

Form 3160-3
(June 2015)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

1a. Type of work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NMNM109385
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☒ Multiple Zone		7. If Unit or CA Agreement, Name and No. VENADO CANYON UNIT / NMNM 1353
2. Name of Operator DJR OPERATING LLC		8. Lease Name and Well No. VENADO CANYON UNIT 506H
3a. Address 1700 LINCOLN STREET, SUITE 2800, DENVER, CO 802	3b. Phone No. (include area code) (505) 632-3476	9. API Well No. 30-043-21407
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SWSE / 1229 FSL / 1310 FEL / LAT 36.1482283 / LONG -107.43379 At proposed prod. zone NENE / 256 FNL / 348 FEL / LAT 36.129312 / LONG -107.413172		10. Field and Pool, or Exploratory BASIN MANCOS/LYBROOK GALLUP
14. Distance in miles and direction from nearest town or post office* 60 miles		11. Sec., T. R. M. or Blk. and Survey or Area SEC 11/T22N/R6W/NMP
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1229 feet	16. No of acres in lease 400.0	12. County or Parish SANDOVAL
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 20 feet	19. Proposed Depth 5369 feet / 13819 feet	13. State NM
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7075 feet	22. Approximate date work will start* 05/09/2021	17. Spacing Unit dedicated to this well 400.0
24. Attachments		20. BLM/BIA Bond No. in file FED: NMB001464
25. Signature (Electronic Submission)		23. Estimated duration 10 days

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

- | | |
|--|---|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be requested by the BLM. |

25. Signature (Electronic Submission)	Name (Printed/Typed) SHAW-MARIE FORD / Ph: (505) 632-3476	Date 11/10/2020
Title Regulatory Specialist		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) DAVE J MANKIEWICZ / Ph: (505) 564-7761	Date 02/17/2022
Title AFM-Minerals		
Office Farmington Field Office		

Application approval 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.

Conditions of approval, if any, are attached.

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.

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

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

OIL CONSERVATION DIVISION

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

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-043-21407	² Pool Code 42289	³ Pool Name LYBROOK GALLUP
⁴ Property Code 325271	⁵ Property Name VENADO CANYON UNIT	⁶ Well Number 506H
⁷ OGRID No. 371838	⁸ Operator Name DJR OPERATING, LLC	⁹ Elevation 7075

¹⁰ Surface Location

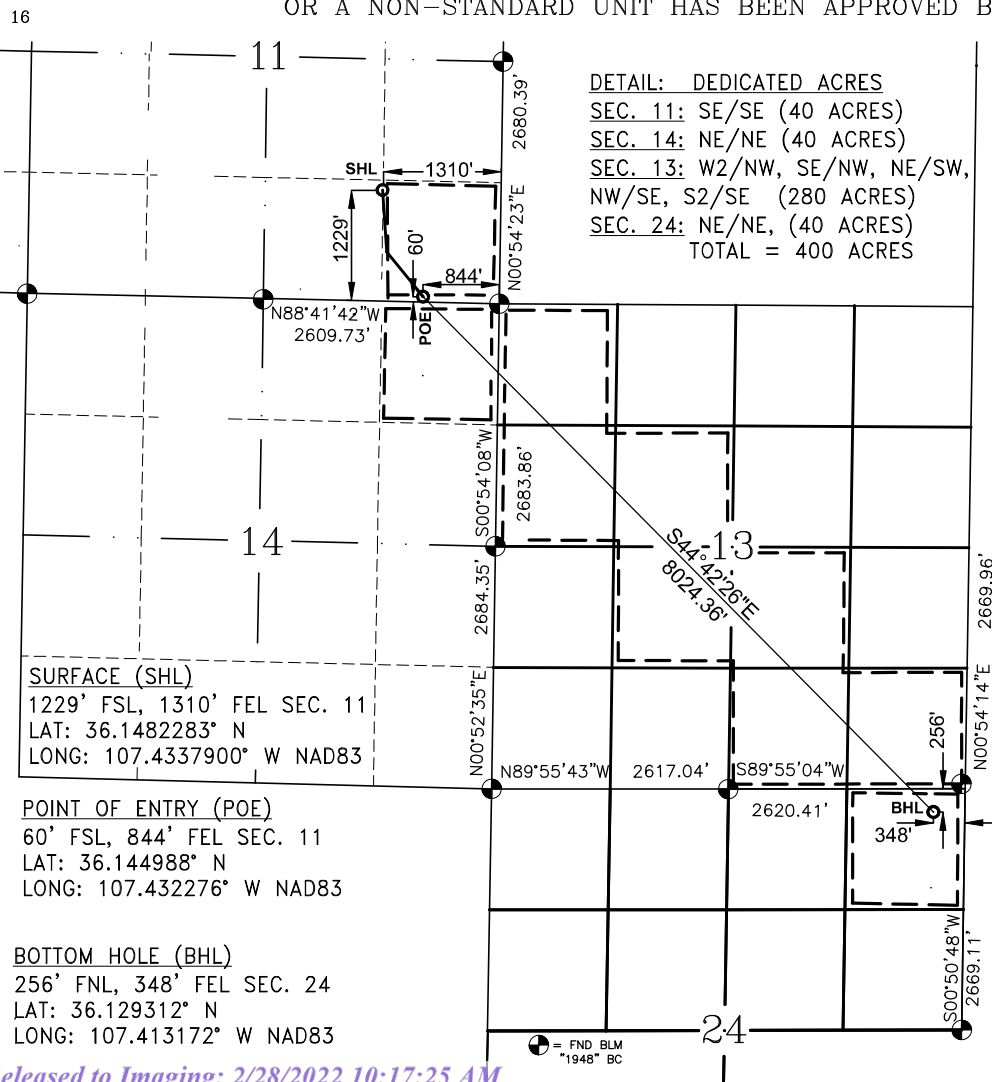
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	11	22-N	6-W		1229	SOUTH	1310	EAST	SANDOVAL

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
A	24	22-N	6-W		256	NORTH	348	EAST	SANDOVAL

¹² Dedicated Acres SEE DETAIL BELOW	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. R-14067 R-14067A
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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



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 a working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Shaw-Marie Ford 6/1/21

Signature Date

Shaw-Marie Ford

Printed Name

sford@djrlc.com

E-mail Address

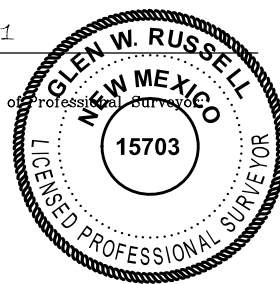
18 SURVEYOR CERTIFICATION

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.

MAY 19, 2021

Date of Survey

Signature and Seal of Professional Surveyor



GLEN W. RUSSELL

Certificate Number

15703

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: _DJR Operating, LLC_ **OGRID:** _371838_ **Date:** _02 / 23 / 2022_

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Venado Canyon Unit 504H	TBD	O-11-22N-06W	1087 FSL x 1405 FEL	280	415	100
Venado Canyon Unit 505H	TBD	O-11-22N-06W	1070 FSL x 1416 FEL	445	660	160
Venado Canyon Unit 506H	TBD	O-11-22N-06W	1104 FSL x 1395 FEL	450	660	160
Venado Canyon Unit 507H	TBD	O-11-22N-06W	1054 FSL x 1427 FEL	280	420	100
Venado Canyon Unit 508H	TBD	O-11-22N-06W	1139 FSL x 1374 FEL	430	640	150
Venado Canyon Unit 509H	TBD	O-11-22N-06W	1121 FSL x 1383 FEL	340	500	120

IV. Central Delivery Point Name: _Chaco Processing Plant_ [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Venado Canyon Unit 504H	TBD	06/03/2022	06/13/2022	10/07/2022	11/01/2022	11/01/2022
Venado Canyon Unit 505H	TBD	05/10/2022	05/20/2022	09/25/2022	11/01/2022	11/01/2022
Venado Canyon Unit 506H	TBD	05/26/2022	06/05/2022	10/03/2022	11/01/2022	11/01/2022
Venado Canyon Unit 507H	TBD	05/19/2022	05/29/2022	09/29/2022	11/01/2022	11/01/2022
Venado Canyon Unit 508H	TBD	06/12/2022	06/22/2022	10/11/2022	11/01/2022	11/01/2022
Venado Canyon Unit 509H	TBD	06/21/2022	07/01/2022	10/15/2022	11/01/2022	11/01/2022

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan**EFFECTIVE APRIL 1, 2022**

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☐ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

If Operator checks this box, Operator will select one of the following:

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: <i>Shaw-Marie Ford</i>
Printed Name: Shaw-Marie Ford
Title: Regulatory Specialist
E-mail Address: sford@djrlc.com
Date: 02/23/2022
Phone: 505-716-3297
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:



DJR OPERATING, LLC.
OGRID NO: 371838
NATURAL GAS MANAGEMENT PLAN
VENADO CANYON UNIT 504H, 505H, 506H, 507H, 508H, 509H
SWSE O-11-22N-06W

SEPARATION EQUIPMENT

DJR Operating, LLC (DJR) has pulled representative pressurized samples from wells in the same producing formation. DJR has utilized these samples in process simulations to determine the amount of gas anticipated in each stage of the process and utilized this information with a safety factor to size the equipment listed below:

Separation equipment will be set as follows:

- Individual 3 phase separators will be set for each individual well.
- The separators will be sized based on the anticipated volume of the well and the pressure of the lines utilized for oil, gas, and water takeaway.
- The 3 phase production separators will each be equipped with a 0.75 MMBtu/hr indirect fired heater.

Heater treaters will be set as follows:

- Individual heater treaters will be set for each individual well.
- The heater treaters are sized based on the anticipated combined volume of oil and produced water predicted to come from the initial 3 phase separators.
- Oil will be separated from the produced water and the produced water will be sent to its respective tanks.
- The combined oil and natural gas stream is routed to the Vapor Recovery Tower.

Vapor Recovery Equipment will be set as follows:

- The Vapor Recovery Tower has been sized, based on the anticipated volume of gas from the heater treater and oil and water tanks.
- The Vapor Recovery Unit has been sized, based on the anticipated volume of gas from the heater treater and oil and water tanks. The Vapor Recovery Unit is utilized to push the recovered gas into the sales pipeline.

Production storage tanks will be set as follows:

- The oil and produced water tanks utilize a closed vent capture system to ensure all breathing, working, and flashing losses are routed to the Vapor Recovery Tower and Vapor Recovery Unit.
- Each of the production storage tanks will be equipped with a 0.5 MMBtu/hr indirect heater.



DJR OPERATING, LLC.
OGRID NO: 371838
NATURAL GAS MANAGEMENT PLAN
VENADO CANYON UNIT 504H, 505H, 506H, 507H, 508H, 509H
SWSE O-11-22N-06W

VENTING and FLARING

DJR Operating, LLC (DJR) has a natural gas system available prior to startup of completion operations. DJR utilizes a Vapor Recovery Unit System and sells all natural gas except during periods of startup, shutdown, maintenance, or malfunction for the gas capturing equipment, including the vapor recovery tower, vapor recovery unit, storage tanks, and pipelines.

Currently, DJR utilizes the following from list A-I of Section 3 for its operations to minimize flaring:

- a) DJR utilizes natural gas-powered generators to power its leases where grid power isn't available.
- b) When electrical grid power is unavailable, natural gas generators will be used for major equipment onsite.
- c) DJR's in service compression will be natural gas powered.
- d) Should liquids removal, such as dehydration be required, units will be powered by natural gas.

DJR will only flare gas during the following times:

- Scheduled maintenance for gas capturing equipment including:
 - Vapor Recovery Tower
 - Vapor Recovery Unit
 - Storage tanks
 - Pipelines
 - Emergency flaring



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OPERATIONAL PRACTICES

19.15.27.8 A. Venting and Flaring of Natural Gas

DJR Operating, LLC (DJR) understands the requirements of NMAC 19.15.27.8 which states that the venting and flaring of natural gas during drilling, completion or production that constitutes waste as defined in 19.15.2 are prohibited.

19.15.27.8 B. Venting and flaring during drilling operations

- DJR shall capture or combust natural gas if technically feasible during drilling operations using best industry practices.
- A flare stack with a 100% capacity for expected volumes will be set on location of the facility at least 100 feet from the nearest surface hole location, well heads, and storage tanks.
- In the event of an emergency, DJR will vent natural gas in order to avoid substantial impact. DJR shall report the vented or flared gas to the NMOCD.

19.15.27.8 E. Venting and flaring during completion or recompletion operations

During Completion Operations, DJR utilizes the following:

- DJR facilities are built and ready from day 1 of Flowback.
- Individual well test separators will be set to properly separate gas and liquids. Temporary test separator will be utilized initially to process volumes. In addition, separators will be tied into flowback tanks which will be tied into the gas processing equipment for sales down a pipeline. See Separation Equipment for details.
- Should the facility not yet be capable of processing gas, or the gas does not meet quality standards, then storage tanks will be set that are tied into gas busters or temporary flare to manage natural gas. This flare would meet the following requirements:
 - 1) An appropriately sized flare stack with an automatic igniter.
 - 2) DJR analyzes the natural gas samples twice per week.
 - 3) DJR routes the natural gas into a gathering pipeline as soon as the pipeline specifications are met.
 - 4) DJR provides the NMOCD with pipeline specifications and natural gas data.



19.15.27.8 D. Venting and flaring during production operations

During Production Operations DJR will not vent or flare natural gas except under the following circumstances:

1. During an emergency or malfunction
2. To unload or clean-up liquid holdup in a well to atmospheric pressure, provided:
 - a. DJR does not vent after the well achieves a stabilized rate and pressure.
 - b. DJR will remain present on-site during liquids unloading by manual purging and take all reasonable actions to achieve a stabilized rate and pressure at the earliest practical time.
 - c. DJR will optimize the system to minimize natural gas venting on any well equipped with a plunger lift or auto control system.
 - d. Best Management Practices will be used during downhole well maintenance.
3. During the first year of production from an exploratory well provided:
 - a. DJR receives approval from the NMOCD.
 - b. DJR remains in compliance with the NM gas capture requirements.
 - c. DJR submits an updated C-129 form to the NMOCD.
4. During the following activities unless prohibited:
 - a. Gauging or sampling a storage tank or low-pressure production vessel.
 - b. Loading out liquids from a storage tank.
 - c. Repair and maintenance.
 - d. Normal operation of gas activated pneumatic controller or pump.
 - e. Normal operation of a storage tank but not including venting from a thief hatch.
 - f. Normal operation of dehydration units.
 - g. Normal operations of compressors, compressor engines, turbines, valves, flanges, and connectors.
 - h. During a bradenhead, packer leakage test, or production test lasting less than 24-hours.
 - i. When natural gas does not meet the gathering pipeline specifications.
 - j. Commissioning of pipelines, equipment, or facilities only for as long as necessary to purge introduced impurities.

19.15.27.8 E. Performance standards

1. DJR has utilized process simulations with a safety factor to design all separation and storage equipment. The equipment is routed to a Vapor Recovery System and utilizes a flare as back up for periods of startup, shutdown, maintenance, or malfunction of the VRU System.
2. DJR will install a flare that designed to handle the full volume of vapors from the facility in case of the VRU failure and it is designed with an auto ignition system.
3. Flare stacks will appropriately sized and designed to ensure proper combustion efficiency.



- a. Flare stacks installed or replaced will be equipped with an automatic ignitor or continuous pilot.
 - b. Previously installed flare stacks will be retrofitted with an automatic ignitor, continuous pilot, or technology that alerts DJR of flare malfunction within 18 months after May 25, 2021.
 - c. Flare stacks replaced after May 25, 2021, will be equipped with an automatic ignitor or continuous pilot if located at a well or facility with average daily production of 60,000 cubic feet of natural gas or less.
 - d. Flare stacks will be located at least 100 feet from the well and storage tanks and securely anchored.
4. DJR will conduct an AVO inspection on all components for leaks and defects on a weekly basis.
 5. DJR will make and keep records of AVO inspections which will be available to the NMOCD for at least 5 years.
 6. DJR may use a remote or automated monitoring technology to detect leaks and releases in lieu of AVO inspections with prior NMOCD approval.
 7. Facilities will be designed to minimize waste.
 8. DJR will resolve emergencies as promptly as possible.

19.15.27.8 F. Measurement or estimation of vented and flared natural gas

1. DJR will have meters on both the low- and high-pressure sides of the flares and the volumes will be recorded in DJR's SCADA system.
2. DJR will install equipment to measure the volume of flared natural gas that has an average daily production of 60,000 cubic feet or greater of natural gas.
3. DJR's measuring equipment will conform to the industry standards.
4. The measurement system is designed such that it cannot be bypassed except for inspections and servicing meters.
5. DJR will estimate the volume of vented or flared natural gas using a methodology that can be independently verified if metering is not practicable due to low flow rate or pressure.
6. DJR will estimate the volume of flared and vented natural gas based on the results of an annual GOR test for wells that do not require measuring equipment reported on Form C-116.
7. DJR will install measuring equipment whenever the NMOCD determines that metering is necessary.



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SWSE O-11-22N-06W

BEST MANAGEMENT PRACTICES

DJR Operating, LLC (DJR) utilizes the following Best Management Practices to minimize venting during active and planned maintenance.

DJR has a closed vent capture system to route emissions from the heater treater, tanks, and vapor recovery to the vapor recovery unit with an enclosed combustion device (ECD) for backup. The system is designed such that if the vapor recovery unit is taken out of service for any reason, the vapors will be routed to the ECD for combustion.

DJR will isolate and attempt to route all vapors to the vapor recovery unit or ECD prior to opening any lines for maintenance to minimize venting from the equipment.

DJR shall notify the NMOCD of venting or flaring that exceeds 50 MCF but less than 500 MCF in volume that either resulted from an emergency or malfunction, or an event lasting over eight hours or more cumulatively within any 24-hour period from a single event by filing a form C-129 no later than 15 days following the discovery or commencement of venting or flaring.

DJR shall notify the NMOCD verbally or by e-mail within 24-hours following discovery or commencement of venting or flaring that exceeds 500 MCF in volume or otherwise qualifies as a major release as defined in 19.15.29.7 NMAC from a single event and provide the information required in form C-129 to the NMOCD no later than 15 days that verifies, updates, or corrects the verbal or e-mail notification.

DJR will install measuring equipment to conform to industry standards such as American Petroleum Institute (API) Manual of Petroleum Measurement Standards (MPMS) Chapter 14.10 Measurement of Flow to Flares.

