.00	90.17	315.790	5,360.94	185.08	-1,033.21	914.54	0.92	0.61	0.69
6,816.00	90.20	315.010	5,360.74	228.52	-1,076.04	975.22	1.28	0.05	-1.28
6,876.00	90.20	314.610	5,360.53	270.80	-1,118.61	1,034.97	0.67	0.00	-0.67
6,937.00	89.80	313.670	5,360.53	313.28	-1,162.39	1,095.77	1.67	-0.66	-1.54
6,997.00	90.00	313.900	5,360.63	354.80	-1,205.70	1,155.61	0.51	0.33	0.38
7,058.00	89.73	314.370	5,360.78	397.28	-1,249.48	1,216.41	0.89	-0.44	0.77
7,118.00	89.73	313.520	5,361.06	438.91	-1,292.68	1,276.23	1.42	0.00	-1.42
7,180.00	89.39	313.150	5,361.54	481.46	-1,337.78	1,338.10	0.81	-0.55	-0.60
7,241.00	89.19	313.370	5,362.29	523.26	-1,382.20	1,398.96	0.49	-0.33	0.36
7,303.00	90.50	314.660	5,362.46	566.34	-1,426.78	1,460.77	2.97	2.11	2.08
7,364.00	90.57	314.410	5,361.89	609.12	-1,470.26	1,521.54	0.43	0.11	-0.41
7,425.00	91.24	315.360	5,360.93	652.16	-1,513.48	1,582.27	1.91	1.10	1.56
7,486.00	91.48	316.710	5,359.48	696.05	-1,555.81	1,642.86	2.25	0.39	2.21
7,547.00	91.82	316.370	5,357.72	740.31	-1,597.75	1,703.38	0.79	0.56	-0.56
7,609.00	91.61	315.690	5,355.87	784.91	-1,640.78	1,764.96	1.15	-0.34	-1.10
7,670.00	91.01	317.190	5,354.47	829.10	-1,682.80	1,825.50	2.65	-0.98	2.46
7,729.00	90.20	317.690	5,353.85	872.56	-1,722.70	1,883.93	1.61	-1.37	0.85
7,789.00	89.76	316.980	5,353.87	916.68	-1,763.37	1,943.38	1.39	-0.73	-1.18
7,849.00	89.40	316.760	5,354.31	960.47	-1,804.38	2,002.89	0.70	-0.60	-0.37
7,909.00	89.23	317.040	5,355.03	1,004.27	-1,845.38	2,062.39	0.55	-0.28	0.47
7,971.00	89.09	316.290	5,355.94	1,049.36	-1,887.92	2,123.91	1.23	-0.23	-1.21
8,031.00	88.92	316.100	5,356.98	1,092.66	-1,929.45	2,183.50	0.42	-0.28	-0.32
8,092.00	89.13	315.870	5,358.02	1,136.52	-1,971.83	2,244.10	0.51	0.34	-0.38
8,153.00	88.75	315.190	5,359.15	1,180.04	-2,014.55	2,304.76	1.28	-0.62	-1.11
8,214.00	88.08	314.550	5,360.83	1,223.06	-2,057.77	2,365.47	1.52	-1.10	-1.05
8,275.00	89.16	314.760	5,362.30	1,265.92	-2,101.14	2,426.21	1.80	1.77	0.34
8,337.00	89.29	315.310	5,363.14	1,309.79	-2,144.95	2,487.92	0.91	0.21	0.89
8,399.00	89.50	315.320	5,363.80	1,353.86	-2,188.55	2,549.60	0.34	0.34	0.02
8,460.00	89.13	314.330	5,364.52	1,396.86	-2,231.81	2,610.34	1.73	-0.61	-1.62
8,522.00	88.96	313.740	5,365.56	1,439.95	-2,276.38	2,672.14	0.99	-0.27	-0.95
8,582.00	90.07	313.940	5,366.07	1,481.51	-2,319.65	2,731.97	1.88	1.85	0.33
8,643.00	90.64	315.120	5,365.69	1,524.28	-2,363.14	2,792.74	2.15	0.93	1.93
8,704.00	90.74	314.660	5,364.95	1,567.33	-2,406.35	2,853.47	0.77	0.16	-0.75



