

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2014

SUNDRY NOTICES AND REPORTS ON WELLS
**Do not use this form for proposals to drill or to re-enter an
abandoned well. Use Form 3160-3 (APD) for such proposals.**

SUBMIT IN TRIPLICATE – Other instructions on page 2.		5. Lease Serial No. NMNM 109385
1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator DJR Operating LLC.		7. If Unit of CA/Agreement, Name and/or No. VENADO CANYON UNIT / NMNM 135367A
3a. Address 1 Road 3263 Aztec, New Mexico 87410		8. Well Name and No. VENADO CANYON UNIT #206H
3b. Phone No. (include area code) 505-632-3476		9. API Well No. 30-043-21292
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SHL: 263' FNL and 1130' FEL Section 11, T22N, R6W BHL: 2338' FNL and 330' FEL Section 13, T22N, R6W		10. Field and Pool or Exploratory Area LYBROOK GALLUP
		11. County or Parish, State Sandoval County, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other <u>BHL Change &</u>
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	<u>New Drilling Plan</u>
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

DJR Operating LLC. has an approved APD for the proposed well, Venado Canyon Unit 206H (API 30-043-21292) which is part of the VENADO CANYON UNIT. DJR Operating is submitting this sundry to change the BHL and the Drilling Plan.

Please find attached an updated C-102 package reflecting the BHL change and the new drilling plan.

**ADHERE TO PREVIOUS NMOCD
CONDITIONS OF APPROVAL**

NMOCD

APR 03 2019

DISTRICT III

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) Steven Merrell		Title Regulatory Specialist
Signature <i>Steven Merrell</i>		Date 03/19/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by <i>Dave Mankiewicz</i>	Title AFM	Date 3/29/19
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office FFU	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

NMOCD

BP

AV

22

DISTRICT I
1635 N. French Dr., Hobbs, N.M. 88240
Phone: (505) 393-6181 Fax: (505) 393-0780

DISTRICT II
811 E. First St., Artesia, N.M. 88210
Phone: (505) 748-1888 Fax: (505) 748-9780

DISTRICT III
1000 Rio Bravos Rd., Aztec, N.M. 87410
Phone: (505) 834-6178 Fax: (505) 834-6170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 478-9480 Fax: (505) 478-9482

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

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

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
A	11	22N	6W		263'	NORTH	1130'	EAST	SANDOVAL

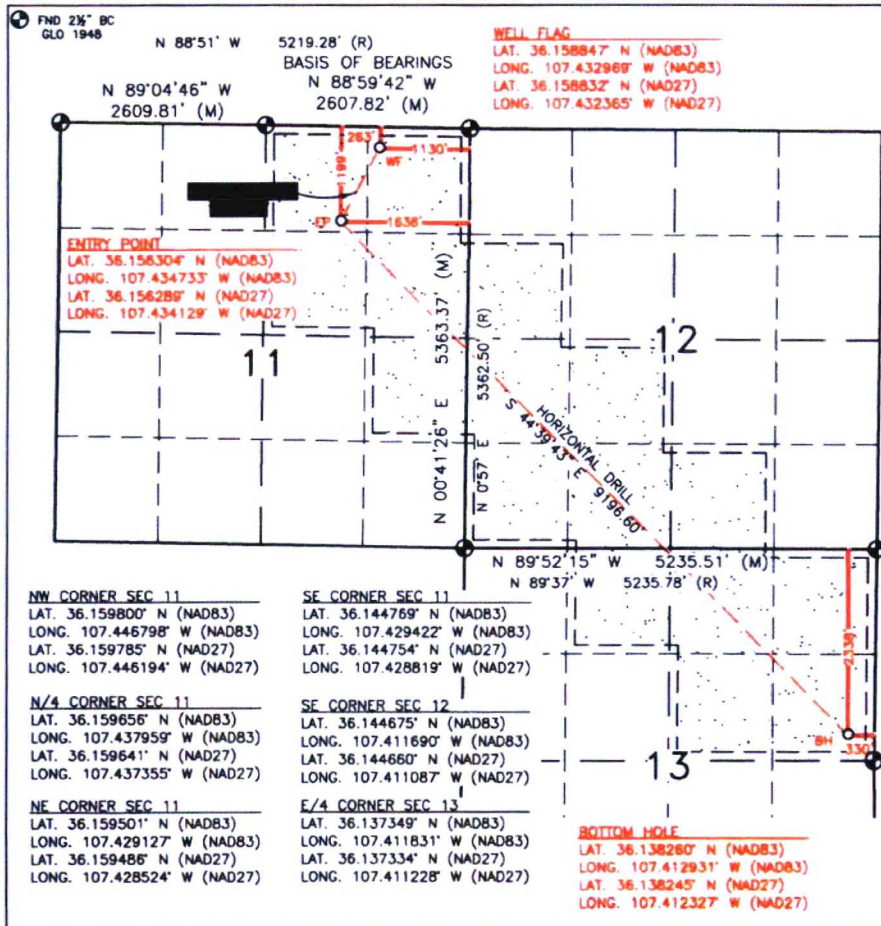
11 Bottom Hole Location If Different From Surface

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		2338'	NORTH	330'	EAST	SANDOVAL

12 Dedicated Acres NE 1/4 & NE 1/2 SEC 11 (200 ACRES); SW 1/4, SW 1/4 NW, & SW 1/4 SEC 12 (240 ACRES); NE 1/4 & NE 1/4 NW SEC 13 (200 ACRES) = 640 ACRES TOTAL - 5280.00 ACRES - 5/2 SEC 1, 5/2 & NE 1/4 SEC 10, ALL SEC 11-14, ALL SEC 15, N 1/2 SEC 22, ALL SEC 23, N 1/2 SEC 24, T22N R6W - UNDIVIDED UNIT		13 Joint or Infill	14 Consolidation Code	15 Order No. R-14067 (4,320 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

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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.

Signature: *Steven Merrell* Date: 3/13/19

Printed Name: Steven Merrell
E-mail Address: Smerrell@djrlc.com

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.

MARCH 8, 2019

Date of Survey
Signature and Seal of Professional Surveyor:



Certificate Number: 11393

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

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

1000 Rio Brazos Rd., Astec, N.M. 87410
Phone: (505) 334-6175 Fax: (505) 334-6170

1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3400 Fax: (505) 476-3452

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

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

DJR OPERATING, LLC
VENADO CANYON UNIT #206H

Form C-102
Revised August 1, 2011

Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL FLAG

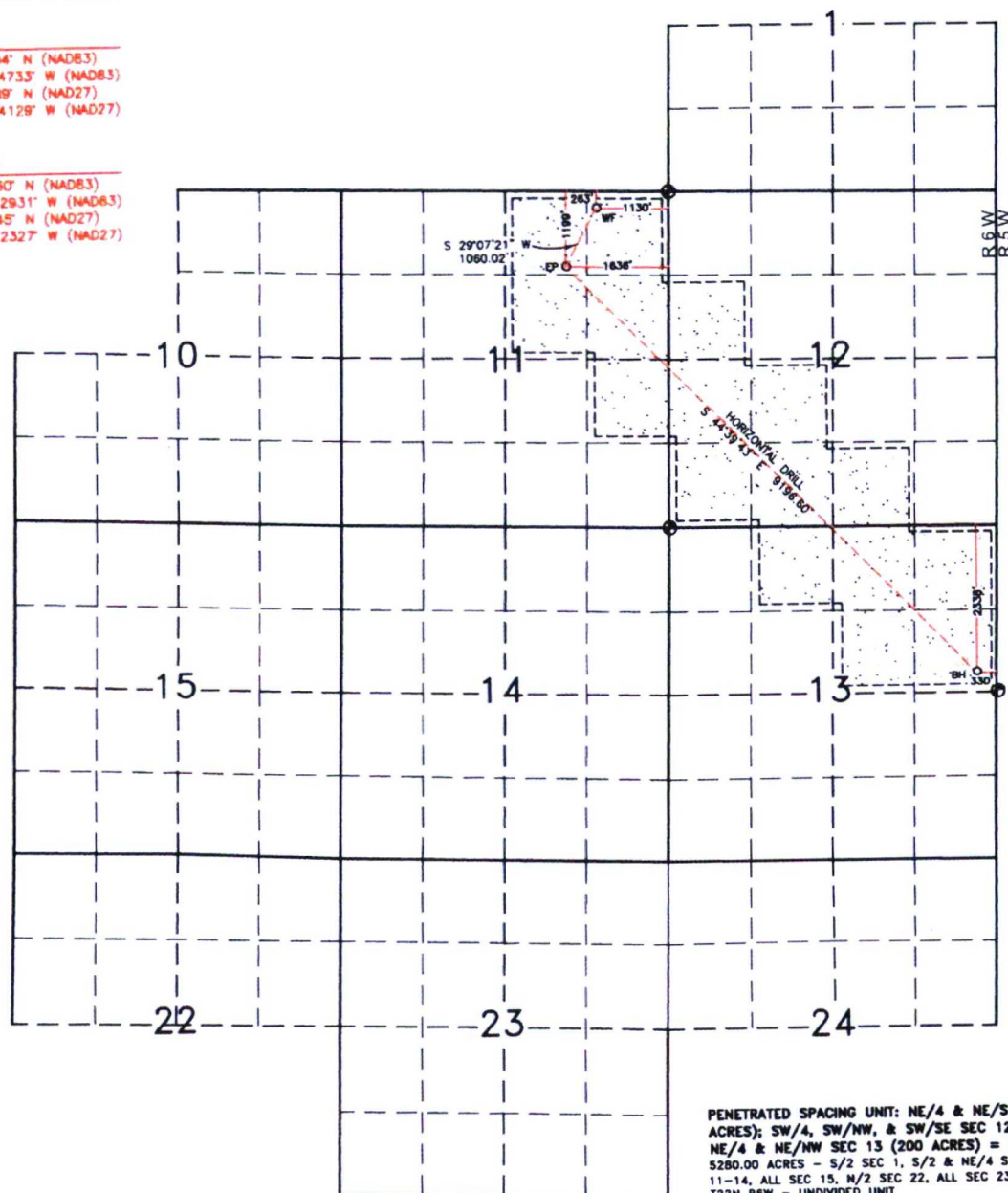
LAT. 36.158847° N (NAD83)
LONG. 107.432968° W (NAD83)
LAT. 36.158832° N (NAD27)
LONG. 107.432365° W (NAD27)

ENTRY POINT

LAT. 36.158304° N (NAD83)
LONG. 107.434733° W (NAD83)
LAT. 36.158289° N (NAD27)
LONG. 107.434129° W (NAD27)

BOTTOM HOLE

LAT. 36.138260° N (NAD83)
LONG. 107.412931° W (NAD83)
LAT. 36.138245° N (NAD27)
LONG. 107.412327° W (NAD27)



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) = 840 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 R5W - UNDIVIDED UNIT

DRILLING PLAN **Vendado Canyon Unit 206H** **Sandoval County, New Mexico**

Surface Location

1130-ft FEL & 263-ft FNL
 Sec 11 T22N R06W
 Graded Elevation 6963' MSL
 RKB Elevation 6777' (14' KB)

SHL Geographical Coordinates (NAD-83)

Latitude 36.1588470° N
 Longitude 107.4329690° W

Kick Off Point for Horizontal Build Curve

4774-ft MD
 4667-ft TVD

Local Coordinates (from SHL)

367-ft South
 857-ft West

Heel Location (Pay zone entry)

1636-ft FEL & 1199-ft FNL
 Sec 11 T22N R06W

Heel Geographical Coordinates (NAD-83)

Latitude 36.15630365° N
 Longitude 107.43473277° W

Bottom Hole Location (TD)

2338-ft FNL & 330-ft FEL
 Sec 13 T22N R06W

BHL Geographical Coordinates (NAD-83)

Latitude 36.13826° N
 Longitude 107.4129310° W

First Take Point (FTP)

5888-ft MD
 Gallup C Sand

FTP Geographical Coordinates (NAD-83)

Latitude 36.1561859° N
 Longitude 107.4345905° W

Last Take Point (LTP)

14965-ft MD
 Gallup C Sand

LTP Geographical Coordinates (NAD-83)

Latitude 36.1383782° N
 Longitude 107.4130729° W

Well objectives

This well is planned as a 9200-ft lateral in the Gallup C sand.