DJR's measuring equipment shall not be designed or equipped with a manifold that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing the measurement equipment.

DJR shall report the volume of vented and flared natural gas for each well or facility at which venting or flaring occurred on a monthly basis.

Rev 1



DRILLING PLAN

Venado Canyon #506H

Sandoval County, New Mexico

Surface Location

1310-ft FEL & 1229-ft FSL
 Sec 11 T22N R06W
 Graded Elevation 7075' MSL
 RKB Elevation 7089' (14' KB)

SHL Geographical Coordinates (NAD-83)

Latitude 36.1482283° N
 Longitude 107.4337900° W

Kick Off Point for Horizontal Build Curve

4870-ft MD
 4814-ft TVD

Local Coordinates (from SHL)

685-ft South
 44-ft East

Heel Location (Pay zone entry)

844-ft FEL & 60-ft FSL
 Sec 11 T22N R6W

Heel Geographical Coordinates (NAD-83)

Latitude 36.1449881° N
 Longitude 107.43227550° W

Bottom Hole Location (TD)

348-ft FEL & 256-ft FNL
 Sec 24 T22N R6W

BHL Geographical Coordinates (NAD-83)

Latitude 36.1293122° N
 Longitude 107.4131721° W

Well objectives

This well is planned as a 8020-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	1298	1291	Sd	W	8.3	8.4 – 8.8
Kirtland	1449	1440	Sh	-	8.3	8.4 – 8.8
Fruitland	1673	1661	C	G	8.3	9.0 - 9.5
Pictured Cliffs	1871	1856	Sd	W	8.3	9.0 - 9.5
Lewis	1965	1949	Sh	-		9.0 - 9.5
Chacra	2688	2662	Sd	-	8.3	9.0 - 9.5
Menefee	3374	3339	Sd, C	G	8.3	9.0 - 9.5
Point Lookout	4156	4110	Sd	-	8.3	9.0 - 9.5
Mancos	4302	4254	Sh	-		9.0 - 9.5
Mancos Silt	4667	4614	Slt	O/G	6.6	9.0 - 9.5
Gallup A	5217	5129	Slt	O/G	6.6	9.0 - 9.5
Gallup B	5273	5171	Sd	O/G	6.6	8.8 -9.0
Gallup C	5410	5259	Sd	O/G	6.6	8.8 -9.0
Target	5795	5369	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"	26	K-55	LTC	surf	5735	surf	5367	surface
4-1/2"	6-1/8"	11.6	P-110	BTC	5456	13819	5283	5322	5456

Note: all casing will be new

Rev 1

**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 Design9-5/8" Surface Casing

	<u>Lead</u>
Name	Redi-Mix
Type	I-II
Planned top	Surface
Density (ppg)	14.50
Yield (cf/sx)	1.61
Mix water (gal/sx)	7.41
Volume (sx)	114
Volume (bbls)	33
Volume (cu. ft.)	185
Excess %	50

7" Intermediate Casing

	<u>Lead</u>	<u>Tail</u>
	BJ Services	BJ Services
Type	III	Poz/G
Planned top	Surface	4370-ft
Density (ppg)	12.30	13.50
Yield (cf/sx)	2.34	1.50
Mix water (gal/sx)	13.26	7.20
Volume (sx)	425	219
Volume (bbls)	177	58
Volume (cu.ft.)	995	327
Excess %	50	50



Rev 1

4-1/2" Production Liner

	BJ Services
Type	Poz/G
Planned top	5456-ft
Density (ppg)	13.3
Yield (cf/sx)	1.56
Mix water (gal/sx)	7.71
Volume (sx)	703
Volume (bbls)	196
Volume (cu.ft)	1099
Excess %	40

Wellhead & Pressure Control

The well head will be an 11" 5M multi-bowl system. A 3M 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 – 5735	9.0 – 9.5	38 – 45	8 – 14	<20
Production	Low solids, non-dispersed	5735 – 13819	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

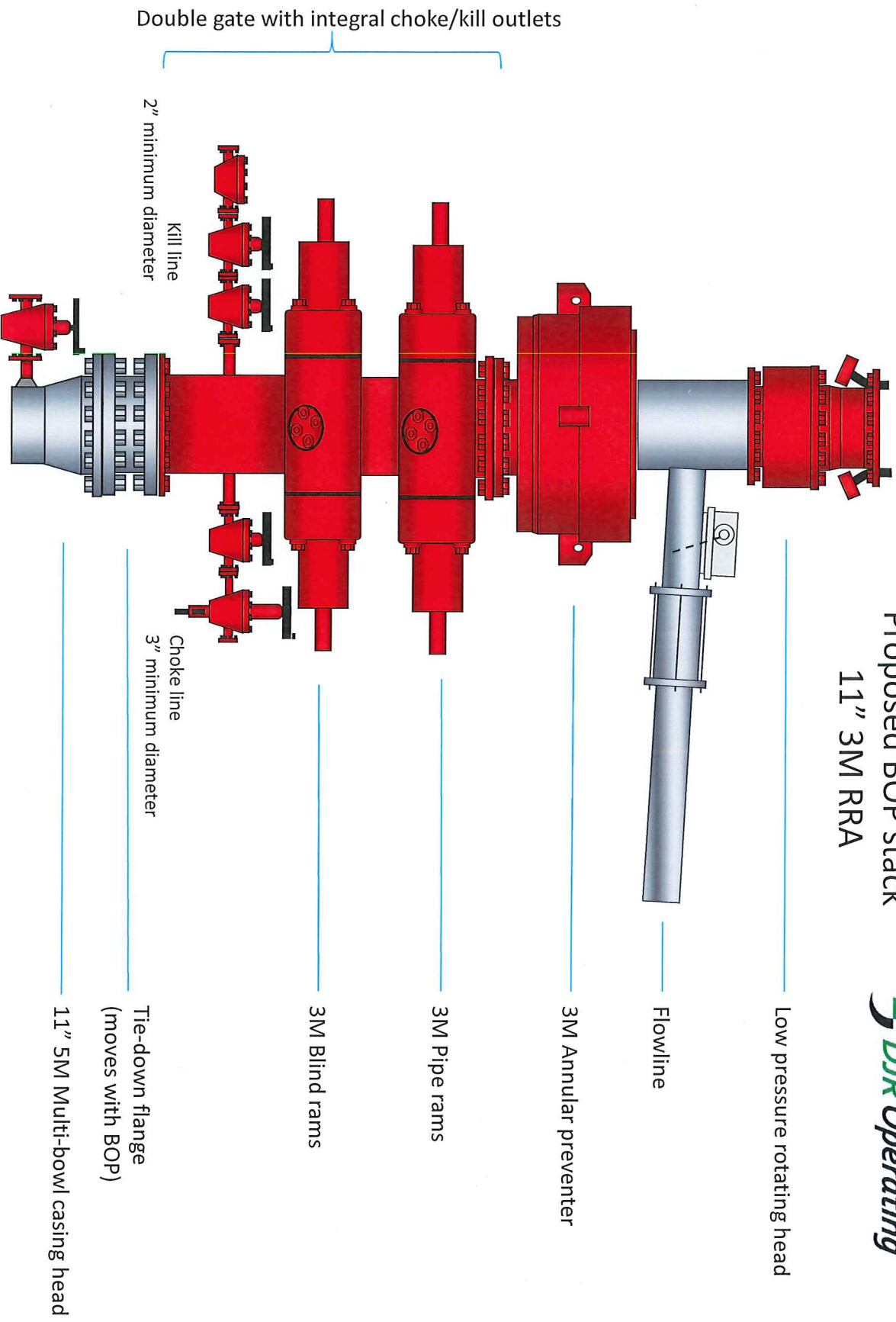
A closed loop, steel tank-based circulating system will be used. In addition to the rig solids control equipment, a dewatering centrifuge and chemical flocculation system will be operational to strip solids from the whole mud. All solids will be collected in 3-sided bins and will then be put into transports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



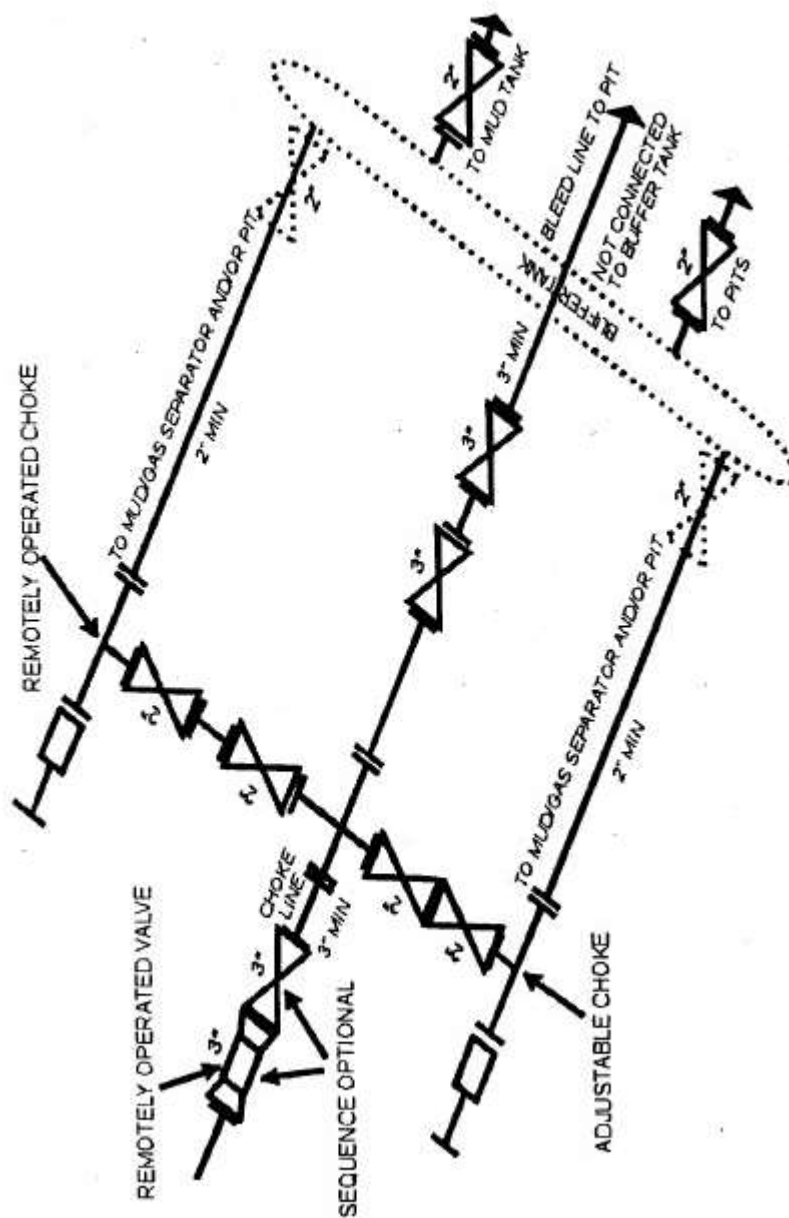
Proposed BOP stack 11" 3M RRA



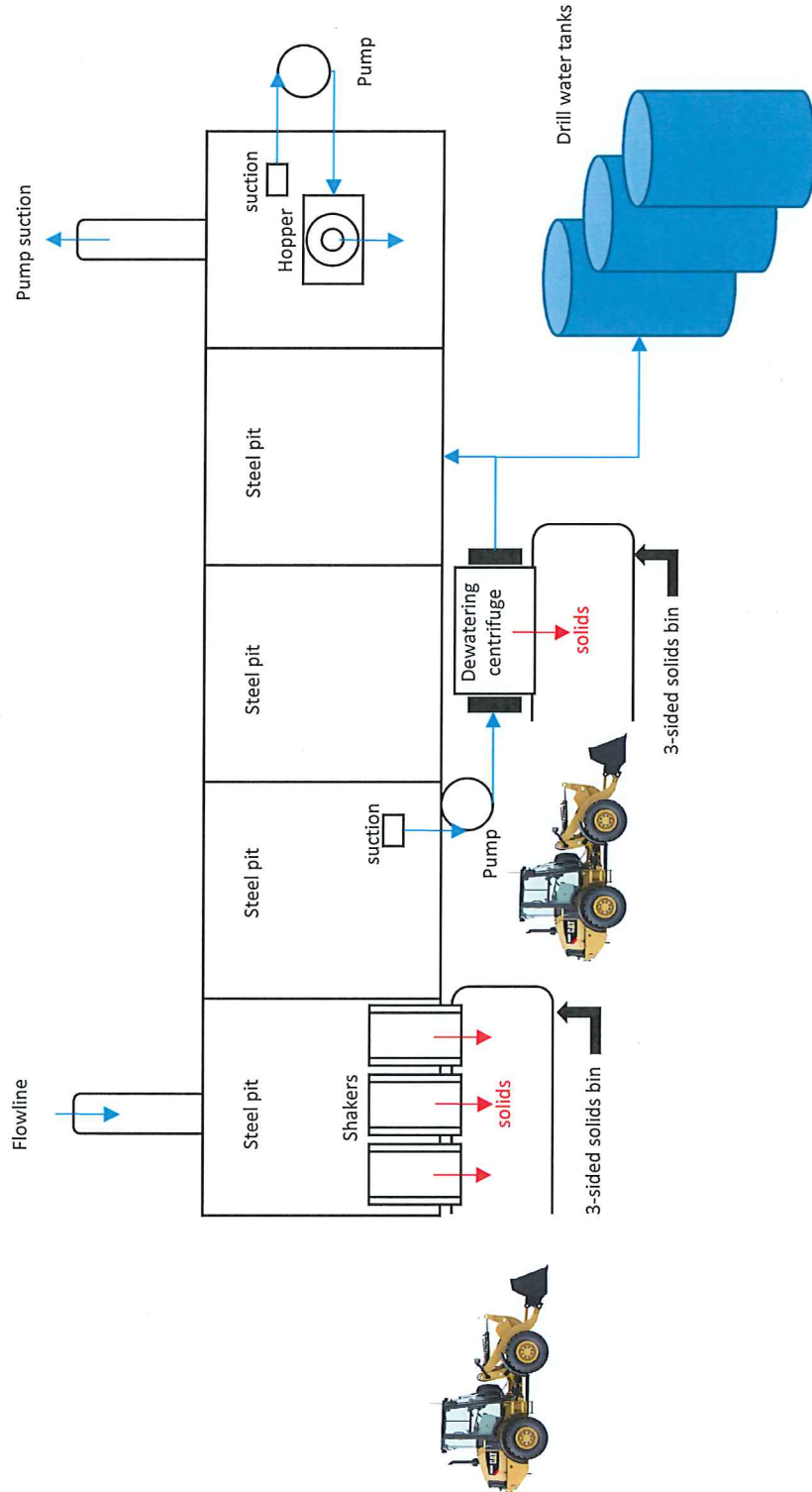


Choke Manifold

Actual system to conform with Onshore Order 2



Closed Loop Mud System





Company: DJR Operating
Project: Venado Canyon Unit
Site: O11 2206 Pad
Well: # 506H
Wellbore: Original Drilling
Design: APD

WELL DETAILS: # 506H

			GL 7075' & RKB 14' @ 7089ft	Latitude	Longitude
+N/-S	+E/-W	Northing	Easting	36.14822830	-107.43379000
0	0	1873494.21	2841050.28		

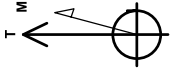
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Western Zone
System Datum: Mean Sea Level
Local North: True

Plan: APD (# 506H/Original Drilling)
Created By: Janie Collins Date: 16:38, May 04 2021

DESIGN TARGET DETAILS

Time	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
506H Heel	5369	-1180	447	1872316.56	2841502.29	36.14498810	-107.43227550
506H Toe	5322	-6885	6089	1866634.07	2847167.19	36.12937220	-107.41317210

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
0	0.00	0.00	0	0	0	0.00	0.00	0	
450	0.00	0.00	450	0	0	0.00	0.00	0	
922	9.44	176.35	920	-39	0	0.00	0.00	0	
450	9.44	176.35	450	-39	2	2.00	176.35	3.1	
5369	90.34	135.32	5369	-1180	447	0.00	41.38	1182	506H Heel
5322	90.34	135.32	5322	-6885	6089	0.00	0.00	9191	506H Toe



