

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

DISTRICT II
811 E. 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

OIL CONSERVATION DIVISION

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

Submit one copy to appropriate
District Office

☐ AMENDED REPORT

☒ AS-DRILLED

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-043-21292		2 Pool Code 42289		3 Pool Name LYBROOK GALLUP OIL POOL	
4 Property Code 325271		5 Property Name VENADO CANYON UNIT			6 Well Number 206H
7 GRID No. 371838		8 Operator Name DJR OPERATING, LLC			9 Elevation 6962'

10 Surface Location DISTRICT III

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	11	22N	6W		263'	NORTH	1130'	EAST	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	East/West line	County
H	13	22N	6W		2350'	NORTH	364'	EAST	SANDOVAL

12 Dedicated Acres PENETRATED SPACING UNIT:
NE/4 & NE/SE SEC 11 (200 ACRES); SW/4, SW/NW, &
SW/SE SEC 12 (240 ACRES); NE/4 & NE/NW SEC 13 (200
ACRES) = 640 ACRES TOTAL - 5280.00 ACRES - S/2 SEC 1,
S/2 & NE/4 SEC 10, ALL SEC 11-14, ALL SEC 15, N/2 SEC 22,
ALL SEC 23, N/2 SEC 24, T22N R6W - UNDIVIDED UNIT

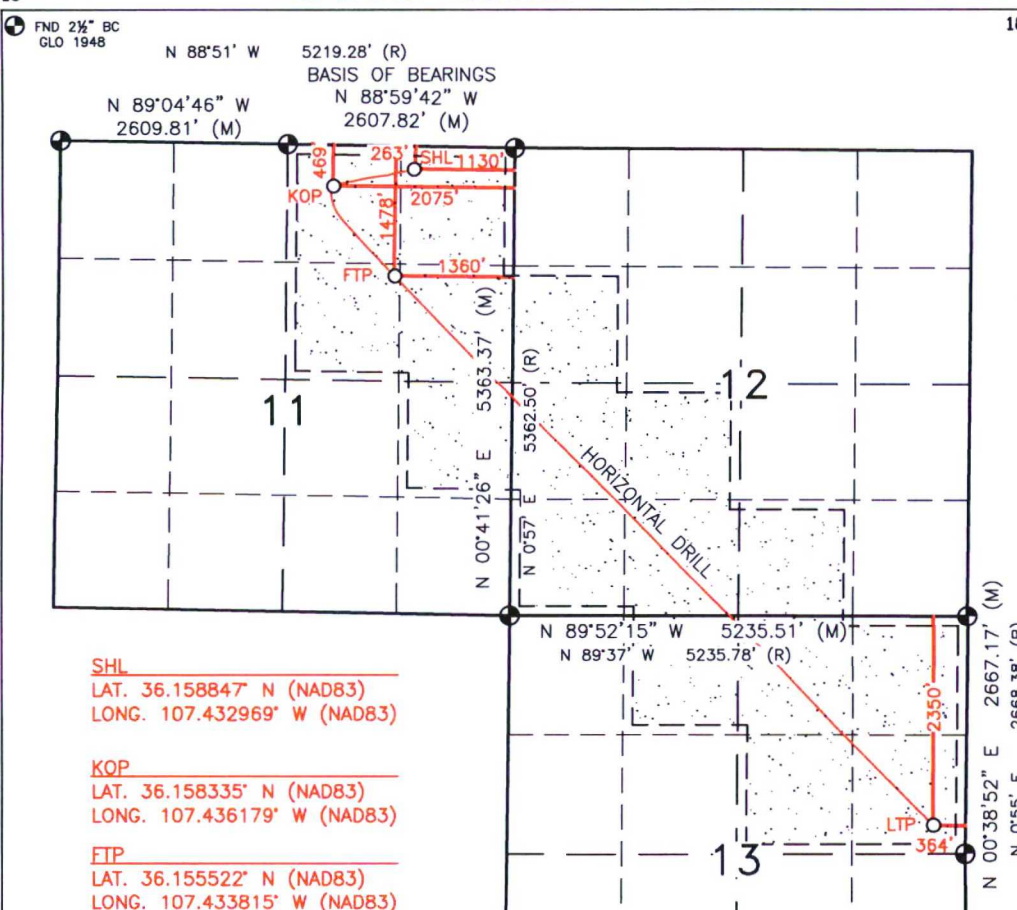
13 Joint or Infill

14 Consolidation Code

15 Order No.

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



SHL
LAT. 36.158847° N (NAD83)
LONG. 107.432969° W (NAD83)

KOP
LAT. 36.158335° N (NAD83)
LONG. 107.436179° W (NAD83)

FTP
LAT. 36.155522° N (NAD83)
LONG. 107.433815° W (NAD83)

LTP
LAT. 36.138228° N (NAD83)
LONG. 107.413047° W (NAD83)

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.

Signature Date
9/9/19

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 5, 2019

Date of Survey
Signature and Seal of Professional Surveyor:



Certificate Number 11393

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) 748-9720

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

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 478-3460 Fax: (505) 478-3482

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

DJR OPERATING, LLC
VENADO CANYON UNIT #206H

SHL
LAT. 36.158847° N (NAD83)
LONG. 107.432969° W (NAD83)

KOP
LAT. 36.158335° N (NAD83)
LONG. 107.436179° W (NAD83)