Bottom Hole temperature and pressure

The temperature in the Gallup C horizontal objective is 142°F. Bottom hole pressure in the Gallup C is forecast to be 1985 psi.

Formation Tops (Sd = Sand; Sh = Shale; Siltstone = Slt, Coal = C; W = water; O = oil; G = gas; NP = no penetration)

Name	MD (ft)	TVD (ft)	Lithology	Pore fluid	Expected Pore Pressure (ppg)	Planned Mud Weight (ppg)
Ojo Alamo	927	925	Sd	W	8.3	8.4 - 8.8
Kirtland	1447	1432	Sh	-	8.3	8.4 - 8.8
Fruitland	1662	1641	C	G	8.3	9.0 - 9.5
Picture Cliffs	1857	1830	Sd	W	8.3	9.0 - 9.5
Lewis	1953	1924	Sh	-		9.0 - 9.5
Chacra	2717	2667	Sd	-	8.3	9.0 - 9.5
Menefee	3415	3345	Sd, C	G	8.3	9.0 - 9.5
Point Lookout	4178	4087	Sd	-	8.3	9.0 - 9.5
Mancos	4322	4227	Sh	-		9.0 - 9.5
Mancos Silt	4730	4624	Slt	O/G	6.6	9.0 - 9.5
Gallup A	5247	5099	Slt	O/G	6.6	9.0 - 9.5
Gallup B	5306	5143	Sd	O/G	6.6	8.8 - 9.0
Gallup C	5442	5230	Sd	O/G	6.6	8.8 - 9.0
Target	5829	5341	Sd	O/G	6.6	8.8 - 9.0

Casing Program

Casing OD	Hole Size	Weight (#/ft)	Grade	Coupling	MD Top	MD Bottom	TVD Top	TVD Bottom	Top of Cement
9-5/8"	12-1/4"	36	K-55	STC	surf	350	surf	350	surface
7"	8-3/4"	23	K-55	LTC	surf	5818	surf	5341	surface
4-1/2"	6-1/8"	11.6	P-110	LTC	4774	15025	5307	5341	4774

Note: all casing will be new

Casing Design Load Cases

		Casing String		
Description		9-5/8" Surface	7" Intermediate	4-1/2" Production Liner
Collapse	Full internal evacuation ¹	✓	✓	✓
	Cementing	✓	✓	✓
Burst	Pressure test	✓ ²	✓ ²	✓
	Gas kick		✓ ³	
	Fracture at shoe, 1/3 BHP at surface		✓ ⁴	
	Injection down casing			✓ ⁵
Axial	Dynamic load on casing coupling ⁶	✓	✓	✓
Axial	Overpull ⁷	✓	✓	✓

Note

- 1 Fluid level at shoe, air column to surface, pore pressure outside
- 2 Tested to 80% of minimum internal yield with freshwater inside, pore pressure outside
- 3 50 bbl kick at TD, 0.50 ppg intensity, 4" drill pipe, 9.0 ppg mud, fracture gradient at shoe
- 4 2060 psi BHP, 687 psi surface pressure, 12.5 ppg EMW shoe integrity
- 5 Surface stimulation pressure of 8000 psi on 8.3 ppg fluid column. Stimulation will be down frac string, so load does not apply to 7" intermediate casing.
- 6 Shock load from abrupt pipe deceleration, evaluated against coupling rating
- 7 Overpull values as follows: Surface casing 20,000 lbs, Intermediate & Production 100,000 lbs

Casing Design Factors

		Design Factors			
Casing string	Casing OD	Burst	Collapse	Axial	Triaxial
Surface	9-5/8"	1.25	13.38	8.16	1.56
Intermediate	7"	1.25	1.50	1.68	1.34
Production liner	4-1/2"	1.37	3.68	1.88	1.69

Cement Design

Additives: A=Accelerator; B=Bond Enhancer; De=Defoamer; Di=Dispersant; Ex=Extender; Fl=Fluid Loss L=Lost Circulation; R=Retarder; SA=Suspending Agent; THX=Thixotropic Additive; V=Viscosifier

9-5/8" Surface Casing

	Lead
Halliburton Name	HALCEM
Type	Class G
Additives	A
Planned top	Surface
Density (ppg)	15.80
Yield (cf/sx)	1.17
Mix water (gal/sx)	5.15
Volume (sx)	205
Volume (bbls)	42

<u>7" Intermediate Casing</u>	<u>Lead</u>	<u>Tail</u>
Halliburton Name	HALCEM	VARICEM
Type	Poz/G	Poz/G
Additives	Ex, L, SA	Ex, FI, SA, L, THX
Planned top	Surface	3822-ft
Density (ppg)	12.30	13.50
Yield (cf/sx)	1.95	1.30
Mix water (gal/sx)	10.14	5.64
Volume (sx)	484	398
Volume (bbls)	168	93

<u>4-1/2" Production Liner</u>	<u>Lead</u>
Halliburton Name	EXTENDACEM
Type	Poz/G
Additives	B, De, Di, FI, Re, V
Planned top	4774-ft
Density (ppg)	13.3
Yield (cf/sx)	1.36
Mix water (gal/sx)	5.94
Volume (sx)	958
Volume (bbls)	232

Wellhead & Pressure Control

The well head will be an 11" 5M multi-bowl system. A 2M BOPE conforming to Onshore Order #2 will be installed on the surface casing. The BOP and accumulator will meet API 16D and 16E respectively.

A PVT mud monitoring system and a trip tank will be rigged up and operational for all hole intervals. An electronic geolograph will be employed to monitor and record drilling data (ROP, WOB, SPM, Pressure, RPM and torque).

Mud Program

Surface hole will be drilled with a fresh water, native mud system. In intermediate hole, a low weight 7% KCl LSND drilling fluid will be used, with KCl providing chemical stability for the young shales and clays present in the interval. In production hole a LSND system with polymer and lubricant additives is programmed. Sufficient drill water and mud additives will be on hand to maintain adequate pit volumes and maintain well control.

Hole Section	Fluid type	Interval (MD)	Density (ppg)	Funnel Viscosity	Yield Point	Fluid Loss (cc/30 min)
Surface	Fresh water spud mud	0 – 350	8.4 – 8.8	32 – 44	2 – 12	NC
Intermediate	7% KCl Low solids, non-dispersed	350 – 5818	9.0 – 9.5	38 – 45	8 – 14	<20
Production	Low solids, non-dispersed	5818 – 15025	8.8 – 9.2	34 – 38	6 – 8	6 – 8

Cores, tests and logs

Wellbore surveying: Drift (inclination only) surveys will be obtained in surface hole. MWD directional surveys will be taken in intermediate and production hole.

Logging while drilling: None in surface hole. MWD GR in intermediate and production hole.

Mud logging: a two-person mud logging unit with C1 – C4 gas analysis will be operational in intermediate and production hole.

Electric logging: No open hole electric logs are programmed. A cased hole GR/CCL will be run during completions for perforating depth control.

Cuttings and drilling fluids management

A closed loop, steel tank-based circulating system will be used. In addition to the rig solids control equipment, a dewatering centrifuge and chemical flocculation system will be operational to strip solids from the whole mud. All solids will be collected in 3-sided bins and will then be put into transports with a bucket loader. Drying agents will be used if

necessary. The solids will be taken to a licensed commercial disposal facility. Whole mud will be dewatered back to drill water and used as make up for subsequent wells or hauled off for disposal. A diagram of the closed loop system is included.

Completion

It is envisioned that this well will be completed with a multi-stage sand frac, using the plug and perf technique. After drilling out the plugs, the current plan is to install a 2-7/8" plunger-assisted gas lift tubing string. The stimulation and completion plan will be sundried at a later date.

Approved
Dave Mankiewicz 
3/29/2019



Pad name : A11 2206 Pad
Well name : Venado Canyon Unit # 206H

SHL Latitude : 36.15884700
SHL Longitude : -107.43296900

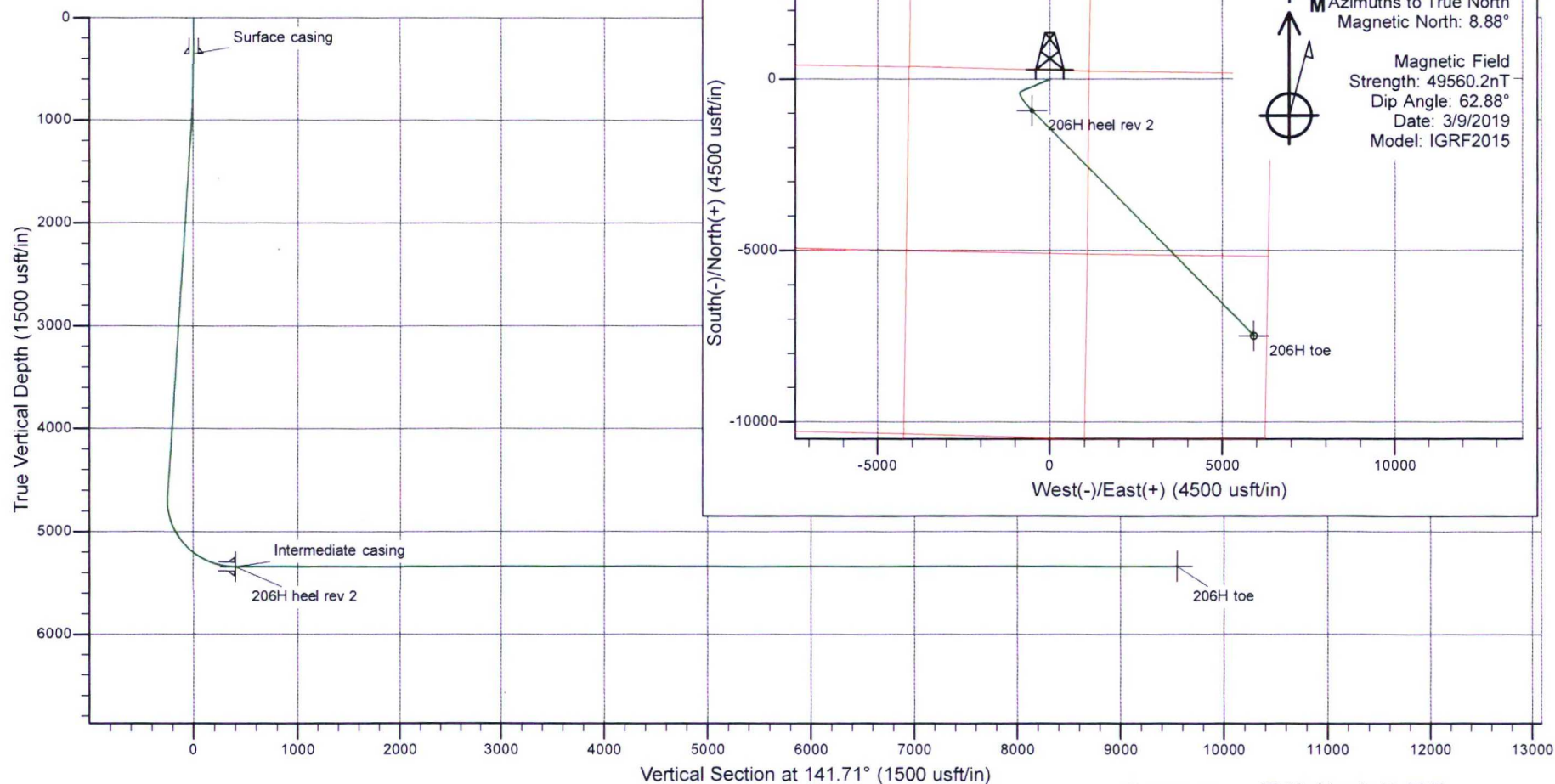
US State Plane 1983
North American Datum 1983
New Mexico Western Zone