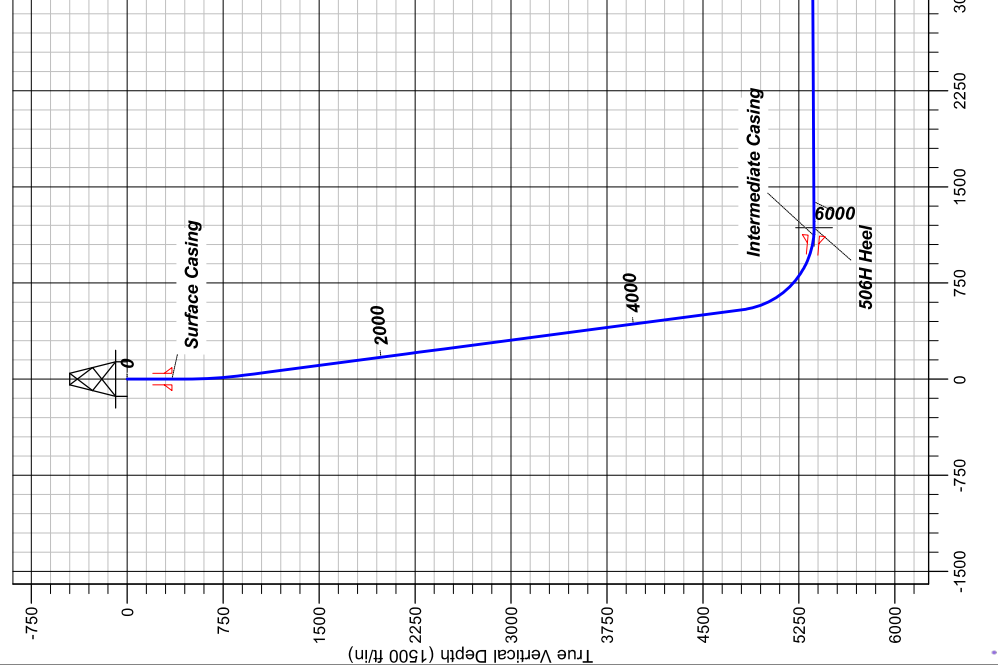
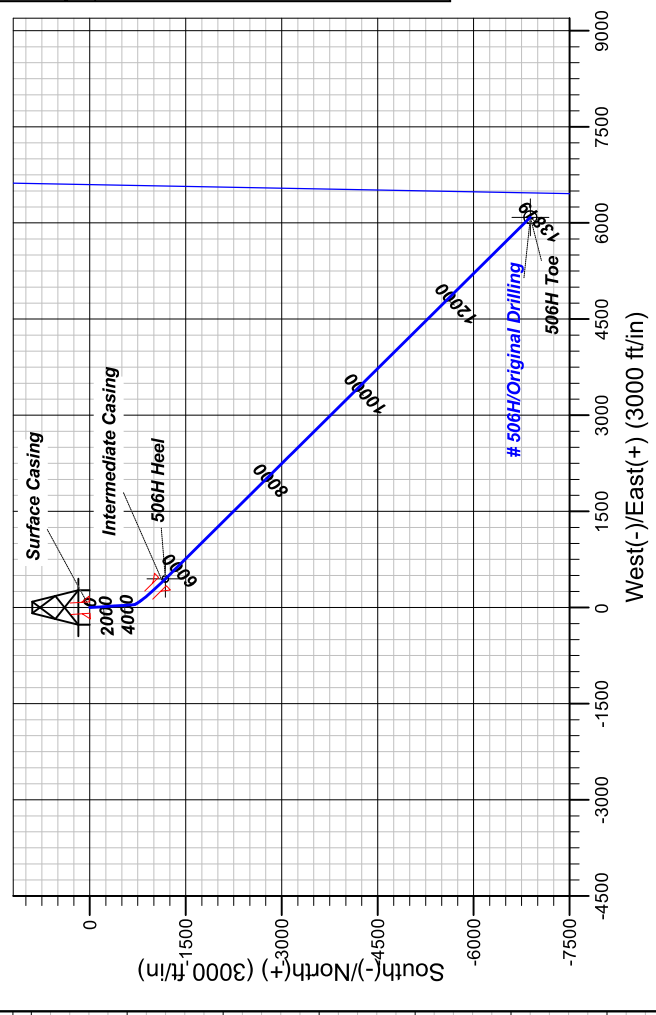
Azimuths to True North
Magnetic North: 8.2°
Magnetic Field
Strength: 49466.00
Dip Angle: 62.83°
Date: 12/31/2019
Model: IGRF2015

CASING DETAILS

TVD	MD	Nearest
350	350	Surface Casing
5367	5735	Intermediate Casing

FORMATION DETAILS

MDPath	Formation
1291	Ojo Alamo
1440	Kirtland
1661	Fruitland
1856	Pictured Cliffs
1949	Lewis
2662	Chacra
3374	Menefee
4110	Point Lookout
4254	Mancos
4614	Mancos Silt
5129	Gallup A
5171	Gallup B
5259	Gallup C



506H/Original Drilling/APD



DJR Operating

Venado Canyon Unit

O11 2206 Pad

506H - Slot 4

Original Drilling

Plan: APD

Standard Planning Report

04 May, 2021





Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 506H - Slot 4
Company:	DJR Operating	TVD Reference:	GL 7075' & RKB 14' @ 7089ft
Project:	Venado Canyon Unit	MD Reference:	GL 7075' & RKB 14' @ 7089ft
Site:	O11 2206 Pad	North Reference:	True
Well:	# 506H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

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	O11 2206 Pad				
Site Position:		Northing:	1,873,443.84 usft	Latitude:	36.14809030
From:	Lat/Long	Easting:	2,841,017.46 usft	Longitude:	-107.43390190
Position Uncertainty:	0 ft	Slot Radius:	13.20 in	Grid Convergence:	0.24

Well	# 506H - Slot 4					
Well Position	+N/-S	50 ft	Northing:	1,873,494.21 usft	Latitude:	36.1482283
	+E/-W	33 ft	Easting:	2,841,050.29 usft	Longitude:	-107.4337900
Position Uncertainty		0 ft	Wellhead Elevation:		Ground Level:	7075

Wellbore	Original Drilling				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/31/2019	8.80	62.86	49,466.63581893

Design	APD			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0	0	0	138.51

Plan Survey Tool Program	Date	5/4/2021		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0	13,819	APD (Original Drilling)	MWD+HDGM
				OWSG MWD + HDGM

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0	0.00	0.00	0	0	0	0.00	0.00	0.00	0.00	
450	0.00	0.00	450	0	0	0.00	0.00	0.00	0.00	
922	9.44	176.35	920	-39	2	2.00	2.00	0.00	176.35	
4870	9.44	176.35	4814	-685	44	0.00	0.00	0.00	0.00	
5795	90.34	135.32	5369	-1180	447	9.00	8.75	-4.44	-41.38	506H Heel
13,819	90.34	135.32	5322	-6885	6089	0.00	0.00	0.00	0.00	506H Toe



Lonestar Consulting, LLC

Planning Report



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Company:	DJR Operating	TVD Reference:	GL 7075' & RKB 14' @ 7089ft
Project:	Venado Canyon Unit	MD Reference:	GL 7075' & RKB 14' @ 7089ft
Site:	O11 2206 Pad	North Reference:	True
Well:	# 506H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0	0.00	0.00	0	0	0	0	0.00	0.00	0.00
100	0.00	0.00	100	0	0	0	0.00	0.00	0.00
200	0.00	0.00	200	0	0	0	0.00	0.00	0.00
300	0.00	0.00	300	0	0	0	0.00	0.00	0.00
400	0.00	0.00	400	0	0	0	0.00	0.00	0.00
450	0.00	0.00	450	0	0	0	0.00	0.00	0.00
500	1.00	176.35	500	0	0	0	2.00	2.00	0.00
600	3.00	176.35	600	-4	0	3	2.00	2.00	0.00
700	5.00	176.35	700	-11	1	9	2.00	2.00	0.00
800	7.00	176.35	799	-21	1	17	2.00	2.00	0.00
900	9.00	176.35	898	-35	2	28	2.00	2.00	0.00
922	9.44	176.35	920	-39	2	31	2.00	2.00	0.00
1000	9.44	176.35	997	-51	3	41	0.00	0.00	0.00
1100	9.44	176.35	1095	-68	4	54	0.00	0.00	0.00
1200	9.44	176.35	1194	-84	5	67	0.00	0.00	0.00
1300	9.44	176.35	1293	-101	6	80	0.00	0.00	0.00
1400	9.44	176.35	1391	-117	7	93	0.00	0.00	0.00
1500	9.44	176.35	1490	-133	9	105	0.00	0.00	0.00
1600	9.44	176.35	1589	-150	10	118	0.00	0.00	0.00
1700	9.44	176.35	1687	-166	11	131	0.00	0.00	0.00
1800	9.44	176.35	1786	-182	12	144	0.00	0.00	0.00
1900	9.44	176.35	1885	-199	13	157	0.00	0.00	0.00
2000	9.44	176.35	1983	-215	14	170	0.00	0.00	0.00
2100	9.44	176.35	2082	-232	15	183	0.00	0.00	0.00
2200	9.44	176.35	2181	-248	16	196	0.00	0.00	0.00
2300	9.44	176.35	2279	-264	17	209	0.00	0.00	0.00
2400	9.44	176.35	2378	-281	18	222	0.00	0.00	0.00
2500	9.44	176.35	2477	-297	19	235	0.00	0.00	0.00
2600	9.44	176.35	2575	-313	20	248	0.00	0.00	0.00
2700	9.44	176.35	2674	-330	21	261	0.00	0.00	0.00
2800	9.44	176.35	2772	-346	22	274	0.00	0.00	0.00
2900	9.44	176.35	2871	-362	23	287	0.00	0.00	0.00
3000	9.44	176.35	2970	-379	24	300	0.00	0.00	0.00
3100	9.44	176.35	3068	-395	25	313	0.00	0.00	0.00
3200	9.44	176.35	3167	-412	26	326	0.00	0.00	0.00
3300	9.44	176.35	3266	-428	27	339	0.00	0.00	0.00
3400	9.44	176.35	3364	-444	28	352	0.00	0.00	0.00
3500	9.44	176.35	3463	-461	29	365	0.00	0.00	0.00
3600	9.44	176.35	3562	-477	30	377	0.00	0.00	0.00
3700	9.44	176.35	3660	-493	31	390	0.00	0.00	0.00
3800	9.44	176.35	3759	-510	33	403	0.00	0.00	0.00
3900	9.44	176.35	3858	-526	34	416	0.00	0.00	0.00
4000	9.44	176.35	3956	-542	35	429	0.00	0.00	0.00
4100	9.44	176.35	4055	-559	36	442	0.00	0.00	0.00
4200	9.44	176.35	4153	-575	37	455	0.00	0.00	0.00
4300	9.44	176.35	4252	-592	38	468	0.00	0.00	0.00
4400	9.44	176.35	4351	-608	39	481	0.00	0.00	0.00
4500	9.44	176.35	4449	-624	40	494	0.00	0.00	0.00
4600	9.44	176.35	4548	-641	41	507	0.00	0.00	0.00
4700	9.44	176.35	4647	-657	42	520	0.00	0.00	0.00
4800	9.44	176.35	4745	-673	43	533	0.00	0.00	0.00
4870	9.44	176.35	4814	-685	44	542	0.00	0.00	0.00
4900	11.60	167.46	4844	-690	44	547	9.00	7.21	-29.69
5000	19.77	153.02	4940	-715	54	572	9.00	8.18	-14.44



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 506H - Slot 4
Company:	DJR Operating	TVD Reference:	GL 7075' & RKB 14' @ 7089ft
Project:	Venado Canyon Unit	MD Reference:	GL 7075' & RKB 14' @ 7089ft
Site:	O11 2206 Pad	North Reference:	True
Well:	# 506H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5100	28.44	146.98	5031	-750	75	612	9.00	8.67	-6.04
5200	37.26	143.60	5115	-795	106	666	9.00	8.82	-3.37
5300	46.13	141.38	5190	-847	147	732	9.00	8.88	-2.23
5400	55.04	139.73	5253	-907	196	809	9.00	8.91	-1.64
5500	63.97	138.41	5304	-972	252	895	9.00	8.93	-1.32
5600	72.91	137.28	5341	-1041	314	988	9.00	8.94	-1.13
5700	81.85	136.26	5363	-1112	381	1085	9.00	8.94	-1.03
5795	90.34	135.32	5369	-1180	447	1180	9.00	8.95	-0.98
5800	90.34	135.32	5369	-1183	451	1185	0.00	0.00	0.00
5900	90.34	135.32	5368	-1254	521	1285	0.00	0.00	0.00
6000	90.34	135.32	5368	-1325	591	1385	0.00	0.00	0.00
6100	90.34	135.32	5367	-1397	662	1485	0.00	0.00	0.00
6200	90.34	135.32	5367	-1468	732	1584	0.00	0.00	0.00
6300	90.34	135.32	5366	-1539	802	1684	0.00	0.00	0.00
6400	90.34	135.32	5365	-1610	873	1784	0.00	0.00	0.00
6500	90.34	135.32	5365	-1681	943	1884	0.00	0.00	0.00
6600	90.34	135.32	5364	-1752	1013	1984	0.00	0.00	0.00
6700	90.34	135.32	5364	-1823	1084	2084	0.00	0.00	0.00
6800	90.34	135.32	5363	-1894	1154	2183	0.00	0.00	0.00
6900	90.34	135.32	5363	-1965	1224	2283	0.00	0.00	0.00
7000	90.34	135.32	5362	-2037	1295	2383	0.00	0.00	0.00
7100	90.34	135.32	5361	-2108	1365	2483	0.00	0.00	0.00
7200	90.34	135.32	5361	-2179	1435	2583	0.00	0.00	0.00
7300	90.34	135.32	5360	-2250	1505	2683	0.00	0.00	0.00
7400	90.34	135.32	5360	-2321	1576	2783	0.00	0.00	0.00
7500	90.34	135.32	5359	-2392	1646	2882	0.00	0.00	0.00
7600	90.34	135.32	5358	-2463	1716	2982	0.00	0.00	0.00
7700	90.34	135.32	5358	-2534	1787	3082	0.00	0.00	0.00
7800	90.34	135.32	5357	-2605	1857	3182	0.00	0.00	0.00
7900	90.34	135.32	5357	-2676	1927	3282	0.00	0.00	0.00
8000	90.34	135.32	5356	-2748	1998	3382	0.00	0.00	0.00
8100	90.34	135.32	5355	-2819	2068	3481	0.00	0.00	0.00
8200	90.34	135.32	5355	-2890	2138	3581	0.00	0.00	0.00
8300	90.34	135.32	5354	-2961	2209	3681	0.00	0.00	0.00
8400	90.34	135.32	5354	-3032	2279	3781	0.00	0.00	0.00
8500	90.34	135.32	5353	-3103	2349	3881	0.00	0.00	0.00
8600	90.34	135.32	5353	-3174	2419	3981	0.00	0.00	0.00
8700	90.34	135.32	5352	-3245	2490	4080	0.00	0.00	0.00
8800	90.34	135.32	5351	-3316	2560	4180	0.00	0.00	0.00
8900	90.34	135.32	5351	-3388	2630	4280	0.00	0.00	0.00
9000	90.34	135.32	5350	-3459	2701	4380	0.00	0.00	0.00
9100	90.34	135.32	5350	-3530	2771	4480	0.00	0.00	0.00
9200	90.34	135.32	5349	-3601	2841	4580	0.00	0.00	0.00
9300	90.34	135.32	5348	-3672	2912	4680	0.00	0.00	0.00
9400	90.34	135.32	5348	-3743	2982	4779	0.00	0.00	0.00
9500	90.34	135.32	5347	-3814	3052	4879	0.00	0.00	0.00
9600	90.34	135.32	5347	-3885	3123	4979	0.00	0.00	0.00
9700	90.34	135.32	5346	-3956	3193	5079	0.00	0.00	0.00
9800	90.34	135.32	5346	-4028	3263	5179	0.00	0.00	0.00
9900	90.34	135.32	5345	-4099	3333	5279	0.00	0.00	0.00
10,000	90.34	135.32	5344	-4170	3404	5378	0.00	0.00	0.00
10,100	90.34	135.32	5344	-4241	3474	5478	0.00	0.00	0.00
10,200	90.34	135.32	5343	-4312	3544	5578	0.00	0.00	0.00
10,300	90.34	135.32	5343	-4383	3615	5678	0.00	0.00	0.00



Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 506H - Slot 4
Company:	DJR Operating	TVD Reference:	GL 7075' & RKB 14' @ 7089ft
Project:	Venado Canyon Unit	MD Reference:	GL 7075' & RKB 14' @ 7089ft
Site:	O11 2206 Pad	North Reference:	True
Well:	# 506H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,400	90.34	135.32	5342	-4454	3685	5778	0.00	0.00	0.00	
10,500	90.34	135.32	5341	-4525	3755	5878	0.00	0.00	0.00	
10,600	90.34	135.32	5341	-4596	3826	5978	0.00	0.00	0.00	
10,700	90.34	135.32	5340	-4668	3896	6077	0.00	0.00	0.00	
10,800	90.34	135.32	5340	-4739	3966	6177	0.00	0.00	0.00	
10,900	90.34	135.32	5339	-4810	4037	6277	0.00	0.00	0.00	
11,000	90.34	135.32	5338	-4881	4107	6377	0.00	0.00	0.00	
11,100	90.34	135.32	5338	-4952	4177	6477	0.00	0.00	0.00	
11,200	90.34	135.32	5337	-5023	4247	6577	0.00	0.00	0.00	
11,300	90.34	135.32	5337	-5094	4318	6676	0.00	0.00	0.00	
11,400	90.34	135.32	5336	-5165	4388	6776	0.00	0.00	0.00	
11,500	90.34	135.32	5336	-5236	4458	6876	0.00	0.00	0.00	
11,600	90.34	135.32	5335	-5308	4529	6976	0.00	0.00	0.00	
11,700	90.34	135.32	5334	-5379	4599	7076	0.00	0.00	0.00	
11,800	90.34	135.32	5334	-5450	4669	7176	0.00	0.00	0.00	
11,900	90.34	135.32	5333	-5521	4740	7275	0.00	0.00	0.00	
12,000	90.34	135.32	5333	-5592	4810	7375	0.00	0.00	0.00	
12,100	90.34	135.32	5332	-5663	4880	7475	0.00	0.00	0.00	
12,200	90.34	135.32	5331	-5734	4951	7575	0.00	0.00	0.00	
12,300	90.34	135.32	5331	-5805	5021	7675	0.00	0.00	0.00	
12,400	90.34	135.32	5330	-5876	5091	7775	0.00	0.00	0.00	
12,500	90.34	135.32	5330	-5947	5161	7875	0.00	0.00	0.00	
12,600	90.34	135.32	5329	-6019	5232	7974	0.00	0.00	0.00	
12,700	90.34	135.32	5329	-6090	5302	8074	0.00	0.00	0.00	
12,800	90.34	135.32	5328	-6161	5372	8174	0.00	0.00	0.00	
12,900	90.34	135.32	5327	-6232	5443	8274	0.00	0.00	0.00	
13,000	90.34	135.32	5327	-6303	5513	8374	0.00	0.00	0.00	
13,100	90.34	135.32	5326	-6374	5583	8474	0.00	0.00	0.00	
13,200	90.34	135.32	5326	-6445	5654	8573	0.00	0.00	0.00	
13,300	90.34	135.32	5325	-6516	5724	8673	0.00	0.00	0.00	
13,400	90.34	135.32	5324	-6587	5794	8773	0.00	0.00	0.00	
13,500	90.34	135.32	5324	-6659	5865	8873	0.00	0.00	0.00	
13,600	90.34	135.32	5323	-6730	5935	8973	0.00	0.00	0.00	
13,700	90.34	135.32	5323	-6801	6005	9073	0.00	0.00	0.00	
13,800	90.34	135.32	5322	-6872	6075	9172	0.00	0.00	0.00	
13,819	90.34	135.32	5322	-6885	6089	9191	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
506H Toe	0.00	0.00	5322	-6885	6089	1,866,634.08	2,847,167.20	36.12931220	-107.41317210	
- plan hits target center										
- Circle (radius 100)										
506H Heel	0.00	0.00	5369	-1180	447	1,872,316.56	2,841,502.29	36.14498810	-107.43227550	
- plan hits target center										
- Circle (radius 50)										



Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 506H - Slot 4
Company:	DJR Operating	TVD Reference:	GL 7075' & RKB 14' @ 7089ft
Project:	Venado Canyon Unit	MD Reference:	GL 7075' & RKB 14' @ 7089ft
Site:	O11 2206 Pad	North Reference:	True
Well:	# 506H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
350	350	Surface Casing	9.62	12.25	
5735	5367	Intermediate Casing	7.00	8.75	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1298	1291	Ojo Alamo		0.00	0.00	
1449	1440	Kirtland		0.00	0.00	
1673	1661	Fruitland		0.00	0.00	
1871	1856	Pictured Cliffs		0.00	0.00	
1965	1949	Lewis		0.00	0.00	
2688	2662	Chacra		0.00	0.00	
3374	3339	Menefee		0.00	0.00	
4156	4110	Point Lookout		0.00	0.00	
4302	4254	Mancos		0.00	0.00	
4667	4614	Mancos Silt		0.00	0.00	
5217	5129	Gallup A		0.00	0.00	
5273	5171	Gallup B		0.00	0.00	
5410	5259	Gallup C		0.00	0.00	



DJR Operating

Venado Canyon Unit

O11 2206 Pad

506H

Original Drilling

APD

Anticollision Report

04 May, 2021





Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 506H - Slot 4
Project:	Venado Canyon Unit	TVD Reference:	GL 7075' & RKB 14' @ 7089ft
Reference Site:	O11 2206 Pad	MD Reference:	GL 7075' & RKB 14' @ 7089ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Reference	APD		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 10,000ft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	5/4/2021		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0	13,819	APD (Original Drilling)	MWD+HDGM	OWSG MWD + HDGM	

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
O11 2206 Pad						
# 504H - Original Drilling - APD	926	923	20	14	3.268	CC, ES
# 504H - Original Drilling - APD	1000	997	21	14	3.123	SF
# 505H - Original Drilling - APD	402	402	40	37	16.169	CC
# 505H - Original Drilling - APD	922	916	43	37	7.059	ES
# 505H - Original Drilling - APD	13,819	12,996	757	388	2.055	SF
# 507H - Original Drilling - APD	450	450	60	57	21.339	CC
# 507H - Original Drilling - APD	600	597	61	57	15.893	ES
# 507H - Original Drilling - APD	1100	1087	74	67	10.104	SF
# 508H - Original Drilling - APD	450	450	40	37	14.178	CC
# 508H - Original Drilling - APD	500	500	40	37	12.736	ES
# 508H - Original Drilling - APD	13,200	12,774	766	411	2.156	SF
# 509H - Original Drilling - APD	450	450	20	17	7.097	CC
# 509H - Original Drilling - APD	500	500	20	17	6.366	ES
# 509H - Original Drilling - APD	800	801	26	21	5.027	SF

Offset Design: O11 2206 Pad - # 504H - Original Drilling - APD													Offset Site Error: 0 ft	
Survey Program: 0-MWD+HDGM								Rule Assigned:					Offset Well Error: 0 ft	
Reference	Vertical	Offset		Semi Major Axis				Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
Measured Depth (ft)	Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0	0	0	0	0	0	-146.78	-17	-11	20					
100	100	100	100	0	0	-146.78	-17	-11	20	20	0.31	65.208		
200	200	200	200	1	1	-146.78	-17	-11	20	19	1.03	19.608		
300	300	300	300	1	1	-146.78	-17	-11	20	18	1.74	11.539		
400	400	400	400	1	1	-146.78	-17	-11	20	18	2.46	8.175		
450	450	450	450	1	1	-146.78	-17	-11	20	17	2.82	7.135		
500	500	500	500	2	2	36.87	-17	-11	20	17	3.16	6.366		
600	600	599	599	2	2	36.88	-21	-11	20	16	3.82	5.259		
700	700	699	698	2	2	36.90	-28	-10	20	16	4.49	4.457		
800	799	798	797	3	3	36.92	-38	-10	20	15	5.19	3.851		
900	898	898	896	3	3	36.96	-52	-9	20	14	5.89	3.375		
922	920	919	917	3	3	36.97	-55	-8	20	14	6.05	3.283		
926	923	923	921	3	3	36.97	-56	-8	20	14	6.08	3.268	CC, ES	
1000	997	997	994	3	3	35.24	-69	-8	21	14	6.61	3.123	SF	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 506H - Slot 4
Project:	Venado Canyon Unit	TVD Reference:	GL 7075' & RKB 14' @ 7089ft
Reference Site:	O11 2206 Pad	MD Reference:	GL 7075' & RKB 14' @ 7089ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: O11 2206 Pad - # 504H - Original Drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
1100	1095	1096	1091	4	4	29.23	-89	-6	24	17	7.31	3.322	
1200	1194	1195	1187	4	4	22.18	-113	-5	31	23	8.00	3.914	
1300	1293	1294	1282	5	5	16.50	-139	-3	41	33	8.70	4.756	
1400	1391	1393	1378	5	5	12.97	-166	-1	52	43	9.44	5.516	
1500	1490	1493	1473	5	6	10.64	-193	1	63	53	10.18	6.172	
1600	1589	1592	1569	6	6	8.99	-220	3	74	63	10.93	6.742	
1700	1687	1692	1665	6	7	7.77	-247	4	85	73	11.68	7.240	
1800	1786	1791	1760	7	7	6.82	-274	6	96	83	12.44	7.678	
1900	1885	1890	1856	7	8	6.08	-301	8	106	93	13.20	8.065	
2000	1983	1990	1952	8	8	5.47	-328	10	117	103	13.96	8.410	
2100	2082	2089	2047	8	9	4.96	-355	12	128	114	14.73	8.719	
2200	2181	2188	2143	8	9	4.54	-382	13	139	124	15.49	8.997	
2300	2279	2288	2238	9	10	4.17	-409	15	150	134	16.26	9.248	
2400	2378	2387	2334	9	10	3.86	-436	17	161	144	17.03	9.476	
2500	2476	2487	2430	10	11	3.58	-463	19	172	155	17.80	9.685	
2600	2575	2586	2525	10	11	3.34	-490	21	183	165	18.57	9.876	
2700	2674	2685	2621	10	12	3.13	-517	22	194	175	19.34	10.051	
2800	2772	2785	2717	11	12	2.94	-544	24	205	185	20.11	10.213	
2900	2871	2884	2812	11	13	2.77	-571	26	216	196	20.89	10.362	
3000	2970	2984	2908	12	13	2.61	-598	28	227	206	21.66	10.501	
3100	3068	3083	3004	12	14	2.47	-625	30	238	216	22.43	10.630	
3200	3167	3182	3099	13	14	2.34	-652	31	249	226	23.21	10.750	
3300	3266	3282	3195	13	15	2.23	-679	33	260	237	23.98	10.862	
3400	3364	3381	3291	13	15	2.12	-705	35	272	247	24.76	10.968	
3500	3463	3481	3386	14	16	2.02	-732	37	283	257	25.53	11.066	
3600	3562	3580	3482	14	16	1.93	-759	39	294	267	26.31	11.159	
3700	3660	3679	3578	15	17	1.84	-786	40	305	277	27.08	11.246	
3800	3759	3779	3673	15	17	1.76	-813	42	316	288	27.86	11.329	
3900	3858	3878	3769	16	18	1.69	-840	44	327	298	28.63	11.407	
4000	3956	3977	3864	16	19	1.62	-867	46	338	308	29.41	11.481	
4100	4055	4077	3960	16	19	1.56	-894	48	349	318	30.19	11.551	
4200	4153	4176	4056	17	20	1.50	-921	49	360	329	30.96	11.617	
4300	4252	4276	4151	17	20	1.44	-948	51	371	339	31.74	11.680	
4400	4351	4375	4247	18	21	1.38	-975	53	382	349	32.52	11.740	
4500	4449	4474	4343	18	21	1.33	-1002	55	393	359	33.29	11.797	
4600	4548	4574	4438	19	22	1.29	-1029	57	404	370	34.07	11.852	
4700	4647	4673	4534	19	22	1.24	-1056	58	415	380	34.85	11.904	
4800	4745	4791	4648	19	23	1.29	-1087	60	425	390	35.78	11.891	
4870	4814	4927	4781	20	23	3.29	-1108	46	425	388	36.37	11.679	
4900	4844	4982	4834	20	23	14.02	-1111	35	421	384	36.42	11.556	
4950	4893	5064	4914	20	24	27.87	-1108	12	409	373	36.44	11.226	
5000	4940	5133	4978	20	24	39.65	-1100	-12	393	356	36.65	10.714	
5050	4987	5188	5027	21	24	50.33	-1090	-34	374	337	37.24	10.041	
5100	5031	5229	5062	21	24	59.72	-1080	-53	355	317	38.26	9.287	
5150	5074	5259	5087	21	24	67.42	-1072	-67	339	300	39.62	8.561	
5200	5115	5281	5104	22	24	73.18	-1066	-78	328	286	41.12	7.967	
5250	5154	5294	5115	22	24	76.99	-1061	-85	322	280	42.48	7.583	
5264	5164	5297	5118	22	24	77.73	-1060	-86	322	279	42.81	7.518	
5300	5190	5303	5122	22	24	79.00	-1059	-89	324	280	43.48	7.446	
5350	5223	5306	5124	23	24	79.37	-1057	-91	333	289	43.99	7.562	
5400	5253	5306	5124	23	24	78.27	-1057	-91	348	304	44.07	7.907	
5450	5280	5300	5120	24	24	75.51	-1059	-88	370	326	43.75	8.460	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 506H - Slot 4
Project:	Venado Canyon Unit	TVD Reference:	GL 7075' & RKB 14' @ 7089ft
Reference Site:	O11 2206 Pad	MD Reference:	GL 7075' & RKB 14' @ 7089ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: O11 2206 Pad - # 504H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program:		0-MWD+HDGM						Rule Assigned:					Offset Well Error:	0 ft
Measured Depth	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre		Distance		Minimum	Separation	Warning	
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Separation (ft)	Factor		
5500	5304	5300	5120	24	24	73.04	-1059	-88	396	353	43.60	9.092		
5550	5324	5288	5111	25	24	68.04	-1063	-82	426	383	43.03	9.905		
5600	5341	5279	5103	25	24	63.05	-1066	-77	459	416	42.67	10.748		
5650	5354	5267	5094	26	24	57.72	-1070	-71	493	450	42.39	11.621		
5700	5363	5250	5080	27	24	51.71	-1075	-63	528	486	42.02	12.557		
5750	5368	5250	5080	28	24	48.00	-1075	-63	563	521	42.46	13.264		
5795	5369	5229	5062	28	24	42.68	-1081	-52	595	553	42.15	14.112		
5800	5369	5227	5060	28	24	42.54	-1081	-52	598	556	42.15	14.198		
5900	5368	5200	5037	30	24	40.08	-1088	-39	672	630	42.27	15.899		
6000	5368	5177	5017	32	24	38.06	-1093	-29	750	708	42.40	17.689		
6100	5367	5150	4993	34	24	35.85	-1098	-18	832	789	42.37	19.631		
6200	5367	5150	4993	36	24	35.85	-1098	-18	916	873	42.94	21.334		
6300	5366	5123	4968	38	24	33.70	-1102	-8	1003	960	42.78	23.438		
6400	5365	5100	4947	40	24	32.02	-1105	1	1091	1048	42.70	25.549		
6500	5365	5100	4947	42	24	32.02	-1105	1	1181	1138	43.06	27.426		
6600	5364	5100	4947	44	24	32.02	-1105	1	1272	1229	43.33	29.356		
6700	5364	5074	4923	47	24	30.22	-1108	9	1364	1321	43.13	31.620		
6800	5363	5050	4900	49	24	28.59	-1109	17	1457	1414	42.96	33.918		
6900	5363	5050	4900	51	24	28.59	-1109	17	1550	1507	43.16	35.921		
7000	5362	5050	4900	54	24	28.59	-1109	17	1645	1601	43.34	37.951		
7100	5361	5050	4900	56	24	28.59	-1109	17	1740	1696	43.49	40.002		
7200	5361	5050	4900	58	24	28.59	-1109	17	1835	1791	43.62	42.070		
7300	5360	5029	4881	61	24	27.29	-1110	23	1930	1887	43.47	44.407		
7400	5360	5024	4875	63	24	26.95	-1111	24	2026	1983	43.51	46.569		
7500	5359	5000	4852	66	24	25.54	-1111	31	2123	2080	43.33	48.996		
7600	5358	5000	4852	68	24	25.54	-1111	31	2219	2176	43.43	51.099		
7700	5358	5000	4852	70	24	25.54	-1111	31	2316	2273	43.53	53.211		
7800	5357	5000	4852	73	24	25.54	-1111	31	2413	2370	43.61	55.330		
7900	5357	5000	4852	75	24	25.54	-1111	31	2510	2467	43.69	57.454		
8000	5356	5000	4852	78	24	25.54	-1111	31	2608	2564	43.77	59.582		
8100	5355	5000	4852	80	24	25.54	-1111	31	2705	2662	43.84	61.713		
8200	5355	5000	4852	83	24	25.54	-1111	31	2803	2759	43.91	63.847		
8300	5354	5000	4852	85	24	25.54	-1111	31	2901	2857	43.97	65.982		
8400	5354	5000	4852	88	24	25.54	-1111	31	2999	2955	44.03	68.118		
8500	5353	5000	4852	90	24	25.54	-1111	31	3097	3053	44.09	70.255		
8600	5353	5000	4852	93	24	25.54	-1111	31	3196	3152	44.15	72.391		
8700	5352	4977	4830	95	23	24.26	-1111	36	3294	3250	43.99	74.874		
8800	5351	4975	4827	98	23	24.13	-1111	37	3392	3348	44.03	77.048		
8900	5351	4972	4825	100	23	24.01	-1111	37	3491	3447	44.06	79.220		
9000	5350	4950	4803	103	23	22.85	-1110	42	3590	3546	43.92	81.726		
9100	5350	4950	4803	105	23	22.85	-1110	42	3688	3644	43.98	83.860		
9200	5349	4950	4803	108	23	22.85	-1110	42	3787	3743	44.04	85.992		
9300	5348	4950	4803	110	23	22.85	-1110	42	3885	3841	44.09	88.121		
9400	5348	4950	4803	113	23	22.85	-1110	42	3984	3940	44.15	90.248		
9500	5347	4950	4803	116	23	22.85	-1110	42	4083	4039	44.20	92.371		
9600	5347	4950	4803	118	23	22.85	-1110	42	4182	4138	44.26	94.492		
9700	5346	4950	4803	121	23	22.85	-1110	42	4281	4237	44.31	96.609		
9800	5346	4950	4803	123	23	22.85	-1110	42	4380	4335	44.37	98.722		
9900	5345	4950	4803	126	23	22.85	-1110	42	4479	4434	44.42	100.832		
10,000	5344	4950	4803	128	23	22.85	-1110	42	4578	4533	44.47	102.937		
10,100	5344	4950	4803	131	23	22.85	-1110	42	4677	4633	44.53	105.039		
10,200	5343	4950	4803	133	23	22.85	-1110	42	4776	4732	44.58	107.136		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 506H - Slot 4
Project:	Venado Canyon Unit	TVD Reference:	GL 7075' & RKB 14' @ 7089ft
Reference Site:	O11 2206 Pad	MD Reference:	GL 7075' & RKB 14' @ 7089ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: O11 2206 Pad - # 504H - Original Drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
10,300	5343	4950	4803	136	23	22.85	-1110	42	4875	4831	44.63	109.228	
10,400	5342	4950	4803	138	23	22.85	-1110	42	4975	4930	44.69	111.315	
10,500	5341	4950	4803	141	23	22.85	-1110	42	5074	5029	44.74	113.398	
10,600	5341	4950	4803	144	23	22.85	-1110	42	5173	5128	44.80	115.476	
10,700	5340	4950	4803	146	23	22.85	-1110	42	5272	5228	44.85	117.548	
10,800	5340	4950	4803	149	23	22.85	-1110	42	5372	5327	44.91	119.615	
10,900	5339	4950	4803	151	23	22.85	-1110	42	5471	5426	44.96	121.677	
11,000	5338	4950	4803	154	23	22.85	-1110	42	5570	5525	45.02	123.733	
11,100	5338	4950	4803	156	23	22.85	-1110	42	5670	5625	45.08	125.784	
11,200	5337	4950	4803	159	23	22.85	-1110	42	5769	5724	45.13	127.829	
11,300	5337	4950	4803	161	23	22.85	-1110	42	5869	5824	45.19	129.868	
11,400	5336	4950	4803	164	23	22.85	-1110	42	5968	5923	45.25	131.902	
11,500	5336	4950	4803	167	23	22.85	-1110	42	6068	6022	45.30	133.929	
11,600	5335	4950	4803	169	23	22.85	-1110	42	6167	6122	45.36	135.950	
11,700	5334	4950	4803	172	23	22.85	-1110	42	6267	6221	45.42	137.965	
11,800	5334	4950	4803	174	23	22.85	-1110	42	6366	6321	45.48	139.974	
11,900	5333	4950	4803	177	23	22.85	-1110	42	6466	6420	45.54	141.977	
12,000	5333	4950	4803	179	23	22.85	-1110	42	6565	6520	45.60	143.973	
12,100	5332	4950	4803	182	23	22.85	-1110	42	6665	6619	45.66	145.963	
12,200	5331	4950	4803	185	23	22.85	-1110	42	6764	6719	45.72	147.946	
12,300	5331	4950	4803	187	23	22.85	-1110	42	6864	6818	45.78	149.923	
12,400	5330	4950	4803	190	23	22.85	-1110	42	6964	6918	45.85	151.893	
12,500	5330	4950	4803	192	23	22.85	-1110	42	7063	7017	45.91	153.856	
12,600	5329	4950	4803	195	23	22.85	-1110	42	7163	7117	45.97	155.813	
12,700	5329	4950	4803	197	23	22.85	-1110	42	7262	7216	46.03	157.762	
12,800	5328	4950	4803	200	23	22.85	-1110	42	7362	7316	46.10	159.705	
12,900	5327	4950	4803	203	23	22.85	-1110	42	7462	7416	46.16	161.641	
13,000	5327	4950	4803	205	23	22.85	-1110	42	7561	7515	46.23	163.570	
13,100	5326	4926	4780	208	23	21.69	-1108	46	7661	7614	46.13	166.070	
13,200	5326	4926	4780	210	23	21.66	-1108	46	7760	7714	46.19	168.002	
13,300	5325	4925	4779	213	23	21.64	-1108	47	7860	7814	46.26	169.926	
13,400	5324	4925	4779	215	23	21.61	-1108	47	7960	7913	46.32	171.844	
13,500	5324	4924	4778	218	23	21.59	-1108	47	8059	8013	46.38	173.754	
13,600	5323	4924	4778	221	23	21.57	-1108	47	8159	8113	46.45	175.657	
13,700	5323	4923	4777	223	23	21.54	-1108	47	8259	8212	46.51	177.552	
13,800	5322	4900	4754	226	23	20.47	-1106	51	8359	8312	46.43	180.049	
13,819	5322	4900	4754	226	23	20.47	-1106	51	8378	8331	46.44	180.402	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 506H - Slot 4
Project:	Venado Canyon Unit	TVD Reference:	GL 7075' & RKB 14' @ 7089ft
Reference Site:	O11 2206 Pad	MD Reference:	GL 7075' & RKB 14' @ 7089ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: O11 2206 Pad - # 505H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0 ft
Reference	Offset	Rule Assigned:												
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre	Distance	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0	0	0	0	0	0	-146.75	-33	-22	40					
100	100	100	100	0	0	-146.75	-33	-22	40	40	0.31	129.613		
200	200	200	200	1	1	-146.75	-33	-22	40	39	1.03	38.975		
300	300	300	300	1	1	-146.75	-33	-22	40	38	1.74	22.936		
400	400	400	400	1	1	-146.75	-33	-22	40	37	2.46	16.249		
402	402	402	402	1	1	-146.75	-33	-22	40	37	2.47	16.169 CC		
450	450	450	450	1	1	-146.85	-34	-22	40	37	2.81	14.237		
500	500	499	499	2	2	36.42	-34	-22	40	37	3.15	12.811		
600	600	598	598	2	2	35.66	-39	-21	41	37	3.81	10.757		
700	700	697	696	2	2	34.88	-46	-21	42	37	4.49	9.262		
800	799	796	795	3	3	34.10	-57	-20	42	37	5.18	8.126		
900	898	895	892	3	3	33.29	-72	-19	43	37	5.88	7.232		
922	920	916	914	3	3	33.11	-75	-19	43	37	6.03	7.059 ES		
1000	997	993	990	3	3	31.74	-89	-17	44	37	6.59	6.646		
1100	1095	1092	1086	4	4	28.23	-110	-16	48	41	7.30	6.578		
1200	1194	1190	1181	4	4	23.76	-135	-14	55	47	8.00	6.939		
1300	1293	1287	1274	5	5	19.33	-162	-12	66	58	8.68	7.647		
1400	1391	1384	1366	5	5	15.48	-192	-9	81	71	9.36	8.633		
1500	1490	1479	1455	5	6	12.36	-225	-6	99	89	10.03	9.840		
1600	1589	1573	1543	6	6	9.92	-260	-4	120	109	10.69	11.220		
1700	1687	1669	1631	6	7	8.02	-298	-1	144	132	11.42	12.591		
1800	1786	1766	1720	7	7	6.63	-336	3	168	156	12.18	13.776		
1900	1885	1863	1809	7	8	5.60	-375	6	192	179	12.95	14.819		
2000	1983	1960	1898	8	9	4.79	-413	9	216	202	13.72	15.742		
2100	2082	2057	1986	8	9	4.14	-452	12	240	226	14.50	16.564		
2200	2181	2154	2075	8	10	3.62	-490	15	264	249	15.28	17.299		
2300	2279	2251	2164	9	10	3.18	-529	18	289	273	16.07	17.961		
2400	2378	2348	2253	9	11	2.81	-568	21	313	296	16.86	18.559		
2500	2476	2445	2342	10	12	2.49	-606	24	337	319	17.65	19.101		
2600	2575	2542	2431	10	12	2.22	-645	28	361	343	18.44	19.596		
2700	2674	2639	2520	10	13	1.97	-683	31	386	366	19.23	20.048		
2800	2772	2736	2609	11	14	1.76	-722	34	410	390	20.03	20.464		
2900	2871	2833	2698	11	14	1.57	-760	37	434	413	20.82	20.847		
3000	2970	2930	2787	12	15	1.41	-799	40	458	437	21.62	21.200		
3100	3068	3027	2876	12	16	1.26	-837	43	483	460	22.42	21.528		
3200	3167	3124	2965	13	16	1.12	-876	46	507	484	23.22	21.833		
3300	3266	3221	3054	13	17	0.99	-915	49	531	507	24.02	22.116		
3400	3364	3318	3143	13	18	0.88	-953	52	555	531	24.82	22.381		
3500	3463	3415	3232	14	18	0.78	-992	56	580	554	25.62	22.629		
3600	3562	3512	3321	14	19	0.68	-1030	59	604	578	26.42	22.861		
3700	3660	3609	3410	15	20	0.59	-1069	62	628	601	27.22	23.079		
3800	3759	3706	3499	15	20	0.51	-1107	65	653	625	28.03	23.284		
3900	3858	3803	3588	16	21	0.44	-1146	68	677	648	28.83	23.477		
4000	3956	3900	3677	16	21	0.36	-1184	71	701	672	29.64	23.660		
4100	4055	3997	3766	16	22	0.30	-1223	74	725	695	30.44	23.833		
4200	4153	4094	3855	17	23	0.24	-1262	77	750	719	31.24	23.996		
4300	4252	4191	3944	17	23	0.18	-1300	81	774	742	32.05	24.152		
4400	4351	4288	4032	18	24	0.13	-1339	84	798	765	32.85	24.299		
4500	4449	4385	4121	18	25	0.07	-1377	87	823	789	33.66	24.439		
4600	4548	4482	4210	19	25	0.03	-1416	90	847	812	34.47	24.572		
4700	4647	4579	4299	19	26	-0.02	-1454	93	871	836	35.27	24.699		
4800	4745	4676	4388	19	27	-0.06	-1493	96	895	859	36.08	24.820		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 506H - Slot 4
Project:	Venado Canyon Unit	TVD Reference:	GL 7075' & RKB 14' @ 7089ft
Reference Site:	O11 2206 Pad	MD Reference:	GL 7075' & RKB 14' @ 7089ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: O11 2206 Pad - # 505H - Original Drilling - APD											Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM											Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning				
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor
4870	4814	4744	4451	20	27	-0.09	-1520	98	913	876	36.64	24.902
4900	4844	4773	4477	20	27	8.26	-1531	99	919	882	36.89	24.922
4950	4893	4800	4502	20	28	16.59	-1542	100	929	892	37.07	25.053
5000	4940	4829	4528	20	28	21.39	-1554	102	936	899	37.26	25.128
5050	4987	4850	4547	21	28	24.45	-1564	104	942	905	37.35	25.228
5100	5031	4877	4570	21	28	26.64	-1576	107	947	909	37.50	25.244
5150	5074	4900	4590	21	28	28.31	-1588	110	949	912	37.60	25.250
5200	5115	4925	4611	22	29	29.71	-1600	115	950	913	37.72	25.199
5250	5154	4950	4632	22	29	30.97	-1614	120	950	912	37.86	25.090
5300	5190	4973	4650	22	29	32.12	-1626	125	948	910	37.98	24.957
5350	5223	5000	4671	23	29	33.32	-1642	132	944	906	38.21	24.711
5400	5253	5021	4687	23	29	34.43	-1654	138	939	901	38.37	24.473
5450	5280	5050	4709	24	30	35.74	-1671	147	932	894	38.74	24.065
5500	5304	5069	4722	24	30	36.91	-1683	153	924	885	39.00	23.695
5550	5324	5100	4744	25	30	38.44	-1703	164	915	875	39.58	23.108
5600	5341	5117	4755	25	30	39.74	-1714	170	904	864	40.01	22.588
5650	5354	5150	4776	26	31	41.57	-1736	184	892	851	40.87	21.822
5700	5363	5165	4785	27	31	43.01	-1745	190	879	837	41.55	21.149
5750	5368	5189	4799	28	31	44.83	-1762	200	865	822	42.55	20.320
5795	5369	5200	4805	28	31	46.21	-1770	206	851	808	43.42	19.603
5800	5369	5213	4812	28	31	46.66	-1778	212	849	806	43.72	19.431
5900	5368	5263	4838	30	32	48.37	-1814	237	822	776	46.47	17.691
6000	5368	5319	4862	32	33	50.04	-1854	267	800	751	49.63	16.128
6100	5367	5379	4884	34	34	51.56	-1898	302	784	731	53.07	14.778
6200	5367	5450	4902	36	35	52.91	-1950	346	773	716	56.68	13.640
6300	5366	5512	4912	38	36	53.68	-1996	387	766	706	60.20	12.730
6400	5365	5582	4917	40	37	54.04	-2047	435	764	700	63.62	12.005
6452	5365	5630	4917	41	37	54.05	-2080	469	764	698	65.36	11.684
6500	5365	5678	4917	42	38	54.04	-2114	502	764	697	66.95	11.405
6600	5364	5778	4916	44	40	54.04	-2185	572	763	693	70.38	10.847
6700	5364	5878	4915	47	42	54.04	-2256	643	763	689	73.90	10.329
6800	5363	5978	4915	49	44	54.04	-2327	713	763	686	77.50	9.848
6900	5363	6078	4914	51	46	54.04	-2398	784	763	682	81.17	9.403
7000	5362	6178	4914	54	48	54.03	-2469	854	763	678	84.89	8.989
7100	5361	6278	4913	56	50	54.03	-2540	924	763	674	88.67	8.605
7200	5361	6378	4913	58	52	54.03	-2611	995	763	670	92.49	8.249
7300	5360	6478	4912	61	54	54.03	-2683	1065	763	666	96.34	7.918
7400	5360	6578	4912	63	56	54.03	-2754	1135	763	662	100.24	7.609
7500	5359	6678	4911	66	59	54.02	-2825	1206	763	658	104.16	7.322
7600	5358	6778	4910	68	61	54.02	-2896	1276	763	654	108.11	7.053
7700	5358	6878	4910	70	63	54.02	-2967	1347	762	650	112.08	6.802
7800	5357	6978	4909	73	65	54.02	-3038	1417	762	646	116.08	6.567
7900	5357	7078	4909	75	68	54.02	-3109	1487	762	642	120.09	6.347
8000	5356	7178	4908	78	70	54.01	-3180	1558	762	638	124.13	6.140
8100	5355	7278	4908	80	72	54.01	-3251	1628	762	634	128.17	5.945
8200	5355	7378	4907	83	75	54.01	-3322	1698	762	630	132.24	5.762
8300	5354	7478	4907	85	77	54.01	-3393	1769	762	626	136.31	5.589
8400	5354	7578	4906	88	80	54.01	-3464	1839	762	621	140.40	5.426
8500	5353	7678	4905	90	82	54.00	-3535	1910	762	617	144.50	5.271
8600	5353	7778	4905	93	85	54.00	-3606	1980	762	613	148.61	5.125
8700	5352	7878	4904	95	87	54.00	-3677	2050	761	609	152.73	4.986
8800	5351	7978	4904	98	89	54.00	-3748	2121	761	605	156.85	4.854