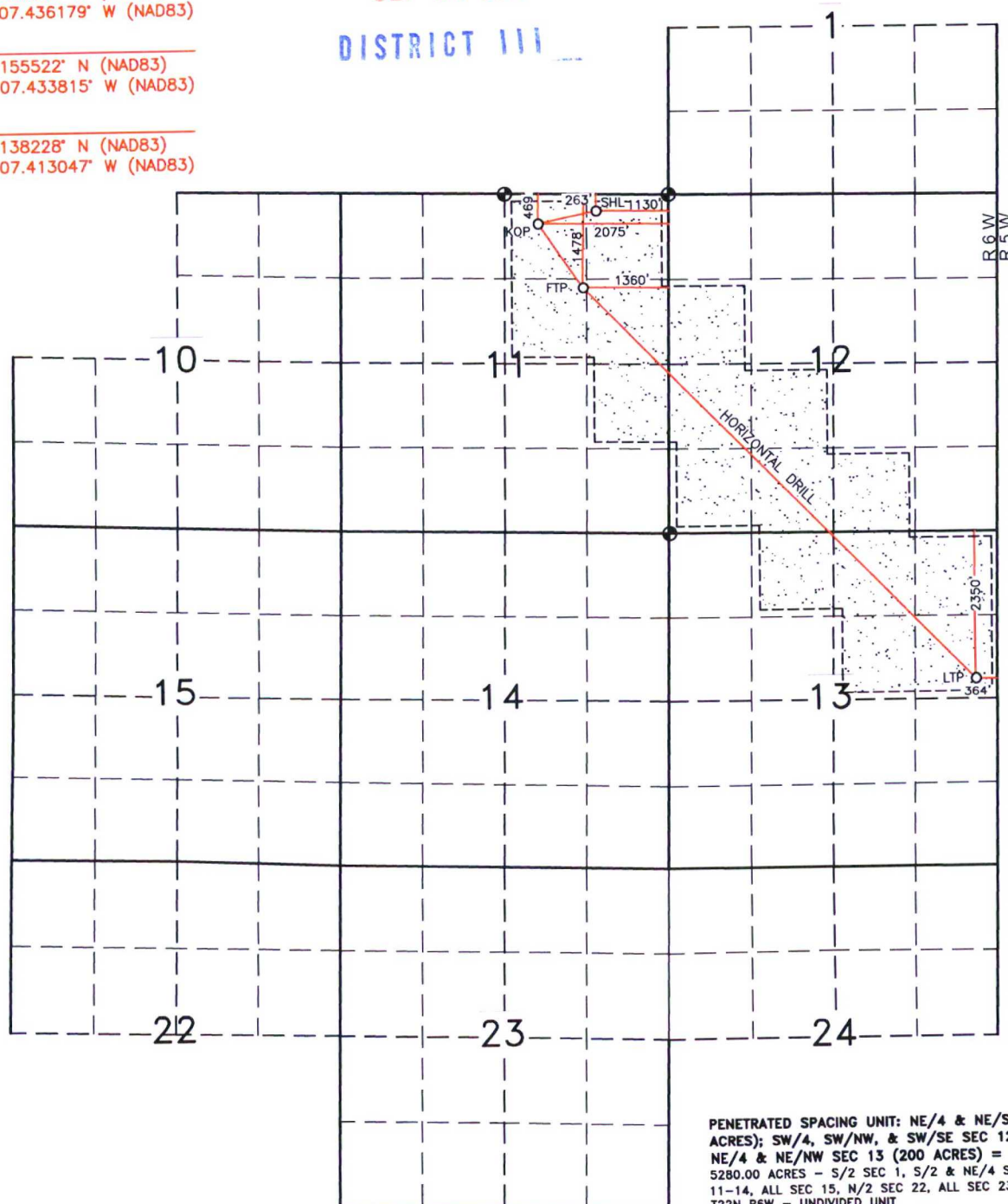
FTP
LAT. 36.155522° N (NAD83)
LONG. 107.433815° W (NAD83)

LTP
LAT. 36.138228° N (NAD83)
LONG. 107.413047° W (NAD83)

NMOC

SEP 23 2019

DISTRICT III



PENETRATED SPACING UNIT: NE/4 & NE/SE SEC 11 (200 ACRES); SW/4, SW/NW, & SW/SE SEC 12 (240 ACRES); NE/4 & NE/NW SEC 13 (200 ACRES) = 640 ACRES TOTAL
5280.00 ACRES - S/2 SEC 1, S/2 & NE/4 SEC 10, ALL SEC 11-14, ALL SEC 15, N/2 SEC 22, ALL SEC 23, N/2 SEC 24, T22N R6W - 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.	A11 2206 206H
County & State	Sandoval, NM
SDI Job No.	OP.020481
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 397 feet to a
measured depth of 15,110 feet is true and correct as determined from all available records.

Signature

4-Sep-19
Date

Janie Collins

Colorado District Well Planner
Scientific Drilling International



Scientific Drilling, Intl

Survey Report



Company: DJR Operating
Project: Venado Canyon Unit
Site: A11 2206 Pad
Well: # 206H
Wellbore: Original drilling
Design: Original drilling

Local Co-ordinate Reference: Well # 206H
TVD Reference: GL 6963' & RKB 14' @ 6977.00usft (Aztec 920)
MD Reference: GL 6963' & RKB 14' @ 6977.00usft (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		A11 2206 Pad			
Site Position:		Northing:	1,877,360.54 usft	Latitude:	36.1588470
From:	Lat/Long	Easting:	2,841,256.67 usft	Longitude:	-107.4330370
Position Uncertainty:	0.00 usft	Slot Radius:	16.00 in	Grid Convergence:	0.24 °

Well	# 206H					
Well Position	+N/-S	0.00 usft	Northing:	1,877,360.63 usft	Latitude:	36.1588470
	+E/-W	0.00 usft	Easting:	2,841,276.74 usft	Longitude:	-107.4329690
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	6,963.00 usft

Wellbore	Original drilling				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	8/12/2019	8.67	62.78	49,266