TRAJECTORY DETAILS Pad elevation : 6963.0 RKB @ 6977.0usft (AD 920)

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
450.0	0.00	0.00	450.0	0.0	0.0	0.00	0.00	0.0	
1125.9	13.52	246.81	1119.6	-31.3	-72.9	2.00	246.81	-20.7	
4774.5	13.52	246.81	4667.2	-367.1	-856.9	0.00	0.00	-242.9	
5828.5	90.00	135.57	5341.0	-925.8	-520.7	9.00	-110.70	404.0	206H heel rev 2
15024.9	90.00	135.57	5341.0	-7493.5	5916.7	0.00	0.00	9547.8	206H toe

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
206H heel rev 2	5341.0	-925.8	-520.7	1876433	2840760	36.15630365	-107.43473277
206H toe	5341.0	-7493.5	5916.7	1869892	2847224	36.13826000	-107.41293100



Prepared : 17:56, March 12 2019

DJR Operating

Venado Canyon Unit

A11 2206 Pad

206H

30-043-21292

Original drilling

Plan: APD

Standard Planning Report

12 March, 2019

Planning Report

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

Local Co-ordinate Reference: Well # 206H
TVD Reference: RKB @ 6977.0usft (AD 920)
MD Reference: RKB @ 6977.0usft (AD 920)
North Reference: True
Survey Calculation Method: Minimum Curvature

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:	1,877,361 usft	Latitude: 36.15884700
From:	Lat/Long	Easting:	2,841,257 usft	Longitude: -107.43303700
Position Uncertainty:	0.0 usft	Slot Radius:	16.000 in	Grid Convergence: 0.24 °

Well	# 206H			
Well Position	+N/-S	0.0 usft	Northing:	1,877,361 usft
	+E/-W	20.1 usft	Easting:	2,841,277 usft
Position Uncertainty	0.0 usft		Wellhead Elevation:	Ground Level: 6,963.0 usft

Wellbore	Original drilling				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	3/9/2019	8.88	62.88	49,560.16650086

Design	APD			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	141.71

Plan Survey Tool Program	Date	3/12/2019		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	15,024.9	APD (Original drilling)	MWD+IGRF OWSG MWD + IGRF or WMM

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
450.0	0.00	0.00	450.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,125.9	13.52	246.81	1,119.6	-31.3	-72.9	2.00	2.00	0.00	246.81	
4,774.5	13.52	246.81	4,667.2	-367.1	-856.9	0.00	0.00	0.00	0.00	
5,828.5	90.00	135.57	5,341.0	-925.8	-520.7	9.00	7.26	-10.55	-110.70	206H heel rev 2
15,024.9	90.00	135.57	5,341.0	-7,493.5	5,916.7	0.00	0.00	0.00	0.00	206H toe

Planning Report

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

Local Co-ordinate Reference: Well # 206H
TVD Reference: RKB @ 6977.0usft (AD 920)
MD Reference: RKB @ 6977.0usft (AD 920)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
350.0	0.00	0.00	350.0	0.0	0.0	0.0	0.00	0.00	0.00
Surface casing									
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
450.0	0.00	0.00	450.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	1.00	246.81	500.0	-0.2	-0.4	-0.1	2.00	2.00	0.00
600.0	3.00	246.81	599.9	-1.5	-3.6	-1.0	2.00	2.00	0.00
700.0	5.00	246.81	699.7	-4.3	-10.0	-2.8	2.00	2.00	0.00
800.0	7.00	246.81	799.1	-8.4	-19.6	-5.6	2.00	2.00	0.00
900.0	9.00	246.81	898.2	-13.9	-32.4	-9.2	2.00	2.00	0.00
1,000.0	11.00	246.81	996.6	-20.7	-48.4	-13.7	2.00	2.00	0.00
1,100.0	13.00	246.81	1,094.4	-28.9	-67.5	-19.1	2.00	2.00	0.00
1,125.9	13.52	246.81	1,119.6	-31.3	-72.9	-20.7	2.00	2.00	0.00
1,200.0	13.52	246.81	1,191.7	-38.1	-88.9	-25.2	0.00	0.00	0.00
1,300.0	13.52	246.81	1,288.9	-47.3	-110.4	-31.3	0.00	0.00	0.00
1,345.3	13.52	246.81	1,333.0	-51.5	-120.1	-34.0	0.00	0.00	0.00
Ojo Alamo									
1,400.0	13.52	246.81	1,386.2	-56.5	-131.8	-37.4	0.00	0.00	0.00
1,447.2	13.52	246.81	1,432.0	-60.8	-142.0	-40.2	0.00	0.00	0.00
Kirtland									
1,500.0	13.52	246.81	1,483.4	-65.7	-153.3	-43.5	0.00	0.00	0.00
1,600.0	13.52	246.81	1,580.6	-74.9	-174.8	-49.5	0.00	0.00	0.00
1,662.1	13.52	246.81	1,641.0	-80.6	-188.2	-53.3	0.00	0.00	0.00
Fruitland									
1,700.0	13.52	246.81	1,677.8	-84.1	-196.3	-55.6	0.00	0.00	0.00
1,800.0	13.52	246.81	1,775.1	-93.3	-217.8	-61.7	0.00	0.00	0.00
1,856.5	13.52	246.81	1,830.0	-98.5	-229.9	-65.2	0.00	0.00	0.00
Pictured Cliffs									
1,900.0	13.52	246.81	1,872.3	-102.5	-239.3	-67.8	0.00	0.00	0.00
1,953.2	13.52	246.81	1,924.0	-107.4	-250.7	-71.1	0.00	0.00	0.00
Lewis									
2,000.0	13.52	246.81	1,969.5	-111.7	-260.8	-73.9	0.00	0.00	0.00
2,100.0	13.52	246.81	2,066.8	-120.9	-282.2	-80.0	0.00	0.00	0.00
2,200.0	13.52	246.81	2,164.0	-130.1	-303.7	-86.1	0.00	0.00	0.00
2,300.0	13.52	246.81	2,261.2	-139.3	-325.2	-92.2	0.00	0.00	0.00
2,400.0	13.52	246.81	2,358.5	-148.5	-346.7	-98.3	0.00	0.00	0.00
2,500.0	13.52	246.81	2,455.7	-157.8	-368.2	-104.4	0.00	0.00	0.00
2,600.0	13.52	246.81	2,552.9	-167.0	-389.7	-110.4	0.00	0.00	0.00
2,700.0	13.52	246.81	2,650.1	-176.2	-411.2	-116.5	0.00	0.00	0.00
2,717.3	13.52	246.81	2,667.0	-177.8	-414.9	-117.6	0.00	0.00	0.00
Chacra									
2,800.0	13.52	246.81	2,747.4	-185.4	-432.6	-122.6	0.00	0.00	0.00
2,900.0	13.52	246.81	2,844.6	-194.6	-454.1	-128.7	0.00	0.00	0.00
3,000.0	13.52	246.81	2,941.8	-203.8	-475.6	-134.8	0.00	0.00	0.00
3,100.0	13.52	246.81	3,039.1	-213.0	-497.1	-140.9	0.00	0.00	0.00
3,200.0	13.52	246.81	3,136.3	-222.2	-518.6	-147.0	0.00	0.00	0.00
3,300.0	13.52	246.81	3,233.5	-231.4	-540.1	-153.1	0.00	0.00	0.00
3,367.3	13.52	246.81	3,299.0	-237.6	-554.5	-157.2	0.00	0.00	0.00
Cliff House									
3,400.0	13.52	246.81	3,330.7	-240.6	-561.6	-159.2	0.00	0.00	0.00