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 506H - Slot 4
Project:	Venado Canyon Unit	TVD Reference:	GL 7075' & RKB 14' @ 7089ft
Reference Site:	O11 2206 Pad	MD Reference:	GL 7075' & RKB 14' @ 7089ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: O11 2206 Pad - # 505H - Original Drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
8900	5351	8078	4903	100	92	54.00	-3819	2191	761	600	160.99	4.729	
9000	5350	8178	4903	103	94	53.99	-3890	2261	761	596	165.13	4.610	
9100	5350	8278	4902	105	97	53.99	-3961	2332	761	592	169.28	4.496	
9200	5349	8378	4902	108	99	53.99	-4032	2402	761	588	173.43	4.388	
9300	5348	8478	4901	110	102	53.99	-4103	2473	761	583	177.59	4.285	
9400	5348	8578	4901	113	104	53.99	-4174	2543	761	579	181.75	4.186	
9500	5347	8678	4900	116	107	53.98	-4245	2613	761	575	185.92	4.092	
9600	5347	8778	4899	118	109	53.98	-4317	2684	761	571	190.10	4.001	
9700	5346	8878	4899	121	112	53.98	-4388	2754	761	566	194.27	3.915	
9800	5346	8978	4898	123	114	53.98	-4459	2824	760	562	198.46	3.832	
9900	5345	9078	4898	126	117	53.98	-4530	2895	760	558	202.64	3.752	
10,000	5344	9178	4897	128	119	53.97	-4601	2965	760	553	206.83	3.676	
10,100	5344	9278	4897	131	122	53.97	-4672	3036	760	549	211.02	3.602	
10,200	5343	9378	4896	133	124	53.97	-4743	3106	760	545	215.22	3.532	
10,300	5343	9478	4896	136	127	53.97	-4814	3176	760	541	219.42	3.464	
10,400	5342	9578	4895	138	129	53.97	-4885	3247	760	536	223.62	3.398	
10,500	5341	9678	4894	141	132	53.96	-4956	3317	760	532	227.82	3.335	
10,600	5341	9778	4894	144	134	53.96	-5027	3387	760	528	232.03	3.274	
10,700	5340	9878	4893	146	137	53.96	-5098	3458	760	523	236.23	3.215	
10,800	5340	9978	4893	149	140	53.96	-5169	3528	759	519	240.44	3.159	
10,900	5339	10,078	4892	151	142	53.96	-5240	3599	759	515	244.66	3.104	
11,000	5338	10,178	4892	154	145	53.95	-5311	3669	759	510	248.87	3.051	
11,100	5338	10,278	4891	156	147	53.95	-5382	3739	759	506	253.08	3.000	
11,200	5337	10,378	4891	159	150	53.95	-5453	3810	759	502	257.30	2.950	
11,300	5337	10,478	4890	161	152	53.95	-5524	3880	759	497	261.52	2.902	
11,400	5336	10,578	4889	164	155	53.95	-5595	3950	759	493	265.74	2.856	
11,500	5336	10,678	4889	167	157	53.94	-5666	4021	759	489	269.96	2.811	
11,600	5335	10,778	4888	169	160	53.94	-5737	4091	759	485	274.19	2.767	
11,700	5334	10,878	4888	172	162	53.94	-5808	4162	759	480	278.41	2.725	
11,800	5334	10,978	4887	174	165	53.94	-5879	4232	759	476	282.63	2.684	
11,900	5333	11,078	4887	177	168	53.94	-5951	4302	758	472	286.86	2.644	
12,000	5333	11,178	4886	179	170	53.93	-6022	4373	758	467	291.09	2.605	
12,100	5332	11,278	4886	182	173	53.93	-6093	4443	758	463	295.32	2.568	
12,200	5331	11,378	4885	185	175	53.93	-6164	4513	758	459	299.55	2.531	
12,300	5331	11,478	4885	187	178	53.93	-6235	4584	758	454	303.78	2.495	
12,400	5330	11,578	4884	190	180	53.93	-6306	4654	758	450	308.01	2.461	
12,500	5330	11,678	4883	192	183	53.92	-6377	4725	758	446	312.24	2.427	
12,600	5329	11,778	4883	195	185	53.92	-6448	4795	758	441	316.47	2.394	
12,700	5329	11,878	4882	197	188	53.92	-6519	4865	758	437	320.71	2.363	
12,800	5328	11,978	4882	200	191	53.92	-6590	4936	758	433	324.94	2.331	
12,900	5327	12,078	4881	203	193	53.92	-6661	5006	758	428	329.18	2.301	
13,000	5327	12,178	4881	205	196	53.91	-6732	5076	757	424	333.41	2.272	
13,100	5326	12,278	4880	208	198	53.91	-6803	5147	757	420	337.65	2.243	
13,200	5326	12,378	4880	210	201	53.91	-6874	5217	757	415	341.89	2.215	
13,300	5325	12,478	4879	213	203	53.91	-6945	5288	757	411	346.12	2.187	
13,400	5324	12,578	4878	215	206	53.91	-7016	5358	757	407	350.36	2.161	
13,500	5324	12,678	4878	218	208	53.90	-7087	5428	757	402	354.60	2.135	
13,600	5323	12,778	4877	221	211	53.90	-7158	5499	757	398	358.84	2.109	
13,700	5323	12,878	4877	223	214	53.90	-7229	5569	757	394	363.08	2.084	
13,800	5322	12,978	4876	226	216	53.90	-7300	5639	757	389	367.32	2.060	
13,819	5322	12,996	4876	226	217	53.90	-7314	5653	757	388	368.11	2.055 SF	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 506H - Slot 4
Project:	Venado Canyon Unit	TVD Reference:	GL 7075' & RKB 14' @ 7089ft
Reference Site:	O11 2206 Pad	MD Reference:	GL 7075' & RKB 14' @ 7089ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: O11 2206 Pad - # 507H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0	0	0	0	0	0	-146.67	-50	-33	60					
100	100	100	100	0	0	-146.67	-50	-33	60	60	0.31	195.031		
200	200	200	200	1	1	-146.67	-50	-33	60	59	1.03	58.646		
300	300	300	300	1	1	-146.67	-50	-33	60	58	1.74	34.512		
400	400	400	400	1	1	-146.67	-50	-33	60	58	2.46	24.450		
450	450	450	450	1	1	-146.67	-50	-33	60	57	2.82	21.339 CC		
500	500	499	499	2	2	37.07	-51	-33	60	57	3.16	19.070		
600	600	597	597	2	2	37.83	-54	-34	61	57	3.81	15.893 ES		
700	700	695	695	2	2	39.30	-61	-35	61	57	4.48	13.695		
800	799	793	792	3	3	41.43	-70	-37	63	58	5.17	12.134		
900	898	891	890	3	3	44.12	-83	-40	65	59	5.87	11.003		
922	920	913	911	3	3	44.78	-87	-40	65	59	6.02	10.799		
1000	997	989	986	3	3	46.64	-100	-43	68	61	6.58	10.293		
1100	1095	1087	1082	4	4	47.52	-119	-47	74	67	7.32	10.104 SF		
1200	1194	1184	1176	4	4	46.99	-142	-51	83	75	8.05	10.301		
1300	1293	1281	1269	5	5	45.52	-168	-57	95	86	8.78	10.800		
1400	1391	1377	1361	5	5	43.52	-196	-62	110	100	9.50	11.544		
1500	1490	1472	1450	5	6	41.35	-227	-68	128	117	10.21	12.497		
1600	1589	1565	1537	6	6	39.20	-260	-75	149	138	10.90	13.626		
1700	1687	1661	1626	6	7	37.23	-297	-82	172	160	11.64	14.756		
1800	1786	1758	1715	7	7	35.69	-334	-90	195	183	12.42	15.731		
1900	1885	1855	1805	7	8	34.48	-371	-97	219	206	13.20	16.591		
2000	1983	1952	1894	8	8	33.51	-408	-104	243	229	13.99	17.354		
2100	2082	2049	1984	8	9	32.71	-444	-112	267	252	14.78	18.034		
2200	2181	2146	2073	8	10	32.04	-481	-119	290	275	15.58	18.643		
2300	2279	2244	2163	9	10	31.48	-518	-127	314	298	16.38	19.191		
2400	2378	2341	2252	9	11	30.99	-555	-134	338	321	17.18	19.687		
2500	2476	2438	2341	10	11	30.57	-592	-141	362	344	17.98	20.138		
2600	2575	2535	2431	10	12	30.20	-629	-149	386	367	18.78	20.549		
2700	2674	2632	2520	10	13	29.87	-666	-156	410	390	19.59	20.925		
2800	2772	2729	2610	11	13	29.58	-703	-164	434	413	20.40	21.270		
2900	2871	2826	2699	11	14	29.32	-740	-171	458	437	21.21	21.588		
3000	2970	2923	2789	12	15	29.08	-777	-178	482	460	22.02	21.883		
3100	3068	3020	2878	12	15	28.87	-814	-186	506	483	22.83	22.155		
3200	3167	3117	2968	13	16	28.68	-851	-193	530	506	23.64	22.408		
3300	3266	3214	3057	13	16	28.50	-888	-200	554	529	24.45	22.644		
3400	3364	3311	3147	13	17	28.34	-924	-208	578	552	25.27	22.865		
3500	3463	3408	3236	14	18	28.19	-961	-215	602	576	26.08	23.071		
3600	3562	3505	3326	14	18	28.05	-998	-223	626	599	26.90	23.264		
3700	3660	3602	3415	15	19	27.93	-1035	-230	650	622	27.71	23.446		
3800	3759	3700	3505	15	20	27.81	-1072	-237	674	645	28.53	23.617		
3900	3858	3797	3594	16	20	27.70	-1109	-245	698	668	29.34	23.778		
4000	3956	3894	3683	16	21	27.60	-1146	-252	722	692	30.16	23.930		
4100	4055	3991	3773	16	22	27.50	-1183	-259	746	715	30.98	24.074		
4200	4153	4088	3862	17	22	27.41	-1220	-267	770	738	31.79	24.210		
4300	4252	4185	3952	17	23	27.32	-1257	-274	794	761	32.61	24.339		
4400	4351	4282	4041	18	23	27.24	-1294	-282	818	784	33.43	24.462		
4500	4449	4379	4131	18	24	27.17	-1331	-289	842	808	34.25	24.579		
4600	4548	4501	4244	19	25	27.24	-1375	-300	865	830	35.31	24.507		
4700	4647	4673	4406	19	26	29.47	-1415	-341	882	846	36.73	24.024		
4800	4745	4824	4543	19	26	33.53	-1421	-402	893	855	37.93	23.549		
4870	4814	4911	4617	20	26	36.70	-1413	-446	900	861	38.72	23.232		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 506H - Slot 4
Project:	Venado Canyon Unit	TVD Reference:	GL 7075' & RKB 14' @ 7089ft
Reference Site:	O11 2206 Pad	MD Reference:	GL 7075' & RKB 14' @ 7089ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: O11 2206 Pad - # 507H - Original Drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0 ft
Reference	Offset	Rule Assigned:											
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre	Distance	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
							+N/-S (ft)	+E/-W (ft)					
4900	4844	4943	4643	20	26	46.55	-1408	-464	902	863	39.05	23.102	
4950	4893	4987	4678	20	27	57.08	-1398	-491	907	867	39.60	22.894	
5000	4940	5022	4704	20	27	63.55	-1389	-512	912	872	40.13	22.725	
5050	4987	5049	4722	21	27	67.71	-1382	-529	918	878	40.60	22.620	
5100	5031	5067	4736	21	27	70.32	-1376	-541	927	886	41.03	22.588	
5150	5074	5080	4744	21	27	71.79	-1372	-550	937	895	41.39	22.637	
5200	5115	5088	4749	22	27	72.36	-1369	-555	949	907	41.69	22.763	
5250	5154	5091	4752	22	27	72.21	-1368	-557	963	921	41.95	22.957	
5300	5190	5091	4752	22	27	71.46	-1368	-557	979	937	42.18	23.206	
5350	5223	5088	4750	23	27	70.21	-1369	-555	996	954	42.40	23.499	
5400	5253	5083	4746	23	27	68.57	-1371	-552	1015	973	42.62	23.819	
5450	5280	5076	4742	24	27	66.62	-1373	-547	1035	992	42.86	24.154	
5500	5304	5067	4736	24	27	64.42	-1376	-541	1056	1013	43.13	24.490	
5550	5324	5050	4724	25	27	61.68	-1381	-530	1078	1035	43.31	24.891	
5600	5341	5050	4724	25	27	59.82	-1381	-530	1100	1056	43.87	25.077	
5650	5354	5033	4711	26	27	57.08	-1386	-519	1122	1078	44.17	25.406	
5700	5363	5020	4702	27	27	54.57	-1390	-511	1144	1100	44.60	25.656	
5750	5368	5000	4687	28	27	51.88	-1395	-499	1166	1121	44.97	25.933	
5795	5369	5000	4687	28	27	50.28	-1395	-499	1186	1140	45.69	25.951	
5800	5369	5000	4687	28	27	50.28	-1395	-499	1188	1142	45.77	25.952	
5900	5368	4950	4649	30	26	48.26	-1406	-469	1233	1187	46.38	26.590	
6000	5368	4950	4649	32	26	48.26	-1406	-469	1284	1236	47.86	26.817	
6100	5367	4915	4621	34	26	46.83	-1412	-449	1338	1290	48.54	27.576	
6200	5367	4900	4608	36	26	46.20	-1414	-441	1398	1348	49.47	28.255	
6300	5366	4878	4589	38	26	45.28	-1417	-429	1461	1411	50.13	29.139	
6400	5365	4850	4566	40	26	44.12	-1420	-415	1527	1477	50.58	30.200	
6500	5365	4850	4566	42	26	44.12	-1420	-415	1597	1545	51.45	31.040	
6600	5364	4850	4566	44	26	44.12	-1420	-415	1670	1617	52.20	31.981	
6700	5364	4822	4541	47	26	42.97	-1421	-401	1744	1692	52.36	33.307	
6800	5363	4800	4522	49	26	42.05	-1422	-391	1821	1769	52.56	34.652	
6900	5363	4800	4522	51	26	42.05	-1422	-391	1900	1847	53.08	35.793	
7000	5362	4800	4522	54	26	42.05	-1422	-391	1981	1927	53.54	36.995	
7100	5361	4800	4522	56	26	42.05	-1422	-391	2063	2009	53.94	38.248	
7200	5361	4776	4500	58	26	41.05	-1422	-380	2147	2093	53.89	39.831	
7300	5360	4750	4477	61	26	39.99	-1421	-369	2232	2178	53.79	41.493	
7400	5360	4750	4477	63	26	39.99	-1421	-369	2318	2264	54.08	42.855	
7500	5359	4750	4477	66	26	39.99	-1421	-369	2405	2350	54.34	44.251	
7600	5358	4750	4477	68	26	39.99	-1421	-369	2492	2438	54.57	45.675	
7700	5358	4750	4477	70	26	39.99	-1421	-369	2581	2526	54.78	47.124	
7800	5357	4750	4477	73	26	39.99	-1421	-369	2671	2616	54.96	48.597	
7900	5357	4750	4477	75	26	39.99	-1421	-369	2761	2706	55.12	50.090	
8000	5356	4729	4458	78	26	39.15	-1420	-361	2852	2797	54.96	51.884	
8100	5355	4725	4454	80	26	38.98	-1420	-359	2943	2888	55.04	53.473	
8200	5355	4721	4450	83	26	38.82	-1420	-358	3035	2980	55.10	55.074	
8300	5354	4700	4431	85	26	37.98	-1418	-350	3127	3073	54.92	56.949	
8400	5354	4700	4431	88	26	37.98	-1418	-350	3220	3165	55.03	58.517	
8500	5353	4700	4431	90	26	37.98	-1418	-350	3313	3258	55.13	60.096	
8600	5353	4700	4431	93	26	37.98	-1418	-350	3407	3351	55.23	61.685	
8700	5352	4700	4431	95	26	37.98	-1418	-350	3500	3445	55.31	63.283	
8800	5351	4700	4431	98	26	37.98	-1418	-350	3595	3539	55.40	64.888	
8900	5351	4700	4431	100	26	37.98	-1418	-350	3689	3634	55.47	66.501	
9000	5350	4700	4431	103	26	37.98	-1418	-350	3784	3728	55.55	68.120	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 506H - Slot 4
Project:	Venado Canyon Unit	TVD Reference:	GL 7075' & RKB 14' @ 7089ft
Reference Site:	O11 2206 Pad	MD Reference:	GL 7075' & RKB 14' @ 7089ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: O11 2206 Pad - # 507H - Original Drilling - APD											Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM											Offset Well Error:	0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Rule Assigned:	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor
9100	5350	4700	4431	105	26	37.98	-1418	-350	3879	3823	55.62	69.744
9200	5349	4700	4431	108	26	37.98	-1418	-350	3974	3919	55.68	71.374
9300	5348	4700	4431	110	26	37.98	-1418	-350	4070	4014	55.74	73.008
9400	5348	4700	4431	113	26	37.98	-1418	-350	4165	4110	55.80	74.646
9500	5347	4700	4431	116	26	37.98	-1418	-350	4261	4205	55.86	76.287
9600	5347	4700	4431	118	26	37.98	-1418	-350	4357	4301	55.91	77.931
9700	5346	4700	4431	121	26	37.98	-1418	-350	4454	4398	55.97	79.578
9800	5346	4677	4409	123	26	37.08	-1415	-342	4550	4494	55.71	81.660
9900	5345	4675	4408	126	26	37.01	-1415	-342	4646	4590	55.74	83.351
10,000	5344	4673	4406	128	26	36.94	-1415	-341	4743	4687	55.77	85.044
10,100	5344	4650	4384	131	26	36.03	-1411	-333	4840	4784	55.51	87.190
10,200	5343	4650	4384	133	26	36.03	-1411	-333	4937	4881	55.56	88.854
10,300	5343	4650	4384	136	26	36.03	-1411	-333	5034	4978	55.61	90.519
10,400	5342	4650	4384	138	26	36.03	-1411	-333	5131	5075	55.66	92.185
10,500	5341	4650	4384	141	26	36.03	-1411	-333	5228	5172	55.71	93.851
10,600	5341	4650	4384	144	26	36.03	-1411	-333	5325	5269	55.75	95.517
10,700	5340	4650	4384	146	26	36.03	-1411	-333	5423	5367	55.80	97.183
10,800	5340	4650	4384	149	26	36.03	-1411	-333	5520	5464	55.84	98.848
10,900	5339	4650	4384	151	26	36.03	-1411	-333	5618	5562	55.89	100.513
11,000	5338	4650	4384	154	26	36.03	-1411	-333	5715	5659	55.94	102.177
11,100	5338	4650	4384	156	26	36.03	-1411	-333	5813	5757	55.98	103.840
11,200	5337	4650	4384	159	26	36.03	-1411	-333	5911	5855	56.03	105.503
11,300	5337	4650	4384	161	26	36.03	-1411	-333	6009	5953	56.07	107.164
11,400	5336	4650	4384	164	26	36.03	-1411	-333	6107	6051	56.12	108.823
11,500	5336	4650	4384	167	26	36.03	-1411	-333	6205	6149	56.16	110.482
11,600	5335	4650	4384	169	26	36.03	-1411	-333	6303	6247	56.21	112.138
11,700	5334	4650	4384	172	26	36.03	-1411	-333	6401	6345	56.25	113.793
11,800	5334	4650	4384	174	26	36.03	-1411	-333	6499	6443	56.30	115.446
11,900	5333	4650	4384	177	26	36.03	-1411	-333	6597	6541	56.34	117.097
12,000	5333	4650	4384	179	26	36.03	-1411	-333	6696	6639	56.39	118.746
12,100	5332	4650	4384	182	26	36.03	-1411	-333	6794	6738	56.43	120.392
12,200	5331	4650	4384	185	26	36.03	-1411	-333	6892	6836	56.48	122.037
12,300	5331	4650	4384	187	26	36.03	-1411	-333	6991	6934	56.52	123.679
12,400	5330	4650	4384	190	26	36.03	-1411	-333	7089	7033	56.57	125.318
12,500	5330	4650	4384	192	26	36.03	-1411	-333	7188	7131	56.62	126.955
12,600	5329	4650	4384	195	26	36.03	-1411	-333	7286	7230	56.66	128.590
12,700	5329	4650	4384	197	26	36.03	-1411	-333	7385	7328	56.71	130.221
12,800	5328	4650	4384	200	26	36.03	-1411	-333	7484	7427	56.76	131.850
12,900	5327	4650	4384	203	26	36.03	-1411	-333	7582	7526	56.81	133.476
13,000	5327	4650	4384	205	26	36.03	-1411	-333	7681	7624	56.86	135.099
13,100	5326	4650	4384	208	26	36.03	-1411	-333	7780	7723	56.90	136.719
13,200	5326	4650	4384	210	26	36.03	-1411	-333	7879	7822	56.95	138.335
13,300	5325	4650	4384	213	26	36.03	-1411	-333	7977	7920	57.00	139.949
13,400	5324	4650	4384	215	26	36.03	-1411	-333	8076	8019	57.05	141.560
13,500	5324	4650	4384	218	26	36.03	-1411	-333	8175	8118	57.10	143.167
13,600	5323	4650	4384	221	26	36.03	-1411	-333	8274	8217	57.15	144.771
13,700	5323	4650	4384	223	26	36.03	-1411	-333	8373	8316	57.20	146.371
13,800	5322	4650	4384	226	26	36.03	-1411	-333	8472	8415	57.25	147.968
13,819	5322	4650	4384	226	26	36.03	-1411	-333	8490	8433	57.26	148.270