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	141.706	

Survey Program		Date	9/4/2019		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
176.00	304.00	Survey #1 - Surface Inc Survey (Original d	INCLINOMETER	Inclination Only : < 3 degrees	
397.00	4,597.00	Survey #2 - Surface MWD Survey (Origina	MWD+HDGM	OWSG MWD + HDGM	
4,659.00	6,255.00	Survey #3 - Curve MWD Survey (Original	MWD+HDGM	OWSG MWD + HDGM	
6,318.00	15,110.00	Survey #4 - 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
176.00	0.10	0.000	176.00	0.00	0.00	0.00	0.06	0.06	0.00
304.00	0.30	0.000	304.00	0.00	0.00	0.00	0.16	0.16	0.00
397.00	0.53	308.950	397.00	0.27	-0.33	-0.42	0.44	0.25	-54.89
First SDI Surface MWD Survey									
457.00	1.46	256.200	456.99	0.26	-1.29	-1.01	2.02	1.55	-87.92
518.00	2.35	271.010	517.96	0.10	-3.30	-2.12	1.66	1.46	24.28
578.00	3.57	253.450	577.88	-0.41	-6.32	-3.59	2.51	2.03	-29.27



Scientific Drilling, Intl

Survey Report



Company: DJR Operating
Project: Venado Canyon Unit
Site: A11 2206 Pad
Well: # 206H
Wellbore: Original drilling
Design: Original drilling

Local Co-ordinate Reference: Well # 206H
TVD Reference: GL 6963' & RKB 14' @ 6977.00usft (Aztec 920)
MD Reference: GL 6963' & RKB 14' @ 6977.00usft (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)
638.00	4.82	255.030	637.71	-1.59	-10.54	-5.28	2.09	2.08	2.63
699.00	5.90	255.870	698.45	-3.02	-16.06	-7.58	1.78	1.77	1.38
760.00	6.09	259.720	759.11	-4.36	-22.29	-10.38	0.73	0.31	6.31
821.00	7.17	254.380	819.70	-5.97	-29.14	-13.37	2.04	1.77	-8.75
881.00	8.83	256.520	879.12	-8.05	-37.22	-16.75	2.81	2.77	3.57
942.00	9.40	257.690	939.35	-10.20	-46.64	-20.90	0.98	0.93	1.92
1,002.00	10.66	258.010	998.43	-12.40	-56.86	-25.50	2.10	2.10	0.53
1,062.00	12.54	257.290	1,057.20	-14.99	-68.64	-30.77	3.14	3.13	-1.20
1,122.00	12.35	256.090	1,115.79	-17.96	-81.22	-36.24	0.53	-0.32	-2.00
1,182.00	12.09	258.180	1,174.43	-20.79	-93.60	-41.69	0.86	-0.43	3.48
1,244.00	13.80	260.510	1,234.86	-23.34	-107.25	-48.14	2.88	2.76	3.76
1,305.00	15.03	259.600	1,293.93	-25.97	-122.21	-55.35	2.05	2.02	-1.49
1,366.00	15.62	261.900	1,352.77	-28.55	-138.12	-63.18	1.39	0.97	3.77
1,426.00	15.35	261.720	1,410.59	-30.84	-153.97	-71.22	0.46	-0.45	-0.30
1,486.00	14.94	259.630	1,468.50	-33.37	-169.44	-78.81	1.14	-0.68	-3.48
1,546.00	15.13	259.090	1,526.45	-36.25	-184.74	-86.03	0.39	0.32	-0.90
1,606.00	14.83	257.970	1,584.41	-39.33	-199.93	-93.03	0.69	-0.50	-1.87
1,677.00	14.33	257.050	1,653.12	-43.19	-217.38	-100.81	0.78	-0.70	-1.30
1,726.00	14.41	257.870	1,700.59	-45.83	-229.25	-106.10	0.45	0.16	1.67
1,787.00	15.74	257.600	1,759.49	-49.20	-244.76	-113.06	2.18	2.18	-0.44
1,847.00	15.78	256.990	1,817.24	-52.79	-260.65	-120.10	0.28	0.07	-1.02
1,908.00	16.09	256.440	1,875.89	-56.64	-276.95	-127.18	0.57	0.51	-0.90
1,971.00	15.97	254.710	1,936.44	-60.97	-293.80	-134.22	0.78	-0.19	-2.75
2,033.00	15.69	252.240	1,996.09	-65.77	-310.01	-140.49	1.18	-0.45	-3.98
2,096.00	14.86	251.340	2,056.87	-70.96	-325.78	-146.19	1.37	-1.32	-1.43
2,159.00	13.95	254.090	2,117.88	-75.62	-340.73	-151.80	1.81	-1.44	4.37
2,221.00	12.58	255.670	2,178.23	-79.34	-354.46	-157.39	2.29	-2.21	2.55
2,284.00	13.49	263.650	2,239.61	-81.86	-368.42	-164.06	3.20	1.44	12.67
2,348.00	14.35	264.690	2,301.73	-83.41	-383.73	-172.33	1.40	1.34	1.63
2,411.00	13.79	265.270	2,362.84	-84.76	-398.99	-180.73	0.92	-0.89	0.92
2,474.00	14.32	266.790	2,423.95	-85.81	-414.25	-189.36	1.03	0.84	2.41
2,537.00	15.52	266.040	2,484.83	-86.83	-430.44	-198.59	1.93	1.90	-1.19
2,600.00	15.35	265.800	2,545.56	-88.02	-447.16	-208.02	0.29	-0.27	-0.38
2,663.00	14.85	264.920	2,606.38	-89.35	-463.52	-217.12	0.87	-0.79	-1.40
2,726.00	14.46	264.580	2,667.33	-90.81	-479.39	-225.81	0.63	-0.62	-0.54
2,789.00	14.05	264.800	2,728.39	-92.24	-494.84	-234.25	0.66	-0.65	0.35
2,852.00	13.55	261.500	2,789.57	-94.03	-509.76	-242.10	1.48	-0.79	-5.24
2,915.00	13.41	257.380	2,850.84	-96.71	-524.18	-248.93	1.54	-0.22	-6.54
2,978.00	13.99	256.120	2,912.05	-100.14	-538.71	-255.24	1.04	0.92	-2.00
3,042.00	14.56	257.950	2,974.07	-103.67	-554.08	-262.00	1.14	0.89	2.86
3,105.00	13.92	255.360	3,035.14	-107.24	-569.16	-268.54	1.43	-1.02	-4.11
3,168.00	13.58	258.370	3,096.33	-110.65	-583.74	-274.90	1.26	-0.54	4.78
3,231.00	14.66	258.990	3,157.43	-113.66	-598.81	-281.87	1.73	1.71	0.98