Planning Report

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

Local Co-ordinate Reference: Well # 206H
TVD Reference: RKB @ 6977.0usft (AD 920)
MD Reference: RKB @ 6977.0usft (AD 920)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
3,414.7	13.52	246.81	3,345.0	-242.0	-564.7	-160.1	0.00	0.00	0.00
Menefee									
3,500.0	13.52	246.81	3,428.0	-249.8	-583.0	-165.2	0.00	0.00	0.00
3,600.0	13.52	246.81	3,525.2	-259.0	-604.5	-171.3	0.00	0.00	0.00
3,700.0	13.52	246.81	3,622.4	-268.2	-626.0	-177.4	0.00	0.00	0.00
3,800.0	13.52	246.81	3,719.7	-277.4	-647.5	-183.5	0.00	0.00	0.00
3,900.0	13.52	246.81	3,816.9	-286.6	-669.0	-189.6	0.00	0.00	0.00
4,000.0	13.52	246.81	3,914.1	-295.8	-690.5	-195.7	0.00	0.00	0.00
4,100.0	13.52	246.81	4,011.4	-305.0	-712.0	-201.8	0.00	0.00	0.00
4,177.8	13.52	246.81	4,087.0	-312.2	-728.7	-206.5	0.00	0.00	0.00
Point Lookout									
4,200.0	13.52	246.81	4,108.6	-314.2	-733.4	-207.9	0.00	0.00	0.00
4,300.0	13.52	246.81	4,205.8	-323.5	-754.9	-214.0	0.00	0.00	0.00
4,321.8	13.52	246.81	4,227.0	-325.5	-759.6	-215.3	0.00	0.00	0.00
Mancos									
4,400.0	13.52	246.81	4,303.0	-332.7	-776.4	-220.1	0.00	0.00	0.00
4,500.0	13.52	246.81	4,400.3	-341.9	-797.9	-226.1	0.00	0.00	0.00
4,600.0	13.52	246.81	4,497.5	-351.1	-819.4	-232.2	0.00	0.00	0.00
4,700.0	13.52	246.81	4,594.7	-360.3	-840.9	-238.3	0.00	0.00	0.00
4,730.1	13.52	246.81	4,624.0	-363.0	-847.3	-240.2	0.00	0.00	0.00
Mancos Silt									
4,774.5	13.52	246.81	4,667.2	-367.1	-856.9	-242.9	0.00	0.00	0.00
KOP									
4,800.0	12.88	237.15	4,692.0	-369.8	-862.0	-243.9	8.99	-2.49	-37.89
4,850.0	12.78	216.78	4,740.8	-377.3	-870.0	-243.0	9.00	-0.22	-40.72
4,900.0	14.15	198.28	4,789.4	-387.5	-875.2	-238.2	9.00	2.75	-37.00
4,950.0	16.65	184.11	4,837.6	-400.5	-877.7	-229.6	9.00	4.99	-28.35
5,000.0	19.85	173.95	4,885.1	-416.1	-877.3	-217.1	9.00	6.40	-20.32
5,050.0	23.46	166.66	4,931.6	-434.2	-874.1	-200.9	9.00	7.23	-14.58
5,100.0	27.33	161.27	4,976.8	-454.8	-868.1	-181.0	9.00	7.73	-10.77
5,150.0	31.35	157.15	5,020.4	-477.7	-859.4	-157.7	9.00	8.05	-8.24
5,200.0	35.48	153.90	5,062.1	-502.7	-847.9	-130.9	9.00	8.26	-6.51
5,246.5	39.39	151.41	5,099.0	-527.8	-834.9	-103.2	9.00	8.40	-5.34
Gallup A									
5,250.0	39.68	151.24	5,101.7	-529.7	-833.9	-101.0	9.00	8.45	-4.86
5,300.0	43.93	149.02	5,139.0	-558.6	-817.2	-68.0	9.00	8.50	-4.44
5,305.6	44.41	148.80	5,143.0	-562.0	-815.2	-64.1	9.00	8.55	-4.05
Gallup B									
5,350.0	48.22	147.12	5,173.6	-589.2	-798.2	-32.2	9.00	8.58	-3.77
5,400.0	52.53	145.46	5,205.5	-621.2	-776.8	6.1	9.00	8.63	-3.32
5,442.0	56.17	144.21	5,230.0	-649.1	-757.1	40.2	9.00	8.67	-2.98
Gallup C									
5,450.0	56.87	143.98	5,234.4	-654.5	-753.2	46.9	9.00	8.69	-2.83
5,500.0	61.22	142.64	5,260.1	-688.8	-727.6	89.7	9.00	8.70	-2.68
5,550.0	65.58	141.41	5,282.5	-724.1	-700.1	134.4	9.00	8.73	-2.46
5,600.0	69.96	140.26	5,301.4	-759.9	-670.9	180.7	9.00	8.75	-2.30
5,618.5	71.58	139.85	5,307.5	-773.3	-659.7	198.2	9.00	8.76	-2.21
Top of liner									
5,650.0	74.34	139.18	5,316.7	-796.2	-640.1	228.2	9.00	8.76	-2.15
5,700.0	78.72	138.13	5,328.4	-832.7	-608.0	276.8	9.00	8.77	-2.08
5,750.0	83.11	137.12	5,336.3	-869.2	-574.7	326.0	9.00	8.78	-2.02
5,800.0	87.50	136.13	5,340.4	-905.4	-540.5	375.6	9.00	8.78	-1.98
5,818.5	89.12	135.77	5,340.9	-918.7	-527.7	394.0	9.00	8.78	-1.97

Planning Report

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

Local Co-ordinate Reference: Well # 206H
TVD Reference: RKB @ 6977.0usft (AD 920)
MD Reference: RKB @ 6977.0usft (AD 920)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
Intermediate casing									
5,828.5	90.00	135.57	5,341.0	-925.8	-520.7	404.0	9.00	8.78	-1.97
Target									
5,888.5	90.00	135.57	5,341.0	-968.7	-478.7	463.6	0.00	0.00	0.00
First take point									
5,900.0	90.00	135.57	5,341.0	-976.9	-470.6	475.1	0.00	0.00	0.00
6,000.0	90.00	135.57	5,341.0	-1,048.3	-400.6	574.5	0.00	0.00	0.00
6,100.0	90.00	135.57	5,341.0	-1,119.7	-330.6	673.9	0.00	0.00	0.00
6,200.0	90.00	135.57	5,341.0	-1,191.1	-260.6	773.4	0.00	0.00	0.00
6,300.0	90.00	135.57	5,341.0	-1,262.6	-190.6	872.8	0.00	0.00	0.00
6,400.0	90.00	135.57	5,341.0	-1,334.0	-120.6	972.2	0.00	0.00	0.00
6,500.0	90.00	135.57	5,341.0	-1,405.4	-50.6	1,071.6	0.00	0.00	0.00
6,600.0	90.00	135.57	5,341.0	-1,476.8	19.4	1,171.1	0.00	0.00	0.00
6,700.0	90.00	135.57	5,341.0	-1,548.2	89.4	1,270.5	0.00	0.00	0.00
6,800.0	90.00	135.57	5,341.0	-1,619.6	159.4	1,369.9	0.00	0.00	0.00
6,900.0	90.00	135.57	5,341.0	-1,691.0	229.4	1,469.4	0.00	0.00	0.00
7,000.0	90.00	135.57	5,341.0	-1,762.5	299.4	1,568.8	0.00	0.00	0.00
7,100.0	90.00	135.57	5,341.0	-1,833.9	369.4	1,668.2	0.00	0.00	0.00
7,200.0	90.00	135.57	5,341.0	-1,905.3	439.4	1,767.6	0.00	0.00	0.00
7,300.0	90.00	135.57	5,341.0	-1,976.7	509.4	1,867.1	0.00	0.00	0.00
7,400.0	90.00	135.57	5,341.0	-2,048.1	579.4	1,966.5	0.00	0.00	0.00
7,500.0	90.00	135.57	5,341.0	-2,119.5	649.4	2,065.9	0.00	0.00	0.00
7,600.0	90.00	135.57	5,341.0	-2,190.9	719.4	2,165.3	0.00	0.00	0.00
7,700.0	90.00	135.57	5,341.0	-2,262.4	789.4	2,264.8	0.00	0.00	0.00
7,800.0	90.00	135.57	5,341.0	-2,333.8	859.4	2,364.2	0.00	0.00	0.00
7,900.0	90.00	135.57	5,341.0	-2,405.2	929.4	2,463.6	0.00	0.00	0.00
8,000.0	90.00	135.57	5,341.0	-2,476.6	999.4	2,563.1	0.00	0.00	0.00
8,100.0	90.00	135.57	5,341.0	-2,548.0	1,069.4	2,662.5	0.00	0.00	0.00
8,200.0	90.00	135.57	5,341.0	-2,619.4	1,139.4	2,761.9	0.00	0.00	0.00
8,300.0	90.00	135.57	5,341.0	-2,690.8	1,209.4	2,861.3	0.00	0.00	0.00
8,400.0	90.00	135.57	5,341.0	-2,762.3	1,279.4	2,960.8	0.00	0.00	0.00
8,500.0	90.00	135.57	5,341.0	-2,833.7	1,349.4	3,060.2	0.00	0.00	0.00
8,600.0	90.00	135.57	5,341.0	-2,905.1	1,419.4	3,159.6	0.00	0.00	0.00
8,700.0	90.00	135.57	5,341.0	-2,976.5	1,489.4	3,259.1	0.00	0.00	0.00
8,800.0	90.00	135.57	5,341.0	-3,047.9	1,559.4	3,358.5	0.00	0.00	0.00
8,900.0	90.00	135.57	5,341.0	-3,119.3	1,629.4	3,457.9	0.00	0.00	0.00
9,000.0	90.00	135.57	5,341.0	-3,190.7	1,699.4	3,557.3	0.00	0.00	0.00
9,100.0	90.00	135.57	5,341.0	-3,262.2	1,769.4	3,656.8	0.00	0.00	0.00
9,200.0	90.00	135.57	5,341.0	-3,333.6	1,839.4	3,756.2	0.00	0.00	0.00
9,300.0	90.00	135.57	5,341.0	-3,405.0	1,909.4	3,855.6	0.00	0.00	0.00
9,400.0	90.00	135.57	5,341.0	-3,476.4	1,979.4	3,955.0	0.00	0.00	0.00
9,500.0	90.00	135.57	5,341.0	-3,547.8	2,049.4	4,054.5	0.00	0.00	0.00
9,600.0	90.00	135.57	5,341.0	-3,619.2	2,119.4	4,153.9	0.00	0.00	0.00
9,700.0	90.00	135.57	5,341.0	-3,690.6	2,189.4	4,253.3	0.00	0.00	0.00
9,800.0	90.00	135.57	5,341.0	-3,762.1	2,259.4	4,352.8	0.00	0.00	0.00
9,900.0	90.00	135.57	5,341.0	-3,833.5	2,329.4	4,452.2	0.00	0.00	0.00
10,000.0	90.00	135.57	5,341.0	-3,904.9	2,399.4	4,551.6	0.00	0.00	0.00
10,100.0	90.00	135.57	5,341.0	-3,976.3	2,469.4	4,651.0	0.00	0.00	0.00
10,200.0	90.00	135.57	5,341.0	-4,047.7	2,539.4	4,750.5	0.00	0.00	0.00
10,300.0	90.00	135.57	5,341.0	-4,119.1	2,609.4	4,849.9	0.00	0.00	0.00
10,400.0	90.00	135.57	5,341.0	-4,190.5	2,679.4	4,949.3	0.00	0.00	0.00
10,500.0	90.00	135.57	5,341.0	-4,262.0	2,749.4	5,048.7	0.00	0.00	0.00
10,600.0	90.00	135.57	5,341.0	-4,333.4	2,819.4	5,148.2	0.00	0.00	0.00