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 506H - Slot 4
Project:	Venado Canyon Unit	TVD Reference:	GL 7075' & RKB 14' @ 7089ft
Reference Site:	O11 2206 Pad	MD Reference:	GL 7075' & RKB 14' @ 7089ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: O11 2206 Pad - # 508H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0	0	0	0	0	0	33.51	33	22	40					
100	100	100	100	0	0	33.51	33	22	40	40	0.31	129.580		
200	200	200	200	1	1	33.51	33	22	40	39	1.03	38.965		
300	300	300	300	1	1	33.51	33	22	40	38	1.74	22.930		
400	400	400	400	1	1	33.51	33	22	40	37	2.46	16.245		
450	450	450	450	1	1	33.51	33	22	40	37	2.82	14.178 CC		
500	500	500	500	2	2	-142.59	33	22	40	37	3.16	12.736 ES		
600	600	600	600	2	2	-140.74	31	25	43	39	3.83	11.150		
700	700	700	700	2	2	-137.61	26	30	48	43	4.52	10.555		
800	799	800	799	3	3	-133.98	20	39	55	50	5.23	10.594		
900	898	899	897	3	3	-131.31	12	48	66	60	5.97	11.034		
922	920	921	919	3	3	-131.10	10	51	68	62	6.13	11.160		
1000	997	998	996	3	3	-130.76	4	58	78	71	6.72	11.596		
1100	1095	1098	1094	4	4	-130.42	-5	68	90	83	7.48	12.038		
1200	1194	1197	1193	4	4	-130.16	-13	78	102	94	8.25	12.384		
1300	1293	1296	1291	5	5	-129.96	-21	88	114	105	9.03	12.662		
1400	1391	1395	1389	5	5	-129.80	-29	98	126	117	9.81	12.889		
1500	1490	1495	1488	5	5	-129.66	-37	108	139	128	10.60	13.077		
1600	1589	1594	1586	6	6	-129.55	-46	118	151	139	11.39	13.235		
1700	1687	1693	1685	6	6	-129.45	-54	128	163	151	12.18	13.370		
1800	1786	1792	1783	7	7	-129.37	-62	138	175	162	12.97	13.487		
1900	1885	1892	1882	7	7	-129.30	-70	148	187	173	13.77	13.588		
2000	1983	1991	1980	8	7	-129.24	-78	158	199	185	14.57	13.676		
2100	2082	2090	2078	8	8	-129.18	-86	168	211	196	15.37	13.755		
2200	2181	2189	2177	8	8	-129.13	-95	178	224	207	16.17	13.824		
2300	2279	2289	2275	9	8	-129.08	-103	188	236	219	16.97	13.886		
2400	2378	2388	2374	9	9	-129.04	-111	198	248	230	17.77	13.943		
2500	2476	2487	2472	10	9	-129.01	-119	208	260	241	18.57	13.993		
2600	2575	2586	2570	10	10	-128.97	-127	218	272	253	19.38	14.039		
2700	2674	2686	2669	10	10	-128.94	-136	228	284	264	20.18	14.081		
2800	2772	2785	2767	11	10	-128.91	-144	238	296	275	20.99	14.120		
2900	2871	2884	2866	11	11	-128.89	-152	248	308	287	21.79	14.155		
3000	2970	2984	2964	12	11	-128.87	-160	258	321	298	22.60	14.188		
3100	3068	3083	3063	12	12	-128.84	-168	268	333	309	23.40	14.218		
3200	3167	3182	3161	13	12	-128.82	-176	278	345	321	24.21	14.246		
3300	3266	3281	3259	13	13	-128.80	-185	288	357	332	25.01	14.272		
3400	3364	3381	3358	13	13	-128.79	-193	298	369	343	25.82	14.296		
3500	3463	3480	3456	14	13	-128.77	-201	308	381	355	26.63	14.318		
3600	3562	3579	3555	14	14	-128.75	-209	318	393	366	27.43	14.340		
3700	3660	3678	3653	15	14	-128.74	-217	328	406	377	28.24	14.359		
3800	3759	3778	3751	15	15	-128.72	-226	338	418	389	29.05	14.378		
3900	3858	3877	3850	16	15	-128.71	-234	348	430	400	29.86	14.396		
4000	3956	3976	3948	16	15	-128.70	-242	358	442	411	30.66	14.412		
4100	4055	4075	4047	16	16	-128.69	-250	368	454	423	31.47	14.428		
4200	4153	4175	4145	17	16	-128.68	-258	378	466	434	32.28	14.443		
4300	4252	4274	4244	17	17	-128.66	-266	388	478	445	33.09	14.457		
4400	4351	4373	4342	18	17	-128.65	-275	398	490	457	33.90	14.470		
4500	4449	4471	4439	18	17	-128.43	-284	410	503	468	34.71	14.481		
4600	4548	4565	4529	19	18	-126.86	-302	429	516	480	35.60	14.482		
4700	4647	4653	4609	19	18	-124.11	-326	455	530	494	36.52	14.525		
4800	4745	4733	4677	19	19	-120.69	-355	485	549	512	37.35	14.697		
4870	4814	4783	4717	20	19	-118.16	-377	507	565	527	37.81	14.944		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 506H - Slot 4
Project:	Venado Canyon Unit	TVD Reference:	GL 7075' & RKB 14' @ 7089ft
Reference Site:	O11 2206 Pad	MD Reference:	GL 7075' & RKB 14' @ 7089ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: O11 2206 Pad - # 508H - Original Drilling - APD											Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM											Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning				
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor
4900	4844	4800	4729	20	19	-107.84	-385	515	573	535	37.91	15.109
4950	4893	4837	4756	20	20	-96.04	-402	533	586	548	38.23	15.330
5000	4940	4870	4779	20	20	-88.25	-419	550	600	561	38.46	15.592
5050	4987	4900	4799	21	20	-82.56	-435	566	613	575	38.61	15.889
5100	5031	4935	4820	21	21	-77.87	-454	586	627	588	38.87	16.135
5150	5074	4967	4839	21	21	-74.07	-472	605	641	602	39.06	16.400
5200	5115	5000	4856	22	21	-70.81	-492	625	654	614	39.30	16.634
5250	5154	5030	4871	22	22	-68.09	-510	643	666	627	39.48	16.879
5300	5190	5061	4885	22	22	-65.71	-530	663	678	639	39.72	17.079
5350	5223	5100	4900	23	23	-63.49	-555	688	690	649	40.20	17.155
5400	5253	5123	4908	23	23	-61.85	-570	703	700	660	40.31	17.367
5450	5280	5150	4917	24	24	-60.36	-589	722	709	669	40.57	17.487
5500	5304	5184	4926	24	24	-59.01	-612	745	718	677	41.10	17.469
5550	5324	5215	4933	25	25	-57.91	-633	766	725	684	41.59	17.440
5600	5341	5250	4939	25	25	-56.97	-658	791	732	689	42.28	17.303
5650	5354	5275	4942	26	26	-56.30	-675	808	737	694	42.79	17.215
5700	5363	5300	4944	27	26	-55.80	-693	826	741	697	43.37	17.079
5750	5368	5344	4945	28	27	-55.38	-724	857	743	699	44.52	16.699
5795	5369	5375	4945	28	27	-55.26	-746	879	744	699	45.42	16.388
5800	5369	5381	4945	28	27	-55.26	-750	883	744	699	45.58	16.334
5900	5368	5481	4944	30	29	-55.27	-821	953	745	696	48.61	15.322
6000	5368	5581	4943	32	31	-55.27	-892	1024	745	693	51.82	14.376
6100	5367	5681	4943	34	33	-55.28	-963	1094	745	690	55.20	13.503
6200	5367	5781	4942	36	36	-55.29	-1033	1165	746	687	58.70	12.702
6300	5366	5881	4941	38	38	-55.29	-1104	1235	746	684	62.31	11.970
6400	5365	5981	4941	40	40	-55.30	-1175	1306	746	680	66.01	11.304
6500	5365	6081	4940	42	42	-55.31	-1246	1376	746	677	69.79	10.696
6600	5364	6181	4939	44	45	-55.32	-1317	1447	747	673	73.63	10.142
6700	5364	6281	4939	47	47	-55.32	-1388	1517	747	669	77.53	9.636
6800	5363	6381	4938	49	49	-55.33	-1459	1588	747	666	81.47	9.173
6900	5363	6481	4937	51	52	-55.34	-1530	1658	748	662	85.46	8.748
7000	5362	6581	4937	54	54	-55.34	-1601	1729	748	658	89.48	8.358
7100	5361	6681	4936	56	57	-55.35	-1672	1799	748	655	93.53	8.000
7200	5361	6781	4935	58	59	-55.36	-1742	1870	748	651	97.61	7.668
7300	5360	6881	4935	61	61	-55.37	-1813	1940	749	647	101.71	7.362
7400	5360	6981	4934	63	64	-55.37	-1884	2011	749	643	105.83	7.078
7500	5359	7081	4933	66	66	-55.38	-1955	2081	749	639	109.97	6.814
7600	5358	7181	4933	68	69	-55.39	-2026	2152	750	635	114.13	6.568
7700	5358	7280	4932	70	71	-55.39	-2097	2222	750	632	118.31	6.339
7800	5357	7380	4931	73	74	-55.40	-2168	2293	750	628	122.50	6.124
7900	5357	7480	4931	75	76	-55.41	-2239	2363	750	624	126.70	5.923
8000	5356	7580	4930	78	79	-55.41	-2310	2434	751	620	130.91	5.735
8100	5355	7680	4929	80	81	-55.42	-2381	2504	751	616	135.13	5.558
8200	5355	7780	4929	83	84	-55.43	-2452	2575	751	612	139.36	5.391
8300	5354	7880	4928	85	86	-55.44	-2522	2645	752	608	143.60	5.234
8400	5354	7980	4927	88	89	-55.44	-2593	2716	752	604	147.85	5.086
8500	5353	8080	4927	90	91	-55.45	-2664	2786	752	600	152.11	4.945
8600	5353	8180	4926	93	94	-55.46	-2735	2857	752	596	156.37	4.812
8700	5352	8280	4925	95	97	-55.46	-2806	2927	753	592	160.64	4.686
8800	5351	8380	4925	98	99	-55.47	-2877	2998	753	588	164.91	4.566
8900	5351	8480	4924	100	102	-55.48	-2948	3068	753	584	169.19	4.453
9000	5350	8580	4923	103	104	-55.48	-3019	3139	754	580	173.48	4.344