Scientific Drilling, Intl
Survey Report



Company: DJR Operating
Project: Venado Canyon Unit
Site: A11 2206 Pad
Well: # 206H
Wellbore: Original drilling
Design: Original drilling

Local Co-ordinate Reference: Well # 206H
TVD Reference: GL 6963' & RKB 14' @ 6977.00usft (Aztec 920)
MD Reference: GL 6963' & RKB 14' @ 6977.00usft (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)
3,294.00	16.05	258.740	3,218.18	-116.88	-615.17	-289.49	2.21	2.21	-0.40
3,357.00	16.00	258.550	3,278.73	-120.31	-632.23	-297.37	0.12	-0.08	-0.30
3,421.00	15.18	258.260	3,340.37	-123.76	-649.07	-305.09	1.29	-1.28	-0.45
3,483.00	14.55	257.660	3,400.30	-127.08	-664.63	-312.13	1.05	-1.02	-0.97
3,546.00	14.00	256.760	3,461.35	-130.52	-679.78	-318.82	0.94	-0.87	-1.43
3,608.00	15.06	256.360	3,521.37	-134.13	-694.91	-325.36	1.72	1.71	-0.65
3,671.00	14.57	257.370	3,582.27	-137.80	-710.59	-332.20	0.88	-0.78	1.60
3,733.00	14.64	256.910	3,642.27	-141.28	-725.83	-338.92	0.22	0.11	-0.74
3,796.00	13.88	259.800	3,703.33	-144.42	-741.03	-345.87	1.65	-1.21	4.59
3,858.00	13.63	259.085	3,763.55	-147.12	-755.52	-352.73	0.49	-0.40	-1.15
3,921.00	12.93	260.660	3,824.87	-149.67	-769.76	-359.55	1.25	-1.11	2.50
3,984.00	13.21	257.670	3,886.24	-152.35	-783.75	-366.12	1.16	0.44	-4.75
4,046.00	14.24	257.240	3,946.46	-155.55	-798.11	-372.51	1.67	1.66	-0.69
4,109.00	15.38	258.560	4,007.37	-158.91	-813.86	-379.62	1.89	1.81	2.10
4,172.00	16.00	259.640	4,068.02	-162.13	-830.58	-387.46	1.09	0.98	1.71
4,234.00	16.25	259.500	4,127.58	-165.25	-847.52	-395.51	0.41	0.40	-0.23
4,297.00	16.44	258.100	4,188.04	-168.69	-864.91	-403.58	0.69	0.30	-2.22
4,360.00	14.99	255.820	4,248.68	-172.53	-881.53	-410.88	2.50	-2.30	-3.62
4,422.00	14.62	259.160	4,308.62	-175.96	-896.99	-417.76	1.50	-0.60	5.39
4,485.00	13.75	259.280	4,369.70	-178.85	-912.16	-424.89	1.38	-1.38	0.19
4,548.00	12.27	255.080	4,431.09	-181.97	-925.98	-431.01	2.79	-2.35	-6.67
4,597.00	11.25	250.570	4,479.06	-184.90	-935.52	-434.62	2.80	-2.08	-9.20
Last SDI Surface MWD Survey									
4,659.00	11.92	238.980	4,539.80	-190.21	-946.72	-437.39	3.90	1.08	-18.69
First SDI Curve MWD Survey									
4,722.00	15.38	206.920	4,601.10	-201.03	-956.09	-434.71	12.99	5.49	-50.89
4,784.00	20.48	192.830	4,660.10	-218.96	-962.23	-424.44	10.74	8.23	-22.73
4,847.00	24.26	185.370	4,718.36	-242.60	-965.89	-408.15	7.49	6.00	-11.84
4,910.00	27.29	179.810	4,775.09	-269.94	-967.05	-387.42	6.15	4.81	-8.83
4,972.00	29.96	174.790	4,829.52	-299.58	-965.60	-363.25	5.79	4.31	-8.10
5,035.00	32.46	170.220	4,883.40	-331.92	-961.30	-335.21	5.46	3.97	-7.25
5,097.00	35.57	166.040	4,934.79	-365.83	-954.12	-304.15	6.27	5.02	-6.74
5,160.00	40.01	159.980	4,984.58	-402.67	-942.75	-268.19	9.18	7.05	-9.62
5,223.00	44.46	154.500	5,031.23	-441.65	-926.31	-227.41	9.16	7.06	-8.70
5,285.00	48.12	149.450	5,074.08	-481.15	-905.22	-183.34	8.33	5.90	-8.15
5,348.00	53.71	145.390	5,113.80	-522.28	-878.85	-134.71	10.18	8.87	-6.44
5,411.00	59.90	142.650	5,148.28	-564.89	-847.86	-82.06	10.48	9.83	-4.35
5,474.00	63.59	138.980	5,178.10	-607.87	-812.79	-26.60	7.79	5.86	-5.83
5,537.00	68.14	136.610	5,203.86	-650.43	-774.16	30.74	8.00	7.22	-3.76
5,600.00	72.05	137.640	5,225.31	-693.83	-733.87	89.77	6.39	6.21	1.63
5,663.00	75.82	138.240	5,242.74	-738.77	-693.32	150.17	6.05	5.98	0.95
5,726.00	79.06	138.000	5,256.43	-784.55	-652.28	211.53	5.16	5.14	-0.38
5,789.00	81.44	137.710	5,267.10	-830.58	-610.62	273.48	3.80	3.78	-0.46
5,820.00	83.37	138.510	5,271.20	-853.46	-590.10	304.14	6.73	6.23	2.58