Planning Report

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Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,700.0	90.00	135.57	5,341.0	-4,404.8	2,889.4	5,247.6	0.00	0.00	0.00
10,800.0	90.00	135.57	5,341.0	-4,476.2	2,959.4	5,347.0	0.00	0.00	0.00
10,900.0	90.00	135.57	5,341.0	-4,547.6	3,029.4	5,446.5	0.00	0.00	0.00
11,000.0	90.00	135.57	5,341.0	-4,619.0	3,099.4	5,545.9	0.00	0.00	0.00
11,100.0	90.00	135.57	5,341.0	-4,690.4	3,169.4	5,645.3	0.00	0.00	0.00
11,200.0	90.00	135.57	5,341.0	-4,761.9	3,239.4	5,744.7	0.00	0.00	0.00
11,300.0	90.00	135.57	5,341.0	-4,833.3	3,309.4	5,844.2	0.00	0.00	0.00
11,400.0	90.00	135.57	5,341.0	-4,904.7	3,379.4	5,943.6	0.00	0.00	0.00
11,500.0	90.00	135.57	5,341.0	-4,976.1	3,449.4	6,043.0	0.00	0.00	0.00
11,600.0	90.00	135.57	5,341.0	-5,047.5	3,519.4	6,142.5	0.00	0.00	0.00
11,700.0	90.00	135.57	5,341.0	-5,118.9	3,589.4	6,241.9	0.00	0.00	0.00
11,800.0	90.00	135.57	5,341.0	-5,190.3	3,659.4	6,341.3	0.00	0.00	0.00
11,900.0	90.00	135.57	5,341.0	-5,261.8	3,729.4	6,440.7	0.00	0.00	0.00
12,000.0	90.00	135.57	5,341.0	-5,333.2	3,799.4	6,540.2	0.00	0.00	0.00
12,100.0	90.00	135.57	5,341.0	-5,404.6	3,869.4	6,639.6	0.00	0.00	0.00
12,200.0	90.00	135.57	5,341.0	-5,476.0	3,939.4	6,739.0	0.00	0.00	0.00
12,300.0	90.00	135.57	5,341.0	-5,547.4	4,009.4	6,838.4	0.00	0.00	0.00
12,400.0	90.00	135.57	5,341.0	-5,618.8	4,079.4	6,937.9	0.00	0.00	0.00
12,500.0	90.00	135.57	5,341.0	-5,690.2	4,149.4	7,037.3	0.00	0.00	0.00
12,600.0	90.00	135.57	5,341.0	-5,761.7	4,219.4	7,136.7	0.00	0.00	0.00
12,700.0	90.00	135.57	5,341.0	-5,833.1	4,289.4	7,236.2	0.00	0.00	0.00
12,800.0	90.00	135.57	5,341.0	-5,904.5	4,359.4	7,335.6	0.00	0.00	0.00
12,900.0	90.00	135.57	5,341.0	-5,975.9	4,429.4	7,435.0	0.00	0.00	0.00
13,000.0	90.00	135.57	5,341.0	-6,047.3	4,499.4	7,534.4	0.00	0.00	0.00
13,100.0	90.00	135.57	5,341.0	-6,118.7	4,569.4	7,633.9	0.00	0.00	0.00
13,200.0	90.00	135.57	5,341.0	-6,190.1	4,639.4	7,733.3	0.00	0.00	0.00
13,300.0	90.00	135.57	5,341.0	-6,261.6	4,709.4	7,832.7	0.00	0.00	0.00
13,400.0	90.00	135.57	5,341.0	-6,333.0	4,779.4	7,932.2	0.00	0.00	0.00
13,500.0	90.00	135.57	5,341.0	-6,404.4	4,849.4	8,031.6	0.00	0.00	0.00
13,600.0	90.00	135.57	5,341.0	-6,475.8	4,919.4	8,131.0	0.00	0.00	0.00
13,700.0	90.00	135.57	5,341.0	-6,547.2	4,989.4	8,230.4	0.00	0.00	0.00
13,800.0	90.00	135.57	5,341.0	-6,618.6	5,059.4	8,329.9	0.00	0.00	0.00
13,900.0	90.00	135.57	5,341.0	-6,690.0	5,129.4	8,429.3	0.00	0.00	0.00
14,000.0	90.00	135.57	5,341.0	-6,761.5	5,199.4	8,528.7	0.00	0.00	0.00
14,100.0	90.00	135.57	5,341.0	-6,832.9	5,269.4	8,628.1	0.00	0.00	0.00
14,200.0	90.00	135.57	5,341.0	-6,904.3	5,339.4	8,727.6	0.00	0.00	0.00
14,300.0	90.00	135.57	5,341.0	-6,975.7	5,409.4	8,827.0	0.00	0.00	0.00
14,400.0	90.00	135.57	5,341.0	-7,047.1	5,479.4	8,926.4	0.00	0.00	0.00
14,500.0	90.00	135.57	5,341.0	-7,118.5	5,549.4	9,025.9	0.00	0.00	0.00
14,600.0	90.00	135.57	5,341.0	-7,189.9	5,619.4	9,125.3	0.00	0.00	0.00
14,700.0	90.00	135.57	5,341.0	-7,261.4	5,689.4	9,224.7	0.00	0.00	0.00
14,800.0	90.00	135.57	5,341.0	-7,332.8	5,759.4	9,324.1	0.00	0.00	0.00
14,900.0	90.00	135.57	5,341.0	-7,404.2	5,829.4	9,423.6	0.00	0.00	0.00
14,964.9	90.00	135.57	5,341.0	-7,450.5	5,874.8	9,488.1	0.00	0.00	0.00
Last take point									
15,000.0	90.00	135.57	5,341.0	-7,475.6	5,899.4	9,523.0	0.00	0.00	0.00
15,024.9	90.00	135.57	5,341.0	-7,493.5	5,916.7	9,547.8	0.00	0.00	0.00

Planning Report

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

Local Co-ordinate Reference: Well # 206H
TVD Reference: RKB @ 6977.0usft (AD 920)
MD Reference: RKB @ 6977.0usft (AD 920)
North Reference: True
Survey Calculation Method: Minimum Curvature

Design Targets

Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
206H toe	0.00	0.00	5,341.0	-7,493.5	5,916.7	1,869,892	2,847,224	36.13826000	-107.41293100
- plan hits target center									
- Circle (radius 100.0)									
206H heel rev 2	0.00	0.00	5,341.0	-925.8	-520.7	1,876,433	2,840,760	36.15630365	-107.43473277
- plan hits target center									
- Circle (radius 50.0)									

Casing Points

Measured Depth	Vertical Depth	Name	Casing Diameter	Hole Diameter
(usft)	(usft)		(in)	(in)
350.0	350.0	Surface casing	9.625	12.250
5,818.5	5,340.9	Intermediate casing	7.000	8.750

Formations

Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(usft)	(usft)			(°)	(°)
1,345.3	1,333.0	Ojo Alamo			
1,447.2	1,432.0	Kirtland			
1,662.1	1,641.0	Fruitland			
1,856.5	1,830.0	Pictured Cliffs			
1,953.2	1,924.0	Lewis			
2,717.3	2,667.0	Chacra			
3,367.3	3,299.0	Cliff House			
3,414.7	3,345.0	Menefee			
4,177.8	4,087.0	Point Lookout			
4,321.8	4,227.0	Mancos			
4,730.1	4,624.0	Mancos Silt			
5,246.5	5,099.0	Gallup A			
5,305.6	5,143.0	Gallup B			
5,442.0	5,230.0	Gallup C			
5,828.5	5,341.0	Target			

Plan Annotations

Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S	+E/-W	
(usft)	(usft)	(usft)	(usft)	
4,774.5	4,667.2	-367.1	-856.9	KOP
5,618.5	5,307.5	-773.3	-659.7	Top of liner
5,888.5	5,341.0	-968.7	-478.7	First take point
14,964.9	5,341.0	-7,450.5	5,874.8	Last take point

DJR Operating

Venado Canyon Unit

A11 2206 Pad

206H

30-043-21292

Original drilling

APD

Anticollision Report

12 March, 2019

Anticollision Report

Company: DJR Operating Project: Venado Canyon Unit Reference Site: A11 2206 Pad Site Error: 0.0 usft Reference Well: # 206H Well Error: 0.0 usft Reference Wellbore: Original drilling Reference Design: APD	Local Co-ordinate Reference: Well # 206H TVD Reference: RKB @ 6977.0usft (AD 920) MD Reference: RKB @ 6977.0usft (AD 920) North Reference: True Survey Calculation Method: Minimum Curvature Output errors are at: 2.00 sigma Database: EDM Offset TVD Reference: Offset Datum
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Reference APD	
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	Stations
Depth Range:	Unlimited
Results Limited by:	Maximum center-center distance of 10,000.0 usft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Pedal Curve
Casing Method:	Not applied

Survey Tool Program		Date 3/12/2019
From (usft)	To (usft)	Survey (Wellbore)
0.0	15,024.9	APD (Original drilling)
Tool Name		Description
MWD+IGRF		OWSG MWD + IGRF or WMM

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
A11 2206 Pad						
# 207H - Original drilling - APD	659.3	659.0	14.2	9.9	3,318	CC, ES, SF

Offset Design														A11 2206 Pad - # 207H - Original drilling - APD		Offset Site Error: 0.0 usft	
Survey Program: 0-MWD+IGRF																Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)							
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	0.0	-20.1	20.1								
100.0	100.0	100.0	100.0	0.2	0.2	-90.00	0.0	-20.1	20.1	19.8	0.31	65.113					
200.0	200.0	200.0	200.0	0.5	0.5	-90.00	0.0	-20.1	20.1	19.0	1.03	19.579					
300.0	300.0	300.0	300.0	0.9	0.9	-90.00	0.0	-20.1	20.1	18.3	1.74	11.522					
400.0	400.0	400.0	400.0	1.2	1.2	-90.00	0.0	-20.1	20.1	17.6	2.46	8.163					
450.0	450.0	450.0	450.0	1.4	1.4	-90.00	0.0	-20.1	20.1	17.3	2.82	7.124					
500.0	500.0	500.1	500.1	1.6	1.6	24.89	0.4	-19.9	19.5	16.3	3.17	6.154					
600.0	599.9	600.1	600.0	1.9	1.9	42.32	3.6	-18.6	15.8	11.9	3.87	4.086					
659.3	659.2	659.0	658.8	2.1	2.2	67.97	7.0	-17.1	14.2	9.9	4.29	3.318	CC, ES, SF				
700.0	699.7	699.1	698.8	2.3	2.3	90.53	10.0	-15.9	15.4	10.9	4.58	3.370					
800.0	799.1	797.6	796.9	2.7	2.7	127.47	17.5	-12.7	26.9	21.6	5.30	5.077					
900.0	898.2	895.4	894.4	3.0	3.0	142.85	25.0	-9.6	45.3	39.2	6.02	7.523					
1,000.0	996.6	992.5	991.2	3.5	3.4	150.58	32.4	-6.4	67.9	61.2	6.74	10.087					
1,100.0	1,094.4	1,088.7	1,087.1	3.9	3.8	155.24	39.8	-3.3	94.3	86.9	7.46	12.649					
1,125.9	1,119.6	1,113.5	1,111.7	4.1	3.9	156.16	41.7	-2.5	101.7	94.1	7.65	13.300					
1,200.0	1,191.7	1,184.3	1,182.3	4.4	4.1	158.39	47.1	-0.3	123.3	115.1	8.17	15.083					
1,300.0	1,288.9	1,279.8	1,277.4	5.0	4.5	160.40	54.4	2.8	152.6	143.7	8.89	17.170					
1,400.0	1,386.2	1,375.3	1,372.6	5.5	4.9	161.76	61.8	5.9	182.0	172.4	9.61	18.952					
1,500.0	1,483.4	1,470.8	1,467.8	6.0	5.2	162.74	69.1	9.0	211.5	201.2	10.33	20.487					
1,600.0	1,580.6	1,566.3	1,562.9	6.6	5.6	163.48	76.4	12.1	241.1	230.0	11.05	21.821					
1,700.0	1,677.8	1,661.7	1,658.1	7.1	6.0	164.06	83.7	15.1	270.7	258.9	11.77	22.989					
1,800.0	1,775.1	1,757.2	1,753.3	7.7	6.3	164.53	91.0	18.2	300.3	287.8	12.50	24.020					
1,900.0	1,872.3	1,852.7	1,848.4	8.3	6.7	164.91	98.3	21.3	329.9	316.6	13.23	24.935					
2,000.0	1,969.5	1,948.2	1,943.6	8.8	7.1	165.23	105.7	24.4	359.5	345.5	13.96	25.754					
2,100.0	2,066.8	2,043.7	2,038.8	9.4	7.4	165.50	113.0	27.4	389.1	374.4	14.69	26.491					
2,200.0	2,164.0	2,139.2	2,133.9	9.9	7.8	165.73	120.3	30.5	418.7	403.3	15.42	27.156					