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 506H - Slot 4
Project:	Venado Canyon Unit	TVD Reference:	GL 7075' & RKB 14' @ 7089ft
Reference Site:	O11 2206 Pad	MD Reference:	GL 7075' & RKB 14' @ 7089ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: O11 2206 Pad - # 508H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program:		0-MWD+HDGM						Rule Assigned:					Offset Well Error:	0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9100	5350	8680	4923	105	107	-55.49	-3090	3209	754	576	177.77	4.241		
9200	5349	8780	4922	108	109	-55.50	-3161	3280	754	572	182.06	4.143		
9300	5348	8880	4921	110	112	-55.51	-3231	3350	754	568	186.36	4.049		
9400	5348	8980	4921	113	114	-55.51	-3302	3421	755	564	190.67	3.959		
9500	5347	9080	4920	116	117	-55.52	-3373	3492	755	560	194.97	3.873		
9600	5347	9180	4919	118	119	-55.53	-3444	3562	755	556	199.28	3.790		
9700	5346	9280	4918	121	122	-55.53	-3515	3633	756	552	203.59	3.712		
9800	5346	9380	4918	123	125	-55.54	-3586	3703	756	548	207.91	3.636		
9900	5345	9480	4917	126	127	-55.55	-3657	3774	756	544	212.23	3.563		
10,000	5344	9580	4916	128	130	-55.55	-3728	3844	757	540	216.55	3.493		
10,100	5344	9680	4916	131	132	-55.56	-3799	3915	757	536	220.88	3.426		
10,200	5343	9780	4915	133	135	-55.57	-3870	3985	757	532	225.21	3.362		
10,300	5343	9880	4914	136	137	-55.58	-3940	4056	757	528	229.54	3.300		
10,400	5342	9980	4914	138	140	-55.58	-4011	4126	758	524	233.87	3.240		
10,500	5341	10,080	4913	141	142	-55.59	-4082	4197	758	520	238.20	3.182		
10,600	5341	10,180	4912	144	145	-55.60	-4153	4267	758	516	242.54	3.126		
10,700	5340	10,280	4912	146	148	-55.60	-4224	4338	759	512	246.88	3.072		
10,800	5340	10,380	4911	149	150	-55.61	-4295	4408	759	508	251.22	3.020		
10,900	5339	10,480	4910	151	153	-55.62	-4366	4479	759	504	255.57	2.970		
11,000	5338	10,580	4910	154	155	-55.62	-4437	4549	759	499	259.91	2.922		
11,100	5338	10,680	4909	156	158	-55.63	-4508	4620	760	495	264.26	2.875		
11,200	5337	10,780	4908	159	160	-55.64	-4579	4690	760	491	268.61	2.829		
11,300	5337	10,880	4908	161	163	-55.64	-4650	4761	760	487	272.96	2.785		
11,400	5336	10,980	4907	164	166	-55.65	-4720	4831	761	483	277.31	2.743		
11,500	5336	11,080	4906	167	168	-55.66	-4791	4902	761	479	281.66	2.701		
11,600	5335	11,180	4906	169	171	-55.66	-4862	4972	761	475	286.02	2.661		
11,700	5334	11,280	4905	172	173	-55.67	-4933	5043	761	471	290.38	2.622		
11,800	5334	11,380	4904	174	176	-55.68	-5004	5113	762	467	294.74	2.584		
11,900	5333	11,480	4904	177	178	-55.69	-5075	5184	762	463	299.10	2.548		
12,000	5333	11,580	4903	179	181	-55.69	-5146	5254	762	459	303.46	2.512		
12,100	5332	11,680	4902	182	184	-55.70	-5217	5325	763	455	307.82	2.477		
12,200	5331	11,780	4902	185	186	-55.71	-5288	5395	763	451	312.18	2.444		
12,300	5331	11,880	4901	187	189	-55.71	-5359	5466	763	447	316.55	2.411		
12,400	5330	11,980	4900	190	191	-55.72	-5429	5536	763	442	320.92	2.379		
12,500	5330	12,080	4900	192	194	-55.73	-5500	5607	764	438	325.28	2.348		
12,600	5329	12,180	4899	195	196	-55.73	-5571	5677	764	434	329.65	2.318		
12,700	5329	12,280	4898	197	199	-55.74	-5642	5748	764	430	334.02	2.288		
12,800	5328	12,380	4898	200	202	-55.75	-5713	5818	765	426	338.40	2.259		
12,900	5327	12,480	4897	203	204	-55.75	-5784	5889	765	422	342.77	2.231		
13,000	5327	12,580	4896	205	207	-55.76	-5855	5959	765	418	347.14	2.204		
13,100	5326	12,680	4896	208	209	-55.77	-5926	6030	765	414	351.52	2.178		
13,200	5326	12,774	4895	210	211	-55.77	-5992	6096	766	411	355.13	2.156 SF		
13,300	5325	12,774	4895	213	211	-55.77	-5992	6096	773	420	353.03	2.191		
13,400	5324	12,774	4895	215	211	-55.77	-5992	6096	794	448	345.50	2.297		
13,500	5324	12,774	4895	218	211	-55.77	-5992	6096	826	492	333.66	2.474		
13,600	5323	12,774	4895	221	211	-55.77	-5992	6096	868	549	318.92	2.722		
13,700	5323	12,774	4895	223	211	-55.77	-5992	6096	919	617	302.67	3.037		
13,800	5322	12,774	4895	226	211	-55.77	-5992	6096	978	692	285.99	3.420		
13,819	5322	12,774	4895	226	211	-55.77	-5992	6096	990	707	282.89	3.500		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 506H - Slot 4
Project:	Venado Canyon Unit	TVD Reference:	GL 7075' & RKB 14' @ 7089ft
Reference Site:	O11 2206 Pad	MD Reference:	GL 7075' & RKB 14' @ 7089ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: O11 2206 Pad - # 509H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0 ft
Reference	Offset	Rule Assigned:												
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre	Distance	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0	0	0	0	0	0	33.52	17	11	20					
100	100	100	100	0	0	33.52	17	11	20	20	0.31	64.866		
200	200	200	200	1	1	33.52	17	11	20	19	1.03	19.505		
300	300	300	300	1	1	33.52	17	11	20	18	1.74	11.478		
400	400	400	400	1	1	33.52	17	11	20	18	2.46	8.132		
450	450	450	450	1	1	33.52	17	11	20	17	2.82	7.097 CC		
500	500	500	500	2	2	-142.52	16	11	20	17	3.16	6.366 ES		
600	600	601	600	2	2	-140.16	13	13	21	17	3.82	5.508		
700	700	701	701	2	2	-136.04	7	16	23	19	4.51	5.113		
800	799	801	800	3	3	-131.07	-3	20	26	21	5.22	5.027 SF		
900	898	901	899	3	3	-128.80	-14	25	31	25	5.95	5.230		
922	920	923	921	3	3	-129.03	-17	26	33	26	6.12	5.314		
1000	997	1001	998	3	3	-130.13	-25	30	38	31	6.70	5.608		
1100	1095	1101	1097	4	4	-131.16	-37	36	44	37	7.46	5.912		
1200	1194	1200	1196	4	4	-131.93	-48	41	51	42	8.22	6.155		
1300	1293	1300	1295	5	5	-132.53	-59	46	57	48	8.99	6.354		
1400	1391	1400	1394	5	5	-133.00	-71	51	64	54	9.76	6.519		
1500	1490	1500	1493	5	5	-133.38	-82	56	70	60	10.54	6.659		
1600	1589	1600	1592	6	6	-133.70	-93	61	77	65	11.32	6.777		
1700	1687	1699	1691	6	6	-133.97	-105	67	83	71	12.10	6.880		
1800	1786	1799	1790	7	6	-134.20	-116	72	90	77	12.89	6.969		
1900	1885	1899	1889	7	7	-134.40	-127	77	96	83	13.67	7.047		
2000	1983	1999	1988	8	7	-134.57	-138	82	103	88	14.46	7.117		
2100	2082	2098	2087	8	8	-134.72	-150	87	109	94	15.25	7.178		
2200	2181	2198	2186	8	8	-134.86	-161	92	116	100	16.03	7.234		
2300	2279	2298	2285	9	8	-134.98	-172	98	123	106	16.82	7.284		
2400	2378	2398	2384	9	9	-135.08	-184	103	129	111	17.61	7.329		
2500	2476	2498	2483	10	9	-135.18	-195	108	136	117	18.40	7.370		
2600	2575	2597	2582	10	10	-135.27	-206	113	142	123	19.19	7.408		
2700	2674	2697	2682	10	10	-135.35	-218	118	149	129	19.98	7.442		
2800	2772	2797	2781	11	10	-135.43	-229	124	155	134	20.77	7.474		
2900	2871	2897	2880	11	11	-135.50	-240	129	162	140	21.57	7.503		
3000	2970	2996	2979	12	11	-135.56	-251	134	168	146	22.36	7.530		
3100	3068	3096	3078	12	12	-135.62	-263	139	175	152	23.15	7.555		
3200	3167	3196	3177	13	12	-135.67	-274	144	181	158	23.94	7.579		
3300	3266	3296	3276	13	12	-135.72	-285	149	188	163	24.73	7.601		
3400	3364	3396	3375	13	13	-135.77	-297	155	195	169	25.53	7.621		
3500	3463	3495	3474	14	13	-135.81	-308	160	201	175	26.32	7.640		
3600	3562	3595	3573	14	14	-135.85	-319	165	208	181	27.11	7.658		
3700	3660	3695	3672	15	14	-135.89	-331	170	214	186	27.91	7.675		
3800	3759	3795	3771	15	14	-135.93	-342	175	221	192	28.70	7.691		
3900	3858	3895	3870	16	15	-135.96	-353	180	227	198	29.49	7.706		
4000	3956	3994	3969	16	15	-135.99	-364	186	234	204	30.29	7.721		
4100	4055	4094	4068	16	16	-136.02	-376	191	240	209	31.08	7.734		
4200	4153	4194	4167	17	16	-136.05	-387	196	247	215	31.87	7.747		
4300	4252	4292	4264	17	16	-136.30	-397	200	254	221	32.64	7.768		
4400	4351	4387	4359	18	17	-138.98	-400	197	262	228	33.19	7.884		
4500	4449	4476	4446	18	17	-143.97	-392	184	273	240	33.47	8.167		
4600	4548	4556	4523	19	17	-150.12	-378	166	292	258	33.42	8.726		
4700	4647	4628	4589	19	17	-156.38	-360	144	319	286	32.98	9.681		
4800	4745	4690	4643	19	17	-162.08	-340	121	357	325	32.15	11.115		
4870	4814	4728	4675	20	18	-165.57	-326	105	390	359	31.40	12.423		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 506H - Slot 4
Project:	Venado Canyon Unit	TVD Reference:	GL 7075' & RKB 14' @ 7089ft
Reference Site:	O11 2206 Pad	MD Reference:	GL 7075' & RKB 14' @ 7089ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: O11 2206 Pad - # 509H - Original Drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0 ft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Rule Assigned:				Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
4900	4844	4750	4692	20	18	-157.51	-317	95	406	375	31.26	12.987	
4950	4893	4765	4704	20	18	-147.49	-311	89	436	405	30.46	14.302	
5000	4940	4783	4718	20	18	-141.02	-303	80	469	439	29.86	15.710	
5050	4987	4800	4731	21	18	-135.78	-295	72	506	476	29.37	17.220	
5100	5031	4800	4731	21	18	-128.34	-295	72	545	517	28.51	19.129	
5150	5074	4816	4743	21	18	-122.99	-288	63	587	559	28.31	20.734	
5200	5115	4822	4747	22	18	-115.14	-285	61	631	603	27.93	22.573	
5250	5154	4825	4749	22	18	-105.84	-284	59	675	648	27.63	24.443	
5300	5190	4826	4749	22	18	-95.21	-283	59	721	694	27.40	26.315	
5350	5223	4825	4749	23	18	-83.83	-284	59	767	740	27.24	28.164	
5400	5253	4822	4747	23	18	-72.63	-285	61	813	786	27.14	29.969	
5450	5280	4818	4743	24	18	-62.47	-287	63	859	832	27.10	31.709	
5500	5304	4800	4731	24	18	-52.53	-295	72	905	878	26.83	33.735	
5550	5324	4800	4731	25	18	-46.29	-295	72	950	923	27.06	35.094	
5600	5341	4800	4731	25	18	-41.19	-295	72	993	966	27.35	36.325	
5650	5354	4800	4731	26	18	-37.04	-295	72	1036	1009	27.68	37.429	
5700	5363	4779	4714	27	18	-32.82	-305	82	1077	1050	27.62	39.001	
5750	5368	4768	4706	28	18	-29.91	-309	87	1117	1089	27.84	40.120	
5795	5369	4750	4692	28	18	-27.58	-317	95	1151	1123	27.91	41.252	
5800	5369	4750	4692	28	18	-27.58	-317	95	1155	1127	27.96	41.322	
5900	5368	4750	4692	30	18	-27.58	-317	95	1232	1203	28.89	42.630	
6000	5368	4700	4651	32	17	-26.36	-336	117	1310	1281	28.88	45.357	
6100	5367	4700	4651	34	17	-26.36	-336	117	1390	1361	29.66	46.872	
6200	5367	4680	4635	36	17	-25.88	-343	125	1473	1442	30.06	48.988	
6300	5366	4650	4609	38	17	-25.18	-353	136	1556	1526	30.27	51.413	
6400	5365	4650	4609	40	17	-25.18	-353	136	1641	1610	30.85	53.208	
6500	5365	4650	4609	42	17	-25.18	-353	136	1728	1696	31.35	55.106	
6600	5364	4625	4586	44	17	-24.61	-361	145	1815	1783	31.53	57.570	
6700	5364	4600	4564	47	17	-24.07	-368	153	1904	1872	31.69	60.073	
6800	5363	4600	4564	49	17	-24.07	-368	153	1993	1960	32.08	62.116	
6900	5363	4600	4564	51	17	-24.07	-368	153	2083	2050	32.43	64.217	
7000	5362	4600	4564	54	17	-24.07	-368	153	2174	2141	32.75	66.368	
7100	5361	4575	4541	56	17	-23.53	-374	161	2265	2232	32.83	68.982	
7200	5361	4550	4518	58	17	-23.01	-380	168	2357	2324	32.90	71.631	
7300	5360	4550	4518	61	17	-23.01	-380	168	2449	2416	33.16	73.847	
7400	5360	4550	4518	63	17	-23.01	-380	168	2542	2508	33.40	76.094	
7500	5359	4550	4518	66	17	-23.01	-380	168	2635	2601	33.62	78.367	
7600	5358	4550	4518	68	17	-23.01	-380	168	2729	2695	33.83	80.662	
7700	5358	4550	4518	70	17	-23.01	-380	168	2823	2789	34.02	82.977	
7800	5357	4527	4496	73	17	-22.56	-384	173	2917	2883	34.06	85.653	
7900	5357	4522	4491	75	17	-22.46	-385	175	3012	2978	34.20	88.071	
8000	5356	4500	4470	78	17	-22.03	-389	180	3107	3073	34.23	90.765	
8100	5355	4500	4470	80	17	-22.03	-389	180	3202	3168	34.39	93.109	
8200	5355	4500	4470	83	17	-22.03	-389	180	3298	3263	34.54	95.464	
8300	5354	4500	4470	85	17	-22.03	-389	180	3393	3359	34.69	97.827	
8400	5354	4500	4470	88	17	-22.03	-389	180	3489	3454	34.82	100.197	
8500	5353	4500	4470	90	17	-22.03	-389	180	3585	3550	34.95	102.573	
8600	5353	4500	4470	93	17	-22.03	-389	180	3682	3647	35.08	104.953	
8700	5352	4500	4470	95	17	-22.03	-389	180	3778	3743	35.20	107.337	
8800	5351	4500	4470	98	17	-22.03	-389	180	3875	3840	35.31	109.723	
8900	5351	4500	4470	100	17	-22.03	-389	180	3972	3936	35.43	112.111	
9000	5350	4477	4448	103	17	-21.61	-392	184	4068	4033	35.43	114.823	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 506H - Slot 4
Project:	Venado Canyon Unit	TVD Reference:	GL 7075' & RKB 14' @ 7089ft
Reference Site:	O11 2206 Pad	MD Reference:	GL 7075' & RKB 14' @ 7089ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: O11 2206 Pad - # 509H - Original Drilling - APD											Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM											Offset Well Error:	0 ft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance			Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor
9100	5350	4474	4445	105	17	-21.55	-393	185	4165	4130	35.52	117.252
9200	5349	4450	4421	108	17	-21.12	-395	189	4263	4227	35.52	120.000
9300	5348	4450	4421	110	17	-21.12	-395	189	4360	4324	35.63	122.377
9400	5348	4450	4421	113	17	-21.12	-395	189	4457	4422	35.73	124.752
9500	5347	4450	4421	116	17	-21.12	-395	189	4555	4519	35.83	127.126
9600	5347	4450	4421	118	17	-21.12	-395	189	4652	4616	35.93	129.497
9700	5346	4450	4421	121	17	-21.12	-395	189	4750	4714	36.02	131.866
9800	5346	4450	4421	123	17	-21.12	-395	189	4848	4811	36.11	134.231
9900	5345	4450	4421	126	17	-21.12	-395	189	4945	4909	36.20	136.592
10,000	5344	4450	4421	128	17	-21.12	-395	189	5043	5007	36.30	138.950
10,100	5344	4450	4421	131	17	-21.12	-395	189	5141	5105	36.38	141.302
10,200	5343	4450	4421	133	17	-21.12	-395	189	5239	5203	36.47	143.650
10,300	5343	4450	4421	136	17	-21.12	-395	189	5337	5301	36.56	145.993
10,400	5342	4450	4421	138	17	-21.12	-395	189	5436	5399	36.64	148.330
10,500	5341	4450	4421	141	17	-21.12	-395	189	5534	5497	36.73	150.661
10,600	5341	4450	4421	144	17	-21.12	-395	189	5632	5595	36.81	152.987
10,700	5340	4450	4421	146	17	-21.12	-395	189	5730	5694	36.90	155.305
10,800	5340	4450	4421	149	17	-21.12	-395	189	5829	5792	36.98	157.618
10,900	5339	4450	4421	151	17	-21.12	-395	189	5927	5890	37.06	159.923
11,000	5338	4450	4421	154	17	-21.12	-395	189	6026	5989	37.15	162.222
11,100	5338	4450	4421	156	17	-21.12	-395	189	6124	6087	37.23	164.513
11,200	5337	4450	4421	159	17	-21.12	-395	189	6223	6186	37.31	166.797
11,300	5337	4450	4421	161	17	-21.12	-395	189	6322	6284	37.39	169.073
11,400	5336	4427	4398	164	17	-20.72	-397	192	6420	6383	37.40	171.678
11,500	5336	4426	4397	167	17	-20.69	-397	192	6519	6481	37.47	173.959
11,600	5335	4424	4396	169	17	-20.67	-398	193	6617	6580	37.55	176.231
11,700	5334	4423	4394	172	17	-20.65	-398	193	6716	6679	37.63	178.495
11,800	5334	4400	4372	174	17	-20.27	-399	195	6815	6778	37.64	181.086
11,900	5333	4400	4372	177	17	-20.27	-399	195	6914	6876	37.72	183.313
12,000	5333	4400	4372	179	17	-20.27	-399	195	7013	6975	37.80	185.531
12,100	5332	4400	4372	182	17	-20.27	-399	195	7112	7074	37.88	187.741
12,200	5331	4400	4372	185	17	-20.27	-399	195	7211	7173	37.96	189.942
12,300	5331	4400	4372	187	17	-20.27	-399	195	7310	7272	38.04	192.134
12,400	5330	4400	4372	190	17	-20.27	-399	195	7409	7370	38.13	194.318
12,500	5330	4400	4372	192	17	-20.27	-399	195	7508	7469	38.21	196.492
12,600	5329	4400	4372	195	17	-20.27	-399	195	7607	7568	38.29	198.658
12,700	5329	4400	4372	197	17	-20.27	-399	195	7706	7667	38.37	200.814
12,800	5328	4400	4372	200	17	-20.27	-399	195	7805	7766	38.45	202.962
12,900	5327	4400	4372	203	17	-20.27	-399	195	7904	7865	38.54	205.100
13,000	5327	4400	4372	205	17	-20.27	-399	195	8003	7964	38.62	207.228
13,100	5326	4400	4372	208	17	-20.27	-399	195	8102	8063	38.70	209.347
13,200	5326	4400	4372	210	17	-20.27	-399	195	8201	8162	38.78	211.457
13,300	5325	4400	4372	213	17	-20.27	-399	195	8300	8261	38.87	213.558
13,400	5324	4400	4372	215	17	-20.27	-399	195	8399	8360	38.95	215.648
13,500	5324	4400	4372	218	17	-20.27	-399	195	8499	8460	39.03	217.729
13,600	5323	4400	4372	221	17	-20.27	-399	195	8598	8559	39.12	219.801
13,700	5323	4400	4372	223	17	-20.27	-399	195	8697	8658	39.20	221.863
13,800	5322	4400	4372	226	17	-20.27	-399	195	8796	8757	39.28	223.915
13,819	5322	4400	4372	226	17	-20.27	-399	195	8815	8776	39.30	224.299