Scientific Drilling, Intl

Survey Report



Company: DJR Operating
Project: Venado Canyon Unit
Site: A11 2206 Pad
Well: # 206H
Wellbore: Original drilling
Design: Original drilling

Local Co-ordinate Reference: Well # 206H
TVD Reference: GL 6963' & RKB 14' @ 6977.00usft (Aztec 920)
MD Reference: GL 6963' & RKB 14' @ 6977.00usft (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)
5,941.00	86.10	137.630	5,282.30	-943.09	-509.59	424.38	2.37	2.26	-0.73
6,004.00	87.85	136.480	5,285.63	-989.14	-466.74	487.08	3.32	2.78	-1.83
6,066.00	89.50	135.880	5,287.06	-1,033.86	-423.82	548.77	2.83	2.66	-0.97
6,129.00	89.20	134.910	5,287.78	-1,078.71	-379.58	611.39	1.61	-0.48	-1.54
6,192.00	88.89	134.600	5,288.83	-1,123.06	-334.85	673.91	0.70	-0.49	-0.49
6,225.00	89.73	134.359	5,289.22	-1,146.18	-311.31	706.65	2.66	2.56	-0.73
Last SDI Curve MWD Survey									
6,255.00	90.50	134.140	5,289.16	-1,167.11	-289.82	736.40	2.66	2.56	-0.73
6,318.00	90.03	134.520	5,288.87	-1,211.13	-244.75	798.87	0.96	-0.75	0.60
First SDI Lateral MWD Survey									
6,381.00	89.39	135.360	5,289.19	-1,255.63	-200.16	861.43	1.68	-1.02	1.33
6,444.00	88.39	135.430	5,290.41	-1,300.48	-155.93	924.04	1.59	-1.59	0.11
6,507.00	89.39	133.970	5,291.63	-1,344.78	-111.16	986.55	2.81	1.59	-2.32
6,569.00	90.84	134.470	5,291.50	-1,388.02	-66.73	1,048.02	2.47	2.34	0.81
6,632.00	90.37	134.750	5,290.84	-1,432.26	-21.88	1,110.54	0.87	-0.75	0.44
6,695.00	89.09	134.430	5,291.14	-1,476.49	22.98	1,173.05	2.09	-2.03	-0.51
6,757.00	90.81	134.440	5,291.19	-1,519.89	67.25	1,234.55	2.77	2.77	0.02
6,819.00	90.20	134.460	5,290.64	-1,563.31	111.51	1,296.05	0.98	-0.98	0.03
6,883.00	91.04	135.710	5,289.95	-1,608.63	156.69	1,359.62	2.35	1.31	1.95
6,945.00	90.17	134.940	5,289.30	-1,652.71	200.28	1,421.23	1.87	-1.40	-1.24
7,008.00	90.70	136.430	5,288.82	-1,697.79	244.29	1,483.88	2.51	0.84	2.37
7,071.00	90.00	136.240	5,288.43	-1,743.36	287.79	1,546.60	1.15	-1.11	-0.30
7,134.00	89.19	135.870	5,288.88	-1,788.72	331.51	1,609.29	1.41	-1.29	-0.59
7,197.00	91.07	136.630	5,288.74	-1,834.22	375.07	1,672.00	3.22	2.98	1.21
7,260.00	91.03	137.530	5,287.58	-1,880.35	417.96	1,734.79	1.43	-0.06	1.43
7,323.00	90.37	138.020	5,286.81	-1,927.00	460.30	1,797.63	1.30	-1.05	0.78
7,386.00	89.70	137.580	5,286.77	-1,973.67	502.62	1,860.49	1.27	-1.06	-0.70
7,449.00	89.53	137.630	5,287.20	-2,020.19	545.09	1,923.32	0.28	-0.27	0.08
7,513.00	88.46	137.670	5,288.32	-2,067.48	588.20	1,987.15	1.67	-1.67	0.06
7,576.00	89.73	137.700	5,289.31	-2,114.06	630.60	2,049.99	2.02	2.02	0.05
7,639.00	89.73	137.780	5,289.61	-2,160.69	672.97	2,112.84	0.13	0.00	0.13
7,701.00	91.01	136.660	5,289.21	-2,206.19	715.08	2,174.64	2.74	2.06	-1.81
7,764.00	91.04	136.330	5,288.08	-2,251.88	758.44	2,237.37	0.53	0.05	-0.52
7,827.00	90.37	135.820	5,287.31	-2,297.25	802.14	2,300.06	1.34	-1.06	-0.81
7,890.00	89.63	136.130	5,287.31	-2,342.55	845.92	2,362.75	1.27	-1.17	0.49
7,953.00	89.87	135.950	5,287.58	-2,387.90	889.66	2,425.44	0.48	0.38	-0.29
8,015.00	89.43	135.700	5,287.96	-2,432.37	932.86	2,487.11	0.82	-0.71	-0.40
8,078.00	89.90	136.360	5,288.33	-2,477.71	976.60	2,549.80	1.29	0.75	1.05
8,141.00	91.61	135.620	5,287.50	-2,523.01	1,020.36	2,612.48	2.96	2.71	-1.17
8,203.00	91.65	135.840	5,285.74	-2,567.39	1,063.63	2,674.12	0.36	0.06	0.35
8,266.00	91.38	135.620	5,284.07	-2,612.48	1,107.59	2,736.75	0.55	-0.43	-0.35
8,329.00	91.14	135.690	5,282.69	-2,657.53	1,151.61	2,799.39	0.40	-0.38	0.11
8,392.00	90.71	135.060	5,281.67	-2,702.36	1,195.86	2,861.99	1.21	-0.68	-1.00
8,454.00	89.97	134.200	5,281.30	-2,745.91	1,239.98	2,923.52	1.83	-1.19	-1.39