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company: DJR Operating
 Project: Venado Canyon Unit
 Reference Site: A11 2206 Pad
 Site Error: 0.0 usft
 Reference Well: # 206H
 Well Error: 0.0 usft
 Reference Wellbore: Original drilling
 Reference Design: APD

Local Co-ordinate Reference: Well # 206H
 TVD Reference: RKB @ 6977.0usft (AD 920)
 MD Reference: RKB @ 6977.0usft (AD 920)
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM
 Offset TVD Reference: Offset Datum

Offset Design A11 2206 Pad - # 207H - Original drilling - APD														Offset Site Error:	0.0 usft
Survey Program: 0-MWD+IGRF														Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
2,300.0	2,261.2	2,234.7	2,229.1	10.5	8.2	165.93	127.6	33.6	448.4	432.2	16.15	27.760			
2,400.0	2,358.5	2,330.2	2,324.3	11.1	8.5	166.11	134.9	36.7	478.0	461.1	16.89	28.310			
2,500.0	2,455.7	2,425.7	2,419.4	11.6	8.9	166.27	142.3	39.8	507.7	490.1	17.62	28.814			
2,600.0	2,552.9	2,521.2	2,514.6	12.2	9.3	166.41	149.6	42.8	537.3	519.0	18.35	29.277			
2,700.0	2,650.1	2,616.7	2,609.8	12.8	9.7	166.53	156.9	45.9	567.0	547.9	19.09	29.704			
2,800.0	2,747.4	2,712.2	2,704.9	13.4	10.0	166.64	164.2	49.0	596.6	576.8	19.82	30.099			
2,900.0	2,844.6	2,807.7	2,800.1	13.9	10.4	166.74	171.5	52.1	626.3	605.7	20.56	30.465			
3,000.0	2,941.8	2,903.2	2,895.2	14.5	10.8	166.84	178.8	55.1	655.9	634.7	21.29	30.805			
3,100.0	3,039.1	2,998.7	2,990.4	15.1	11.1	166.92	186.2	58.2	685.6	663.6	22.03	31.122			
3,200.0	3,136.3	3,094.2	3,085.6	15.7	11.5	167.00	193.5	61.3	715.3	692.5	22.77	31.418			
3,300.0	3,233.5	3,189.7	3,180.7	16.2	11.9	167.07	200.8	64.4	744.9	721.4	23.50	31.695			
3,400.0	3,330.7	3,285.2	3,275.9	16.8	12.2	167.13	208.1	67.5	774.6	750.4	24.24	31.955			
3,500.0	3,428.0	3,380.7	3,371.1	17.4	12.6	167.19	215.4	70.5	804.3	779.3	24.98	32.199			
3,600.0	3,525.2	3,476.2	3,466.2	18.0	13.0	167.25	222.7	73.6	833.9	808.2	25.71	32.429			
3,700.0	3,622.4	3,571.7	3,561.4	18.5	13.4	167.30	230.1	76.7	863.6	837.1	26.45	32.647			
3,800.0	3,719.7	3,667.2	3,656.6	19.1	13.7	167.35	237.4	79.8	893.3	866.1	27.19	32.852			
3,900.0	3,816.9	3,762.6	3,751.7	19.7	14.1	167.40	244.7	82.8	922.9	895.0	27.93	33.046			
4,000.0	3,914.1	3,858.1	3,846.9	20.3	14.5	167.44	252.0	85.9	952.6	923.9	28.67	33.229			
4,100.0	4,011.4	3,953.6	3,942.1	20.8	14.8	167.48	259.3	89.0	982.3	952.8	29.41	33.404			
4,200.0	4,108.6	4,049.1	4,037.2	21.4	15.2	167.52	266.6	92.1	1,011.9	981.8	30.14	33.569			
4,300.0	4,205.8	4,144.6	4,132.4	22.0	15.6	167.56	274.0	95.1	1,041.6	1,010.7	30.88	33.727			
4,400.0	4,303.0	4,240.1	4,227.6	22.6	16.0	167.59	281.3	98.2	1,071.3	1,039.6	31.62	33.877			
4,500.0	4,400.3	4,335.6	4,322.7	23.1	16.3	167.62	288.6	101.3	1,100.9	1,068.6	32.36	34.020			
4,600.0	4,497.5	4,431.1	4,417.9	23.7	16.7	167.65	295.9	104.4	1,130.6	1,097.5	33.10	34.157			
4,700.0	4,594.7	4,526.6	4,513.1	24.3	17.1	167.68	303.2	107.5	1,160.3	1,126.4	33.84	34.287			
4,774.5	4,667.2	4,597.8	4,584.0	24.7	17.3	167.70	308.7	109.7	1,182.4	1,148.0	34.39	34.380			
4,800.0	4,692.0	4,622.1	4,608.2	24.9	17.4	177.79	310.5	110.5	1,189.9	1,155.3	34.58	34.411			
4,850.0	4,740.8	4,669.9	4,655.9	25.1	17.6	-161.21	314.2	112.1	1,204.1	1,169.2	34.94	34.464			
4,900.0	4,789.4	4,714.4	4,700.2	25.4	17.8	-142.29	317.6	113.5	1,217.7	1,182.4	35.26	34.532			
4,950.0	4,837.6	4,750.0	4,735.7	25.6	17.9	-127.75	319.6	115.4	1,230.9	1,195.4	35.51	34.667			
5,000.0	4,885.1	4,789.5	4,775.0	25.8	18.1	-117.35	320.2	119.0	1,243.8	1,208.0	35.75	34.787			
5,050.0	4,931.6	4,826.3	4,811.5	26.0	18.2	-109.85	319.2	124.0	1,256.3	1,220.3	35.96	34.932			
5,100.0	4,976.8	4,863.5	4,848.0	26.1	18.3	-104.34	316.6	130.5	1,268.5	1,232.3	36.16	35.075			
5,150.0	5,020.4	4,900.0	4,883.4	26.2	18.4	-100.16	312.6	138.4	1,280.1	1,243.8	36.35	35.217			
5,200.0	5,062.1	4,939.3	4,920.9	26.3	18.5	-96.97	306.7	148.4	1,291.3	1,254.8	36.55	35.330			
5,250.0	5,101.7	4,978.0	4,957.1	26.4	18.6	-94.46	299.2	159.7	1,302.0	1,265.2	36.75	35.427			
5,300.0	5,139.0	5,017.4	4,993.1	26.5	18.8	-92.48	289.9	172.9	1,312.1	1,275.1	36.97	35.491			
5,350.0	5,173.6	5,057.5	5,028.6	26.6	18.9	-90.92	278.8	187.7	1,321.5	1,284.3	37.21	35.515			
5,400.0	5,205.5	5,100.0	5,065.0	26.7	19.0	-89.74	265.2	205.2	1,330.3	1,292.8	37.50	35.479			
5,450.0	5,234.4	5,140.2	5,097.9	26.7	19.1	-88.79	250.8	223.1	1,338.4	1,300.6	37.81	35.399			
5,500.0	5,260.1	5,183.1	5,131.4	26.8	19.2	-88.13	233.7	243.7	1,345.8	1,307.6	38.19	35.238			
5,550.0	5,282.5	5,227.1	5,163.8	26.8	19.3	-87.69	214.4	266.4	1,352.4	1,313.7	38.64	34.999			
5,600.0	5,301.4	5,272.4	5,195.0	26.9	19.5	-87.47	192.9	291.2	1,358.2	1,319.0	39.17	34.673			
5,650.0	5,316.7	5,319.0	5,224.5	27.0	19.7	-87.44	168.9	318.1	1,363.2	1,323.4	39.79	34.256			
5,700.0	5,328.4	5,367.2	5,252.2	27.0	19.9	-87.59	142.5	347.3	1,367.3	1,326.8	40.53	33.740			
5,750.0	5,336.3	5,416.9	5,277.6	27.1	20.2	-87.92	113.6	378.8	1,370.6	1,329.3	41.32	33.170			
5,800.0	5,340.4	5,468.4	5,300.3	27.3	20.6	-88.42	82.1	412.6	1,373.0	1,330.7	42.29	32.466			
5,828.5	5,341.0	5,498.6	5,311.9	27.4	20.9	-88.79	63.0	432.9	1,374.0	1,331.1	42.89	32.035			
5,900.0	5,341.0	5,578.4	5,336.0	27.7	21.7	-89.79	10.3	487.8	1,375.9	1,331.3	44.59	30.858			
6,000.0	5,341.0	5,698.5	5,354.0	28.4	23.1	-90.54	-72.8	572.2	1,377.8	1,330.3	47.44	29.045			
6,100.0	5,341.0	5,805.2	5,355.0	29.4	24.6	-90.58	-148.5	647.5	1,378.5	1,328.0	50.45	27.325			
6,200.0	5,341.0	5,905.2	5,355.0	30.7	26.1	-90.58	-219.4	718.0	1,379.1	1,325.5	53.66	25.701			

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company: DJR Operating
 Project: Venado Canyon Unit
 Reference Site: A11 2206 Pad
 Site Error: 0.0 usft
 Reference Well: # 206H
 Well Error: 0.0 usft
 Reference Wellbore: Original drilling
 Reference Design: APD

Local Co-ordinate Reference: Well # 206H
 TVD Reference: RKB @ 6977.0usft (AD 920)
 MD Reference: RKB @ 6977.0usft (AD 920)
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Output errors are at: 2.00 sigma
 Database: EDM
 Offset TVD Reference: Offset Datum