Scientific Drilling, Intl
Survey Report



Company: DJR Operating
Project: Venado Canyon Unit
Site: L12 2206 Pad
Well: 203H
Wellbore: Original drilling
Design: Original drilling

Local Co-ordinate Reference: Well 203H
TVD Reference: GL 7040' & RKB 14' @ 7054.00usft (Aztec 920)
MD Reference: GL 7040' & RKB 14' @ 7054.00usft (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)
8,766.00	90.44	315.340	5,364.31	1,611.17	-2,450.19	2,915.18	1.20	-0.48	1.10
8,827.00	90.50	315.740	5,363.81	1,654.71	-2,492.91	2,975.85	0.66	0.10	0.66
8,890.00	90.50	315.130	5,363.26	1,699.59	-2,537.12	3,038.51	0.97	0.00	-0.97
8,951.00	90.20	315.580	5,362.89	1,742.99	-2,579.98	3,099.20	0.89	-0.49	0.74
9,012.00	89.73	316.330	5,362.93	1,786.83	-2,622.39	3,159.82	1.45	-0.77	1.23
9,073.00	89.76	315.470	5,363.20	1,830.64	-2,664.84	3,220.44	1.41	0.05	-1.41
9,134.00	89.83	314.910	5,363.42	1,873.92	-2,707.83	3,281.15	0.93	0.11	-0.92
9,195.00	90.20	315.900	5,363.40	1,917.35	-2,750.66	3,341.83	1.73	0.61	1.62
9,257.00	90.61	317.360	5,362.96	1,962.42	-2,793.23	3,403.35	2.45	0.66	2.35
9,318.00	89.36	317.300	5,362.98	2,007.27	-2,834.57	3,463.79	2.05	-2.05	-0.10
9,380.00	89.53	316.720	5,363.58	2,052.62	-2,876.85	3,525.26	0.97	0.27	-0.94
9,441.00	89.50	315.820	5,364.10	2,096.70	-2,919.01	3,585.84	1.48	-0.05	-1.48
9,503.00	89.70	315.230	5,364.53	2,140.93	-2,962.45	3,647.50	1.00	0.32	-0.95
9,564.00	89.60	314.240	5,364.90	2,183.87	-3,005.78	3,708.25	1.63	-0.16	-1.62
9,626.00	89.60	313.790	5,365.34	2,226.95	-3,050.37	3,770.06	0.73	0.00	-0.73
9,687.00	89.73	313.280	5,365.69	2,268.96	-3,094.59	3,830.91	0.86	0.21	-0.84
9,747.00	89.73	313.640	5,365.98	2,310.23	-3,138.14	3,890.77	0.60	0.00	0.60
9,808.00	90.30	314.340	5,365.96	2,352.60	-3,182.02	3,951.59	1.48	0.93	1.15
9,869.00	90.94	316.260	5,365.30	2,395.95	-3,224.93	4,012.27	3.32	1.05	3.15
9,930.00	90.77	316.880	5,364.39	2,440.25	-3,266.86	4,072.81	1.05	-0.28	1.02
9,991.00	88.32	316.590	5,364.87	2,484.66	-3,308.66	4,133.32	4.04	-4.02	-0.48
10,052.00	88.05	315.530	5,366.81	2,528.56	-3,350.97	4,193.90	1.79	-0.44	-1.74
10,114.00	88.52	316.450	5,368.66	2,573.13	-3,394.02	4,255.48	1.67	0.76	1.48
10,175.00	88.92	316.600	5,370.02	2,617.39	-3,435.98	4,316.01	0.70	0.66	0.25
10,236.00	88.55	315.630	5,371.37	2,661.34	-3,478.26	4,376.59	1.70	-0.61	-1.59
10,298.00	90.07	316.430	5,372.12	2,705.96	-3,521.30	4,438.19	2.77	2.45	1.29
10,360.00	90.50	316.230	5,371.81	2,750.80	-3,564.11	4,499.76	0.76	0.69	-0.32
10,421.00	90.40	315.500	5,371.33	2,794.58	-3,606.59	4,560.38	1.21	-0.16	-1.20
10,473.00	90.10	314.360	5,371.10	2,831.31	-3,643.40	4,612.15	2.27	-0.58	-2.19
10,543.00	89.60	313.240	5,371.29	2,879.76	-3,693.92	4,681.96	1.75	-0.71	-1.60
10,605.00	89.90	312.870	5,371.56	2,922.08	-3,739.22	4,743.84	0.77	0.48	-0.60
10,666.00	90.57	314.810	5,371.31	2,964.33	-3,783.22	4,804.67	3.36	1.10	3.18
10,728.00	90.84	315.580	5,370.54	3,008.32	-3,826.91	4,866.36	1.32	0.44	1.24
10,788.00	90.44	315.770	5,369.87	3,051.24	-3,868.83	4,926.02	0.74	-0.67	0.32
10,849.00	90.07	315.590	5,369.60	3,094.88	-3,911.45	4,986.67	0.67	-0.61	-0.30
10,909.00	89.80	314.740	5,369.67	3,137.43	-3,953.75	5,046.38	1.49	-0.45	-1.42
10,971.00	89.80	313.900	5,369.89	3,180.74	-3,998.11	5,108.16	1.35	0.00	-1.35
11,032.00	90.07	314.090	5,369.96	3,223.11	-4,041.99	5,168.98	0.54	0.44	0.31
11,092.00	90.13	316.190	5,369.85	3,265.64	-4,084.31	5,228.69	3.50	0.10	3.50
11,153.00	89.16	317.340	5,370.23	3,310.08	-4,126.09	5,289.20	2.47	-1.59	1.89
11,214.00	90.10	317.830	5,370.62	3,355.11	-4,167.24	5,349.60	1.74	1.54	0.80
11,275.00	90.74	317.570	5,370.18	3,400.23	-4,208.29	5,409.98	1.13	1.05	-0.43
11,336.00	90.67	316.370	5,369.42	3,444.82	-4,249.91	5,470.47	1.97	-0.11	-1.97