Scientific Drilling, Intl
Survey Report



Company: DJR Operating
Project: Venado Canyon Unit
Site: A11 2206 Pad
Well: # 206H
Wellbore: Original drilling
Design: Original drilling

Local Co-ordinate Reference: Well # 206H
TVD Reference: GL 6963' & RKB 14' @ 6977.00usft (Aztec 920)
MD Reference: GL 6963' & RKB 14' @ 6977.00usft (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)
8,517.00	89.63	134.310	5,281.52	-2,789.88	1,285.10	2,985.99	0.57	-0.54	0.17
8,580.00	89.53	134.380	5,281.98	-2,833.91	1,330.16	3,048.47	0.19	-0.16	0.11
8,643.00	89.13	133.480	5,282.72	-2,877.62	1,375.53	3,110.88	1.56	-0.63	-1.43
8,706.00	89.80	134.090	5,283.31	-2,921.21	1,421.01	3,173.28	1.44	1.06	0.97
8,768.00	89.63	135.490	5,283.62	-2,964.89	1,465.00	3,234.82	2.27	-0.27	2.26
8,831.00	88.82	135.510	5,284.47	-3,009.82	1,509.16	3,297.45	1.29	-1.29	0.03
8,894.00	89.33	134.550	5,285.49	-3,054.38	1,553.68	3,360.01	1.73	0.81	-1.52
8,957.00	91.17	133.110	5,285.21	-3,098.01	1,599.12	3,422.41	3.71	2.92	-2.29
9,020.00	90.87	132.840	5,284.09	-3,140.95	1,645.21	3,484.67	0.64	-0.48	-0.43
9,083.00	90.27	133.140	5,283.46	-3,183.90	1,691.29	3,546.94	1.06	-0.95	0.48
9,146.00	91.94	133.080	5,282.25	-3,226.95	1,737.27	3,609.22	2.65	2.65	-0.10
9,209.00	90.80	132.400	5,280.74	-3,269.69	1,783.53	3,671.43	2.11	-1.81	-1.08
9,272.00	88.99	132.690	5,280.86	-3,312.29	1,829.94	3,733.63	2.91	-2.87	0.46
9,335.00	90.54	134.630	5,281.12	-3,355.78	1,875.51	3,796.00	3.94	2.46	3.08
9,398.00	91.65	136.580	5,279.91	-3,400.78	1,919.58	3,858.63	3.56	1.76	3.10
9,462.00	89.83	135.900	5,279.08	-3,447.00	1,963.83	3,922.33	3.04	-2.84	-1.06
9,525.00	90.44	136.420	5,278.94	-3,492.44	2,007.47	3,985.03	1.27	0.97	0.83
9,587.00	91.31	137.660	5,277.99	-3,537.80	2,049.72	4,046.82	2.44	1.40	2.00
9,650.00	90.91	137.310	5,276.77	-3,584.23	2,092.28	4,109.64	0.84	-0.63	-0.56
9,713.00	90.74	137.110	5,275.86	-3,630.46	2,135.08	4,172.43	0.42	-0.27	-0.32
9,775.00	91.78	136.020	5,274.50	-3,675.47	2,177.69	4,234.17	2.43	1.68	-1.76
9,838.00	90.64	135.460	5,273.17	-3,720.58	2,221.65	4,296.81	2.02	-1.81	-0.89
9,901.00	93.19	135.380	5,271.06	-3,765.42	2,265.84	4,359.39	4.05	4.05	-0.13
9,964.00	93.36	135.300	5,267.46	-3,810.16	2,310.05	4,421.90	0.30	0.27	-0.13
10,027.00	90.88	136.250	5,265.13	-3,855.27	2,353.96	4,484.52	4.22	-3.94	1.51
10,090.00	90.23	135.900	5,264.52	-3,900.65	2,397.66	4,547.21	1.17	-1.03	-0.56
10,152.00	91.35	135.470	5,263.67	-3,945.00	2,440.97	4,608.86	1.93	1.81	-0.69
10,216.00	90.44	135.030	5,262.67	-3,990.45	2,486.02	4,672.45	1.58	-1.42	-0.69
10,278.00	90.80	133.170	5,262.00	-4,033.59	2,530.54	4,733.89	3.06	0.58	-3.00
10,339.00	89.83	132.450	5,261.66	-4,075.04	2,575.29	4,794.16	1.98	-1.59	-1.18
10,399.00	89.93	132.870	5,261.79	-4,115.70	2,619.41	4,853.41	0.72	0.17	0.70
10,461.00	89.43	135.410	5,262.13	-4,158.87	2,663.90	4,914.87	4.18	-0.81	4.10
10,522.00	91.08	137.450	5,261.86	-4,203.07	2,705.94	4,975.60	4.30	2.70	3.34
10,583.00	90.81	137.900	5,260.86	-4,248.16	2,747.01	5,036.44	0.86	-0.44	0.74
10,644.00	91.47	138.940	5,259.64	-4,293.78	2,787.48	5,097.33	2.02	1.08	1.70
10,706.00	90.37	138.610	5,258.65	-4,340.40	2,828.33	5,159.24	1.85	-1.77	-0.53
10,767.00	91.01	137.610	5,257.91	-4,385.81	2,869.06	5,220.11	1.95	1.05	-1.64
10,828.00	89.29	136.800	5,257.75	-4,430.57	2,910.50	5,280.92	3.12	-2.82	-1.33
10,889.00	90.07	137.360	5,258.09	-4,475.24	2,952.04	5,341.72	1.57	1.28	0.92
10,950.00	91.48	137.640	5,257.27	-4,520.21	2,993.24	5,402.55	2.36	2.31	0.46
11,011.00	90.44	137.760	5,256.25	-4,565.32	3,034.29	5,463.39	1.72	-1.70	0.20
11,072.00	90.27	136.920	5,255.87	-4,610.18	3,075.63	5,524.21	1.40	-0.28	-1.38
11,133.00	90.84	136.910	5,255.28	-4,654.72	3,117.29	5,585.00	0.93	0.93	-0.02