Offset Design A11 2206 Pad - # 207H - Original drilling - APD														Offset Site Error:	0.0 usft
Survey Program: 0-MWD+IGRF														Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
6,300.0	5,341.0	6,005.2	5,355.0	32.1	27.8	-90.58	-290.4	788.4	1,379.8	1,322.7	57.13	24.152			
6,400.0	5,341.0	6,105.2	5,355.0	33.8	29.6	-90.58	-361.3	858.9	1,380.4	1,319.6	60.80	22.703			
6,500.0	5,341.0	6,205.2	5,355.0	35.6	31.5	-90.58	-432.3	929.3	1,381.1	1,316.4	64.65	21.361			
6,600.0	5,341.0	6,305.2	5,355.0	37.4	33.5	-90.58	-503.3	999.8	1,381.7	1,313.1	68.65	20.127			
6,700.0	5,341.0	6,405.2	5,355.0	39.4	35.5	-90.58	-574.2	1,070.3	1,382.4	1,309.6	72.77	18.998			
6,800.0	5,341.0	6,505.2	5,355.0	41.4	37.6	-90.58	-645.2	1,140.7	1,383.0	1,306.1	76.98	17.966			
6,900.0	5,341.0	6,605.2	5,355.0	43.5	39.8	-90.58	-716.1	1,211.2	1,383.7	1,302.4	81.28	17.023			
7,000.0	5,341.0	6,705.2	5,355.0	45.6	41.9	-90.58	-787.1	1,281.6	1,384.3	1,298.7	85.66	16.161			
7,100.0	5,341.0	6,805.2	5,355.0	47.7	44.1	-90.58	-858.0	1,352.1	1,385.0	1,294.9	90.10	15.372			
7,200.0	5,341.0	6,905.2	5,355.0	49.9	46.4	-90.58	-929.0	1,422.6	1,385.6	1,291.0	94.59	14.649			
7,300.0	5,341.0	7,005.2	5,355.0	52.1	48.6	-90.58	-1,000.0	1,493.0	1,386.3	1,287.2	99.12	13.985			
7,400.0	5,341.0	7,105.2	5,355.0	54.3	50.9	-90.58	-1,070.9	1,563.5	1,386.9	1,283.2	103.70	13.375			
7,500.0	5,341.0	7,205.2	5,355.0	56.6	53.2	-90.58	-1,141.9	1,633.9	1,387.6	1,279.3	108.31	12.811			
7,600.0	5,341.0	7,305.2	5,355.0	58.9	55.5	-90.58	-1,212.8	1,704.4	1,388.2	1,275.3	112.95	12.290			
7,700.0	5,341.0	7,405.2	5,355.0	61.2	57.9	-90.58	-1,283.8	1,774.9	1,388.9	1,271.3	117.62	11.808			
7,800.0	5,341.0	7,505.2	5,355.0	63.5	60.2	-90.58	-1,354.7	1,845.3	1,389.5	1,267.2	122.31	11.360			
7,900.0	5,341.0	7,605.2	5,355.0	65.8	62.6	-90.58	-1,425.7	1,915.8	1,390.2	1,263.1	127.03	10.944			
8,000.0	5,341.0	7,705.2	5,355.0	68.1	64.9	-90.58	-1,496.7	1,986.2	1,390.8	1,259.1	131.76	10.556			
8,100.0	5,341.0	7,805.2	5,355.0	70.4	67.3	-90.58	-1,567.6	2,056.7	1,391.5	1,255.0	136.51	10.193			
8,200.0	5,341.0	7,905.2	5,355.0	72.8	69.7	-90.58	-1,638.6	2,127.2	1,392.1	1,250.8	141.28	9.854			
8,300.0	5,341.0	8,005.2	5,355.0	75.1	72.1	-90.58	-1,709.5	2,197.6	1,392.8	1,246.7	146.05	9.536			
8,400.0	5,341.0	8,105.2	5,355.0	77.5	74.5	-90.58	-1,780.5	2,268.1	1,393.4	1,242.6	150.85	9.237			
8,500.0	5,341.0	8,205.2	5,355.0	79.9	76.9	-90.58	-1,851.4	2,338.5	1,394.1	1,238.4	155.65	8.956			
8,600.0	5,341.0	8,305.2	5,355.0	82.3	79.3	-90.58	-1,922.4	2,409.0	1,394.7	1,234.2	160.46	8.692			
8,700.0	5,341.0	8,405.2	5,355.0	84.7	81.7	-90.57	-1,993.4	2,479.5	1,395.4	1,230.1	165.28	8.442			
8,800.0	5,341.0	8,505.2	5,355.0	87.0	84.1	-90.57	-2,064.3	2,549.9	1,396.0	1,225.9	170.12	8.206			
8,900.0	5,341.0	8,605.2	5,355.0	89.4	86.5	-90.57	-2,135.3	2,620.4	1,396.7	1,221.7	174.95	7.983			
9,000.0	5,341.0	8,705.2	5,355.0	91.8	88.9	-90.57	-2,206.2	2,690.8	1,397.3	1,217.5	179.80	7.771			
9,100.0	5,341.0	8,805.2	5,355.0	94.2	91.4	-90.57	-2,277.2	2,761.3	1,398.0	1,213.3	184.65	7.571			
9,200.0	5,341.0	8,905.2	5,355.0	96.6	93.8	-90.57	-2,348.1	2,831.8	1,398.6	1,209.1	189.51	7.380			
9,300.0	5,341.0	9,005.1	5,355.0	99.1	96.2	-90.57	-2,419.1	2,902.2	1,399.3	1,204.9	194.38	7.199			
9,400.0	5,341.0	9,105.1	5,355.0	101.5	98.7	-90.57	-2,490.1	2,972.7	1,399.9	1,200.7	199.25	7.026			
9,500.0	5,341.0	9,205.1	5,355.0	103.9	101.1	-90.57	-2,561.0	3,043.1	1,400.6	1,196.4	204.12	6.861			
9,600.0	5,341.0	9,305.1	5,355.0	106.3	103.5	-90.57	-2,632.0	3,113.6	1,401.2	1,192.2	209.00	6.704			
9,700.0	5,341.0	9,405.1	5,355.0	108.7	106.0	-90.57	-2,702.9	3,184.1	1,401.8	1,188.0	213.89	6.554			
9,800.0	5,341.0	9,505.1	5,355.0	111.2	108.4	-90.57	-2,773.9	3,254.5	1,402.5	1,183.7	218.77	6.411			
9,900.0	5,341.0	9,605.1	5,355.0	113.6	110.9	-90.57	-2,844.8	3,325.0	1,403.1	1,179.5	223.67	6.273			
10,000.0	5,341.0	9,705.1	5,355.0	116.0	113.3	-90.57	-2,915.8	3,395.4	1,403.8	1,175.2	228.56	6.142			
10,100.0	5,341.0	9,805.1	5,355.0	118.5	115.8	-90.57	-2,986.8	3,465.9	1,404.4	1,171.0	233.46	6.016			
10,200.0	5,341.0	9,905.1	5,355.0	120.9	118.2	-90.57	-3,057.7	3,536.4	1,405.1	1,166.7	238.36	5.895			
10,300.0	5,341.0	10,005.1	5,355.0	123.3	120.7	-90.57	-3,128.7	3,606.8	1,405.7	1,162.5	243.26	5.779			
10,400.0	5,341.0	10,105.1	5,355.0	125.8	123.1	-90.57	-3,199.6	3,677.3	1,406.4	1,158.2	248.17	5.667			
10,500.0	5,341.0	10,205.1	5,355.0	128.2	125.6	-90.57	-3,270.6	3,747.8	1,407.0	1,154.0	253.08	5.560			
10,600.0	5,341.0	10,305.1	5,355.0	130.7	128.0	-90.57	-3,341.5	3,818.2	1,407.7	1,149.7	257.99	5.456			
10,700.0	5,341.0	10,405.1	5,355.0	133.1	130.5	-90.57	-3,412.5	3,888.7	1,408.3	1,145.4	262.91	5.357			
10,800.0	5,341.0	10,505.1	5,355.0	135.6	133.0	-90.57	-3,483.5	3,959.1	1,409.0	1,141.2	267.82	5.261			
10,900.0	5,341.0	10,605.1	5,355.0	138.0	135.4	-90.57	-3,554.4	4,029.6	1,409.6	1,136.9	272.74	5.168			
11,000.0	5,341.0	10,705.1	5,355.0	140.4	137.9	-90.57	-3,625.4	4,100.1	1,410.3	1,132.6	277.66	5.079			
11,100.0	5,341.0	10,805.1	5,355.0	142.9	140.4	-90.57	-3,696.3	4,170.5	1,410.9	1,128.3	282.58	4.993			
11,200.0	5,341.0	10,905.1	5,355.0	145.4	142.8	-90.57	-3,767.3	4,241.0	1,411.6	1,124.1	287.51	4.910			
11,300.0	5,341.0	11,005.1	5,355.0	147.8	145.3	-90.57	-3,838.2	4,311.4	1,412.2	1,119.8	292.43	4.829			
11,400.0	5,341.0	11,105.1	5,355.0	150.3	147.7	-90.57	-3,909.2	4,381.9	1,412.9	1,115.5	297.36	4.751			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company: DJR Operating
Project: Venado Canyon Unit
Reference Site: A11 2206 Pad
Site Error: 0.0 usft
Reference Well: # 206H
Well Error: 0.0 usft
Reference Wellbore: Original drilling
Reference Design: APD

Local Co-ordinate Reference: Well # 206H
TVD Reference: RKB @ 6977.0usft (AD 920)
MD Reference: RKB @ 6977.0usft (AD 920)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM
Offset TVD Reference: Offset Datum