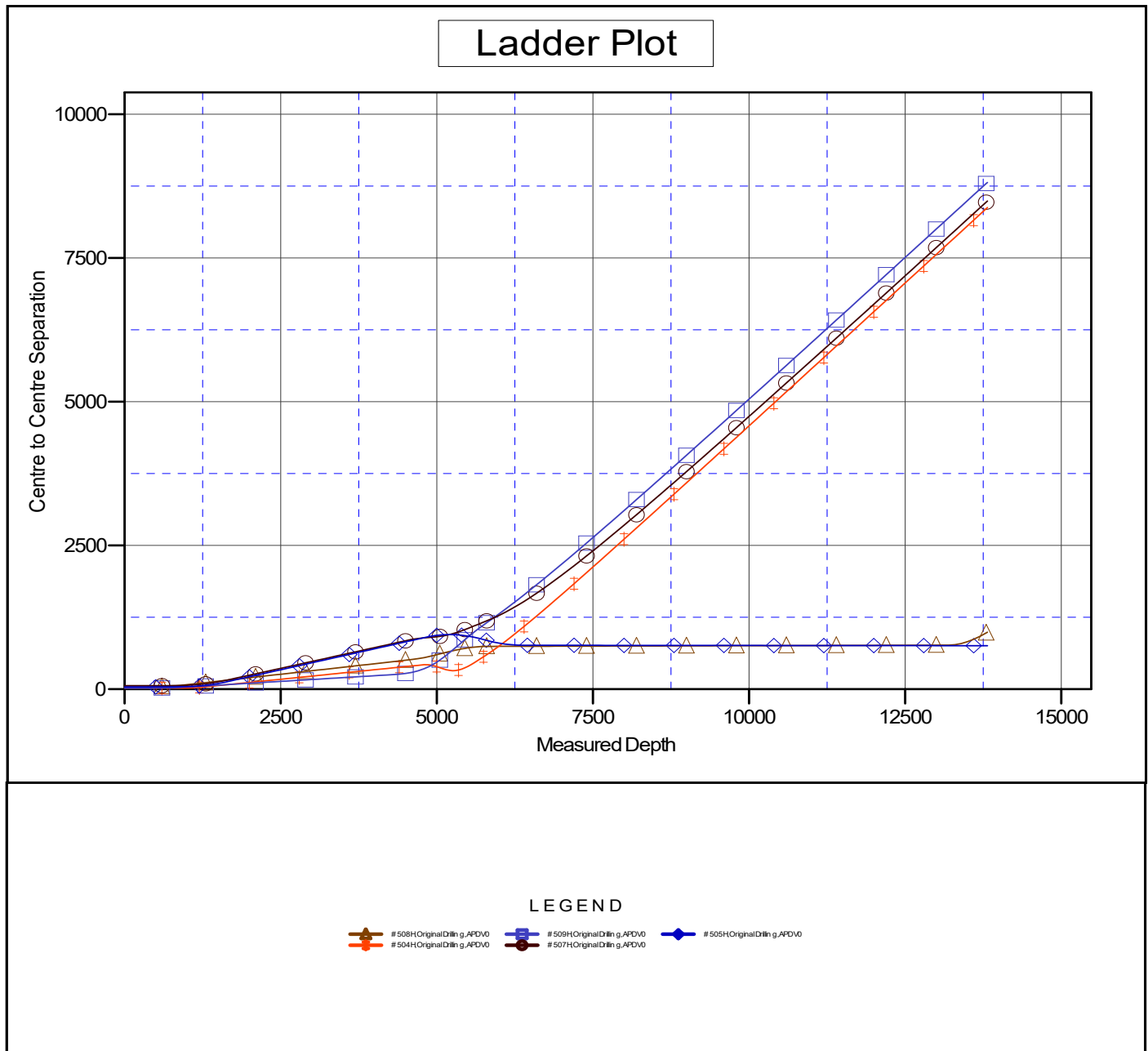
Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 506H - Slot 4
Project:	Venado Canyon Unit	TVD Reference:	GL 7075' & RKB 14' @ 7089ft
Reference Site:	O11 2206 Pad	MD Reference:	GL 7075' & RKB 14' @ 7089ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Reference Depths are relative to GL 7075' & RKB 14' @ 7089ft
Offset Depths are relative to Offset Datum
Central Meridian is -107.8333333

Coordinates are relative to: # 506H - Slot 4
Coordinate System is US State Plane 1983, New Mexico Western Zone
Grid Convergence at Surface is: 0.24°





Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 506H - Slot 4
Project:	Venado Canyon Unit	TVD Reference:	GL 7075' & RKB 14' @ 7089ft
Reference Site:	O11 2206 Pad	MD Reference:	GL 7075' & RKB 14' @ 7089ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 506H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Reference Depths are relative to GL 7075' & RKB 14' @ 7089ft

Offset Depths are relative to Offset Datum

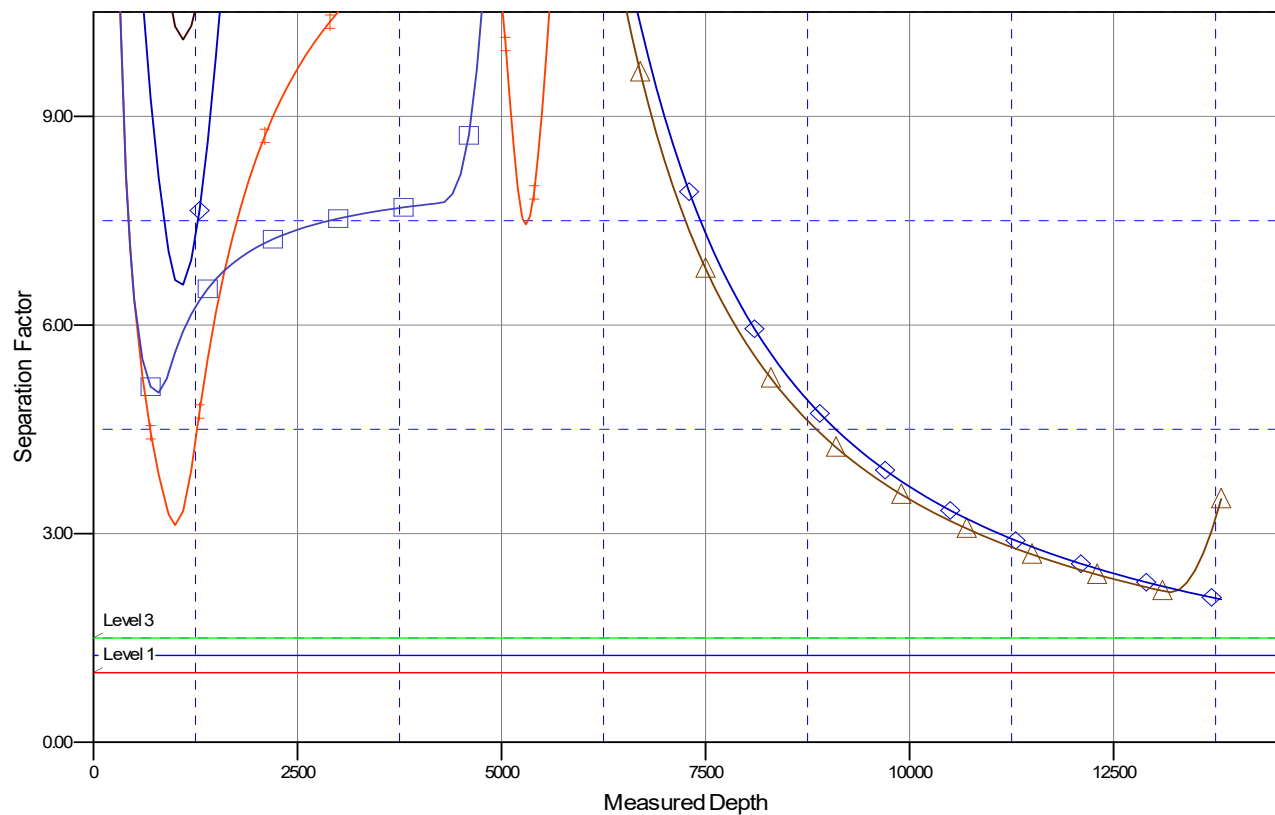
Central Meridian is -107.83333333

Coordinates are relative to: # 506H - Slot 4

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

Grid Convergence at Surface is: 0.24°

Separation Factor Plot



LEGEND

#508HOriginalDrilling.g.APDV0
 #504HOriginalDrilling.g.APDV0
 #505HOriginalDrilling.g.APDV0

District I

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

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 83651

CONDITIONS

Operator: DJR OPERATING, LLC 1 Road 3263 Aztec, NM 87410	OGRID:
	371838
	Action Number: 83651
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Notify OCD 24 hours prior to casing & cement	2/28/2022
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104	2/28/2022
kpickford	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	2/28/2022
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing	2/28/2022
kpickford	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	2/28/2022