Scientific Drilling, Intl

Survey Report



Company: DJR Operating
Project: Venado Canyon Unit
Site: A11 2206 Pad
Well: # 206H
Wellbore: Original drilling
Design: Original drilling

Local Co-ordinate Reference: Well # 206H
TVD Reference: GL 6963' & RKB 14' @ 6977.00usft (Aztec 920)
MD Reference: GL 6963' & RKB 14' @ 6977.00usft (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)
11,193.00	90.84	135.850	5,254.40	-4,698.15	3,158.68	5,644.73	1.77	0.00	-1.77
11,255.00	89.03	134.320	5,254.47	-4,742.06	3,202.45	5,706.31	3.82	-2.92	-2.47
11,316.00	90.67	134.640	5,254.63	-4,784.80	3,245.97	5,766.83	2.74	2.69	0.52
11,378.00	89.83	133.140	5,254.36	-4,827.78	3,290.65	5,828.25	2.77	-1.35	-2.42
11,439.00	90.60	132.560	5,254.13	-4,869.26	3,335.37	5,888.52	1.58	1.26	-0.95
11,500.00	89.83	132.760	5,253.90	-4,910.60	3,380.23	5,948.76	1.30	-1.26	0.33
11,560.00	91.68	133.390	5,253.11	-4,951.57	3,424.05	6,008.07	3.26	3.08	1.05
11,622.00	91.31	133.970	5,251.49	-4,994.37	3,468.88	6,069.44	1.11	-0.60	0.94
11,682.00	91.04	133.540	5,250.26	-5,035.86	3,512.21	6,128.85	0.85	-0.45	-0.72
11,744.00	90.44	133.790	5,249.46	-5,078.66	3,557.05	6,190.24	1.05	-0.97	0.40
11,805.00	89.33	134.830	5,249.58	-5,121.27	3,600.70	6,250.73	2.49	-1.82	1.70
11,866.00	88.26	134.570	5,250.87	-5,164.17	3,644.05	6,311.26	1.81	-1.75	-0.43
11,926.00	90.47	135.500	5,251.53	-5,206.62	3,686.44	6,370.84	4.00	3.68	1.55
11,987.00	90.87	136.430	5,250.82	-5,250.47	3,728.84	6,431.53	1.66	0.66	1.52
12,048.00	90.57	135.950	5,250.05	-5,294.48	3,771.07	6,492.25	0.93	-0.49	-0.79
12,108.00	89.83	135.360	5,249.84	-5,337.39	3,813.00	6,551.91	1.58	-1.23	-0.98
12,170.00	88.86	134.760	5,250.55	-5,381.27	3,856.80	6,613.49	1.84	-1.56	-0.97
12,231.00	90.91	135.480	5,250.67	-5,424.49	3,899.84	6,674.08	3.56	3.36	1.18
12,292.00	90.74	135.570	5,249.79	-5,468.02	3,942.57	6,734.72	0.32	-0.28	0.15
12,353.00	89.63	134.540	5,249.60	-5,511.19	3,985.66	6,795.31	2.48	-1.82	-1.69
12,414.00	88.82	134.930	5,250.42	-5,554.12	4,028.99	6,855.85	1.47	-1.33	0.64
12,476.00	90.37	136.610	5,250.86	-5,598.54	4,072.23	6,917.51	3.69	2.50	2.71
12,537.00	90.44	137.150	5,250.43	-5,643.06	4,113.92	6,978.30	0.89	0.11	0.89
12,598.00	89.93	136.710	5,250.23	-5,687.63	4,155.58	7,039.08	1.10	-0.84	-0.72
12,659.00	90.57	136.700	5,249.97	-5,732.02	4,197.41	7,099.85	1.05	1.05	-0.02
12,719.00	89.87	137.610	5,249.74	-5,776.01	4,238.21	7,159.66	1.91	-1.17	1.52
12,781.00	89.87	138.810	5,249.88	-5,822.24	4,279.53	7,221.54	1.94	0.00	1.94
12,842.00	89.73	138.100	5,250.09	-5,867.89	4,319.98	7,282.44	1.19	-0.23	-1.16
12,904.00	90.91	138.850	5,249.74	-5,914.31	4,361.08	7,344.34	2.26	1.90	1.21
12,965.00	91.45	138.130	5,248.49	-5,959.98	4,401.50	7,405.23	1.48	0.89	-1.18
13,026.00	91.21	137.720	5,247.07	-6,005.24	4,442.37	7,466.08	0.78	-0.39	-0.67
13,087.00	91.54	137.080	5,245.61	-6,050.13	4,483.64	7,526.89	1.18	0.54	-1.05
13,148.00	91.34	136.620	5,244.07	-6,094.62	4,525.35	7,587.66	0.82	-0.33	-0.75
13,209.00	90.74	136.540	5,242.97	-6,138.92	4,567.27	7,648.40	0.99	-0.98	-0.13
13,269.00	90.13	135.680	5,242.51	-6,182.16	4,608.87	7,708.11	1.76	-1.02	-1.43
13,331.00	90.03	135.230	5,242.43	-6,226.35	4,652.36	7,769.74	0.74	-0.16	-0.73
13,391.00	90.23	135.190	5,242.29	-6,268.93	4,694.63	7,829.36	0.34	0.33	-0.07
13,452.00	89.50	134.600	5,242.43	-6,311.98	4,737.84	7,889.93	1.54	-1.20	-0.97
13,513.00	90.07	135.040	5,242.66	-6,354.98	4,781.11	7,950.49	1.18	0.93	0.72
13,573.00	90.10	135.370	5,242.57	-6,397.56	4,823.38	8,010.10	0.55	0.05	0.55
13,633.00	90.50	134.990	5,242.26	-6,440.12	4,865.67	8,069.71	0.92	0.67	-0.63
13,692.00	90.23	135.190	5,241.88	-6,481.90	4,907.33	8,128.32	0.57	-0.46	0.34
13,753.00	89.40	134.140	5,242.08	-6,524.78	4,950.71	8,188.86	2.19	-1.36	-1.72