Scientific Drilling, Intl

Survey Report



Company: DJR Operating
Project: Venado Canyon Unit
Site: L12 2206 Pad
Well: 203H
Wellbore: Original drilling
Design: Original drilling

Local Co-ordinate Reference: Well 203H
TVD Reference: GL 7040' & RKB 14' @ 7054.00usft (Aztec 920)
MD Reference: GL 7040' & RKB 14' @ 7054.00usft (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)
11,396.00	90.87	316.420	5,368.62	3,488.26	-4,291.29	5,530.03	0.34	0.33	0.08
11,457.00	89.80	316.830	5,368.26	3,532.60	-4,333.18	5,590.57	1.88	-1.75	0.67
11,518.00	89.83	315.900	5,368.46	3,576.75	-4,375.27	5,651.14	1.53	0.05	-1.52
11,582.00	90.10	315.520	5,368.50	3,622.56	-4,419.96	5,714.77	0.73	0.42	-0.59
11,646.00	90.27	314.020	5,368.29	3,667.63	-4,465.40	5,778.50	2.36	0.27	-2.34
11,709.00	89.60	312.820	5,368.36	3,710.93	-4,511.15	5,841.35	2.18	-1.06	-1.90
11,751.00	90.10	312.410	5,368.47	3,739.37	-4,542.06	5,883.29	1.54	1.19	-0.98
Last SDI Lateral MWD Survey									
11,812.00	90.10	312.410	5,368.37	3,780.51	-4,587.10	5,944.22	0.00	0.00	0.00
Projection to TD									

Design Targets

Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- Shape									
203H toe rev B	0.00	0.000	5,364.00	3,781.27	-4,579.02	1,877,320.87	2,837,903.44	36.1587754	-107.4443967
- actual wellpath misses target center by 7.43usft at 11806.56usft MD (5368.38 TVD, 3776.84 N, -4583.08 E)									
- Circle (radius 100.00)									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
442.00	441.99	0.00	-2.12	First SDI Surface MWD Survey
4,665.00	4,568.14	-839.20	186.22	Last SDI Surface MWD Survey
4,728.00	4,630.01	-849.52	180.67	First SDI Curve MWD Survey
5,734.00	5,337.03	-520.48	-296.92	Last SDI Curve MWD Survey
5,816.00	5,345.34	-466.50	-358.08	First SDI Lateral MWD Survey
11,751.00	5,368.47	3,739.37	-4,542.06	Last SDI Lateral MWD Survey
11,812.00	5,368.37	3,780.51	-4,587.10	Projection to TD

Checked By: _____ Approved By: _____ Date: _____