Offset Design A11 2206 Pad - # 207H - Original drilling - APD														Offset Site Error:	0.0 usft
Survey Program: 0-MWD+IGRF														Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (usft)	Separation Factor	Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)							
11,500.0	5,341.0	11,205.1	5,355.0	152.7	150.2	-90.57	-3,980.2	4,452.4	1,413.5	1,111.2	302.29	4.676			
11,600.0	5,341.0	11,305.1	5,355.0	155.2	152.7	-90.57	-4,051.1	4,522.8	1,414.2	1,107.0	307.22	4.603			
11,700.0	5,341.0	11,405.1	5,355.0	157.6	155.1	-90.57	-4,122.1	4,593.3	1,414.8	1,102.7	312.15	4.533			
11,800.0	5,341.0	11,505.1	5,355.0	160.1	157.6	-90.57	-4,193.0	4,663.7	1,415.5	1,098.4	317.08	4.464			
11,900.0	5,341.0	11,605.1	5,355.0	162.5	160.1	-90.57	-4,264.0	4,734.2	1,416.1	1,094.1	322.01	4.398			
12,000.0	5,341.0	11,705.1	5,355.0	165.0	162.6	-90.57	-4,334.9	4,804.7	1,416.8	1,089.8	326.95	4.333			
12,100.0	5,341.0	11,805.1	5,355.0	167.5	165.0	-90.57	-4,405.9	4,875.1	1,417.4	1,085.5	331.89	4.271			
12,200.0	5,341.0	11,905.1	5,355.0	169.9	167.5	-90.57	-4,476.9	4,945.6	1,418.1	1,081.2	336.82	4.210			
12,300.0	5,341.0	12,005.1	5,355.0	172.4	170.0	-90.57	-4,547.8	5,016.0	1,418.7	1,077.0	341.76	4.151			
12,400.0	5,341.0	12,105.1	5,355.0	174.8	172.4	-90.57	-4,618.8	5,086.5	1,419.4	1,072.7	346.70	4.094			
12,500.0	5,341.0	12,205.1	5,355.0	177.3	174.9	-90.56	-4,689.7	5,157.0	1,420.0	1,068.4	351.64	4.038			
12,600.0	5,341.0	12,305.1	5,355.0	179.8	177.4	-90.56	-4,760.7	5,227.4	1,420.7	1,064.1	356.58	3.984			
12,700.0	5,341.0	12,405.1	5,355.0	182.2	179.9	-90.56	-4,831.6	5,297.9	1,421.3	1,059.8	361.52	3.931			
12,800.0	5,341.0	12,505.1	5,355.0	184.7	182.3	-90.56	-4,902.6	5,368.3	1,422.0	1,055.5	366.46	3.880			
12,900.0	5,341.0	12,605.1	5,355.0	187.1	184.8	-90.56	-4,973.6	5,438.8	1,422.6	1,051.2	371.41	3.830			
13,000.0	5,341.0	12,705.1	5,355.0	189.6	187.3	-90.56	-5,044.5	5,509.3	1,423.3	1,046.9	376.35	3.782			
13,100.0	5,341.0	12,805.1	5,355.0	192.1	189.7	-90.56	-5,115.5	5,579.7	1,423.9	1,042.6	381.30	3.734			
13,200.0	5,341.0	12,905.1	5,355.0	194.5	192.2	-90.56	-5,186.4	5,650.2	1,424.6	1,038.3	386.24	3.688			
13,300.0	5,341.0	13,005.1	5,355.0	197.0	194.7	-90.56	-5,257.4	5,720.6	1,425.2	1,034.0	391.19	3.643			
13,400.0	5,341.0	13,105.1	5,355.0	199.5	197.2	-90.56	-5,328.3	5,791.1	1,425.9	1,029.7	396.13	3.599			
13,500.0	5,341.0	13,205.1	5,355.0	201.9	199.6	-90.56	-5,399.3	5,861.6	1,426.5	1,025.4	401.08	3.557			
13,600.0	5,341.0	13,305.1	5,355.0	204.4	202.1	-90.56	-5,470.3	5,932.0	1,427.1	1,021.1	406.03	3.515			
13,700.0	5,341.0	13,327.2	5,355.0	206.9	202.7	-90.56	-5,485.9	5,947.6	1,429.9	1,021.9	408.00	3.505			
13,800.0	5,341.0	13,327.2	5,355.0	209.3	202.7	-90.56	-5,485.9	5,947.6	1,439.5	1,032.1	407.39	3.533			
13,900.0	5,341.0	13,327.2	5,355.0	211.8	202.7	-90.56	-5,485.9	5,947.6	1,455.9	1,051.0	404.91	3.596			
14,000.0	5,341.0	13,327.2	5,355.0	214.3	202.7	-90.56	-5,485.9	5,947.6	1,478.8	1,078.1	400.71	3.691			
14,100.0	5,341.0	13,327.2	5,355.0	216.8	202.7	-90.56	-5,485.9	5,947.6	1,508.1	1,113.1	395.02	3.818			
14,200.0	5,341.0	13,327.2	5,355.0	219.2	202.7	-90.56	-5,485.9	5,947.6	1,543.3	1,155.2	388.06	3.977			
14,300.0	5,341.0	13,327.2	5,355.0	221.7	202.7	-90.56	-5,485.9	5,947.6	1,584.1	1,203.9	380.11	4.167			
14,400.0	5,341.0	13,327.2	5,355.0	224.2	202.7	-90.56	-5,485.9	5,947.6	1,629.9	1,258.5	371.42	4.388			
14,500.0	5,341.0	13,327.2	5,355.0	226.6	202.7	-90.56	-5,485.9	5,947.6	1,680.5	1,318.3	362.20	4.640			
14,600.0	5,341.0	13,327.2	5,355.0	229.1	202.7	-90.56	-5,485.9	5,947.6	1,735.4	1,382.7	352.67	4.921			
14,700.0	5,341.0	13,327.2	5,355.0	231.6	202.7	-90.56	-5,485.9	5,947.6	1,794.1	1,451.2	343.00	5.231			
14,800.0	5,341.0	13,327.2	5,355.0	234.0	202.7	-90.56	-5,485.9	5,947.6	1,856.4	1,523.1	333.32	5.570			
14,900.0	5,341.0	13,327.2	5,355.0	236.5	202.7	-90.56	-5,485.9	5,947.6	1,921.9	1,598.2	323.76	5.936			
15,000.0	5,341.0	13,327.2	5,355.0	239.0	202.7	-90.56	-5,485.9	5,947.6	1,990.3	1,675.9	314.39	6.331			
15,024.9	5,341.0	13,327.2	5,355.0	239.6	202.7	-90.56	-5,485.9	5,947.6	2,007.9	1,695.8	312.11	6.433			

Anticollision Report

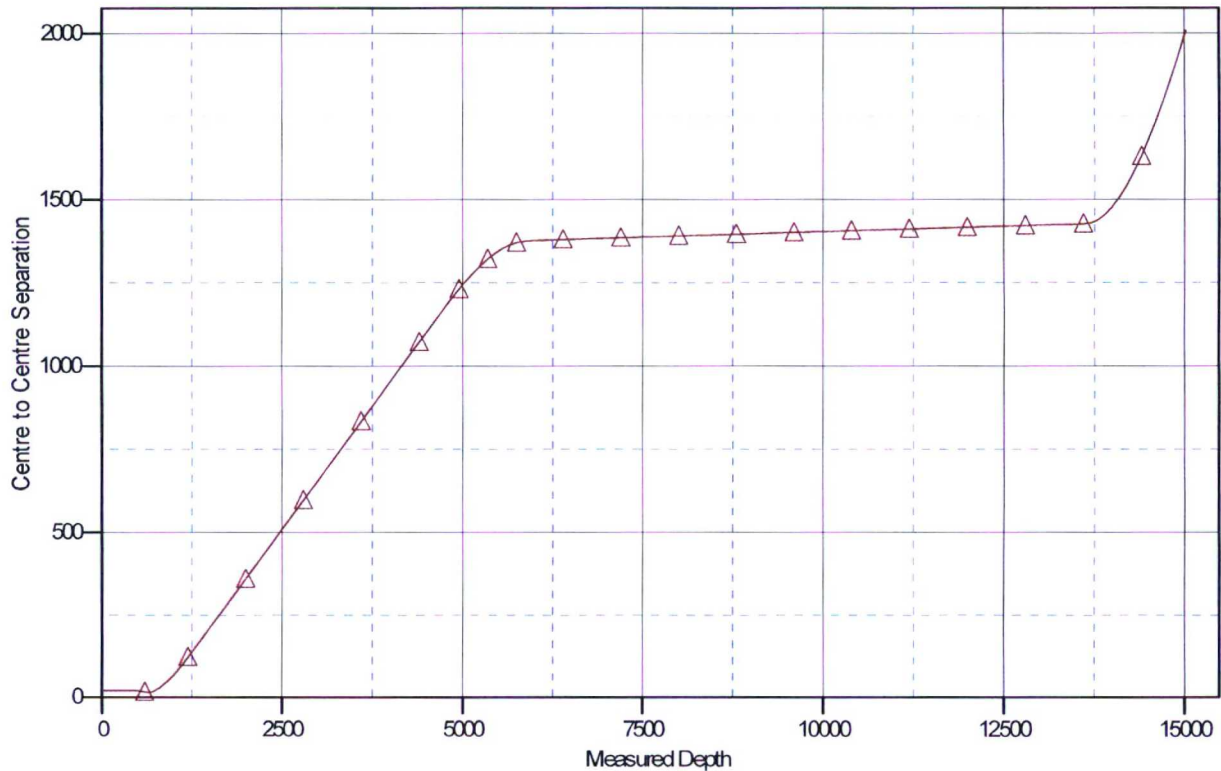
Company: DJR Operating
Project: Venado Canyon Unit
Reference Site: A11 2206 Pad
Site Error: 0.0 usft
Reference Well: # 206H
Well Error: 0.0 usft
Reference Wellbore: Original drilling
Reference Design: APD

Local Co-ordinate Reference: Well # 206H
TVD Reference: RKB @ 6977.0usft (AD 920)
MD Reference: RKB @ 6977.0usft (AD 920)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM
Offset TVD Reference: Offset Datum

Reference Depths are relative to RKB @ 6977.0usft (AD 920)
Offset Depths are relative to Offset Datum
Central Meridian is -107.8333333

Coordinates are relative to: # 206H
Coordinate System is US State Plane 1983, New Mexico Western Zone
Grid Convergence at Surface is: 0.24°

Ladder Plot



LEGEND

—▲— # 207H - Original drilling, APD V0

Anticollision Report

Company: DJR Operating
Project: Venado Canyon Unit
Reference Site: A11 2206 Pad
Site Error: 0.0 usft
Reference Well: # 206H
Well Error: 0.0 usft
Reference Wellbore: Original drilling
Reference Design: APD

Local Co-ordinate Reference: Well # 206H
TVD Reference: RKB @ 6977.0usft (AD 920)
MD Reference: RKB @ 6977.0usft (AD 920)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM
Offset TVD Reference: Offset Datum

Reference Depths are relative to RKB @ 6977.0usft (AD 920)

Offset Depths are relative to Offset Datum

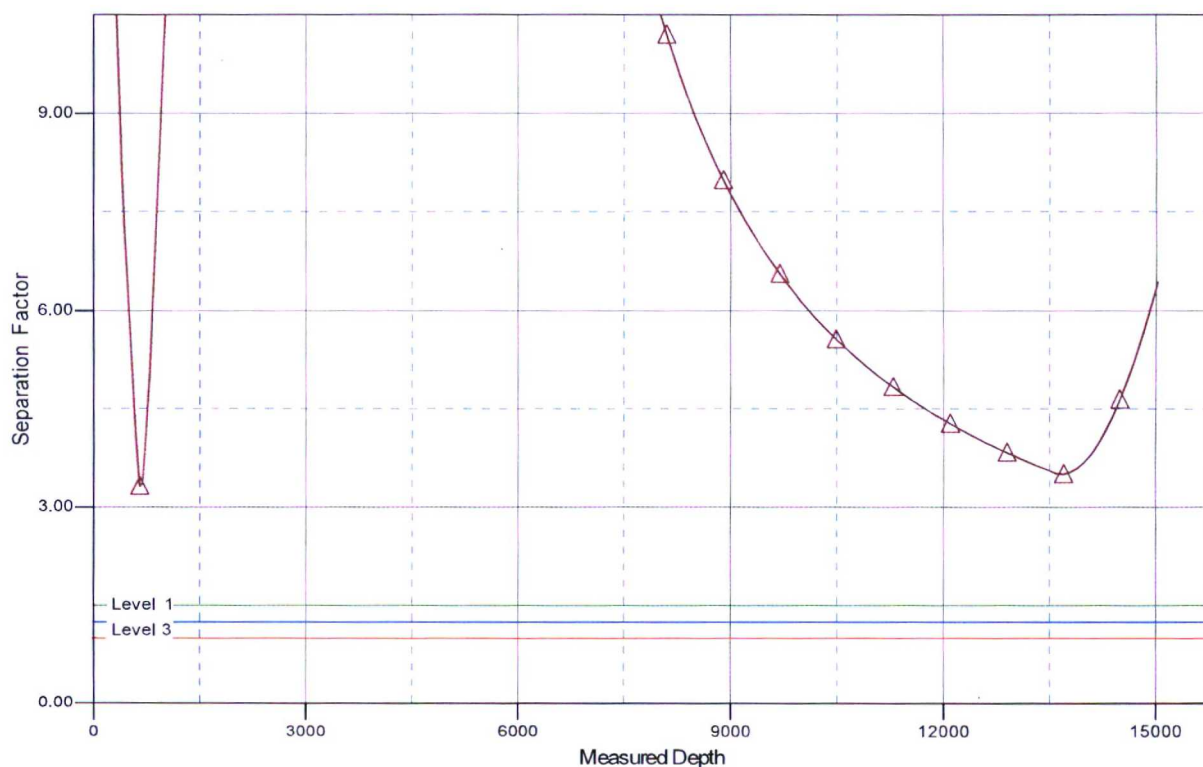
Central Meridian is -107.83333333

Coordinates are relative to: # 206H

Coordinate System is US State Plane 1983, New Mexico Western Zone

Grid Convergence at Surface is: 0.24°

Separation Factor Plot



LEGEND

— # 207H, Original drilling, APD V9