Scientific Drilling, Intl

Survey Report



Company: DJR Operating
Project: Venado Canyon Unit
Site: A11 2206 Pad
Well: # 206H
Wellbore: Original drilling
Design: Original drilling

Local Co-ordinate Reference: Well # 206H
TVD Reference: GL 6963' & RKB 14' @ 6977.00usft (Aztec 920)
MD Reference: GL 6963' & RKB 14' @ 6977.00usft (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)
13,814.00	90.77	136.020	5,241.99	-6,567.97	4,993.78	8,249.44	3.81	2.25	3.08
13,875.00	89.97	134.680	5,241.60	-6,611.36	5,036.65	8,310.07	2.56	-1.31	-2.20
13,935.00	90.67	134.390	5,241.26	-6,653.44	5,079.42	8,369.59	1.26	1.17	-0.48
13,996.00	90.64	133.920	5,240.56	-6,695.93	5,123.18	8,430.06	0.77	-0.05	-0.77
14,056.00	90.60	133.360	5,239.91	-6,737.34	5,166.60	8,489.46	0.94	-0.07	-0.93
14,117.00	90.24	133.430	5,239.47	-6,779.25	5,210.92	8,549.82	0.60	-0.59	0.11
14,178.00	90.40	135.510	5,239.13	-6,821.98	5,254.45	8,610.33	3.42	0.26	3.41
14,238.00	91.44	135.310	5,238.16	-6,864.70	5,296.56	8,669.96	1.77	1.73	-0.33
14,299.00	88.32	134.990	5,238.29	-6,907.94	5,339.58	8,730.55	5.14	-5.11	-0.52
14,359.00	88.12	134.850	5,240.15	-6,950.29	5,382.04	8,790.11	0.41	-0.33	-0.23
14,419.00	88.46	133.950	5,241.94	-6,992.25	5,424.89	8,849.59	1.60	0.57	-1.50
14,480.00	88.59	134.170	5,243.51	-7,034.65	5,468.71	8,910.03	0.42	0.21	0.36
14,541.00	89.03	134.990	5,244.78	-7,077.46	5,512.15	8,970.54	1.53	0.72	1.34
14,602.00	88.86	135.610	5,245.90	-7,120.81	5,555.05	9,031.15	1.05	-0.28	1.02
14,663.00	89.66	135.660	5,246.69	-7,164.41	5,597.70	9,091.81	1.31	1.31	0.08
14,723.00	90.64	136.350	5,246.54	-7,207.58	5,639.37	9,151.51	2.00	1.63	1.15
14,784.00	90.87	136.060	5,245.73	-7,251.60	5,681.59	9,212.22	0.61	0.38	-0.48
14,845.00	90.47	136.110	5,245.02	-7,295.54	5,723.89	9,272.92	0.66	-0.66	0.08
14,905.00	90.50	134.710	5,244.51	-7,338.27	5,766.01	9,332.56	2.33	0.05	-2.33
14,966.00	88.99	134.670	5,244.78	-7,381.17	5,809.38	9,393.10	2.48	-2.48	-0.07
15,027.00	88.99	133.640	5,245.86	-7,423.65	5,853.14	9,453.56	1.69	0.00	-1.69
15,057.00	88.99	133.410	5,246.39	-7,444.31	5,874.88	9,483.25	0.77	0.00	-0.77
Last SDI Lateral MWD Survey									
15,110.00	88.99	133.410	5,247.32	-7,480.73	5,913.38	9,535.69	0.00	0.00	0.00
Projection to TD									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
397.00	397.00	0.27	-0.33	First SDI Surface MWD Survey
4,597.00	4,479.06	-184.90	-935.52	Last SDI Surface MWD Survey
4,659.00	4,539.80	-190.21	-946.72	First SDI Curve MWD Survey
6,225.00	5,289.22	-1,146.18	-311.31	Last SDI Curve MWD Survey
6,318.00	5,288.87	-1,211.13	-244.75	First SDI Lateral MWD Survey
15,057.00	5,246.39	-7,444.31	5,874.88	Last SDI Lateral MWD Survey
15,110.00	5,247.32	-7,480.73	5,913.38	Projection to TD

Checked By: _____ Approved By: _____ Date: _____