

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 508H
3a. Address 1700 LINCOLN STREET, SUITE 2800, DENVER, CO 802	3b. Phone No. (include area code) (505) 632-3476	9. API Well No. 30-043-21409
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SWSE / 1263 FSL / 1289 FEL / LAT 36.1483198 / LONG -107.4337153 At proposed prod. zone SESE / 637 FSL / 355 FEL / LAT 36.131766 / LONG -107.413147		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) 1263 feet	16. No of acres in lease 520.0	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 4945 feet / 12774 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 FED: NMB001464
24. Attachments		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. 2. A Drilling Plan. 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).		4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 5. Operator certification. 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
Approval Date: 02/17/2022

(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 30-043-21409		² Pool Code 42289		³ Pool Name LYBROOK GALLUP	
⁴ Property Code 325271		⁵ Property Name VENADO CANYON UNIT			⁶ Well Number 508H
⁷ GRID 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
P	11	22-N	6-W		1263	SOUTH	1289	EAST	SANDOVAL

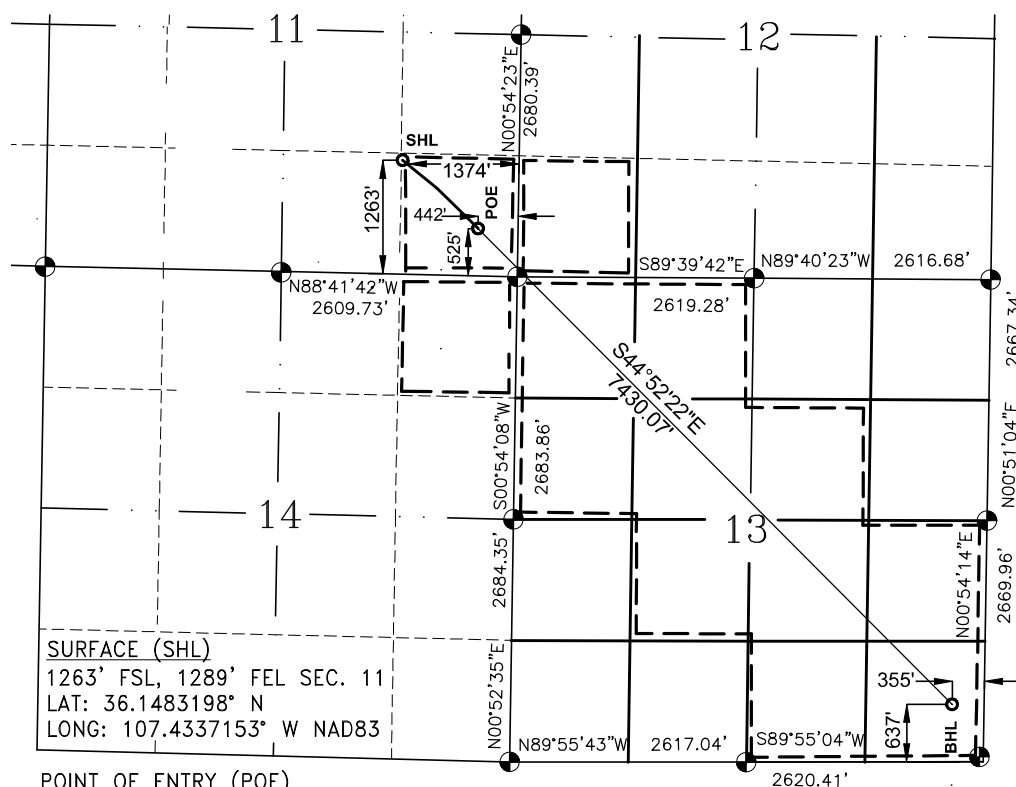
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	13	22-N	6-W		637	SOUTH	355	EAST	SANDOVAL

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

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16



POINT OF ENTRY (POE)
525' FSL, 442' FEL SEC. 11
LAT: 36.146239° N
LONG: 107.430888° W NAD83

BOTTOM HOLE (BHL)
637' FSL, 355' FEL SEC. 13
LAT: 36.131766° N
LONG: 107.413147° W NAD83

DETAIL: DEDICATED ACRES
SEC. 11: SE/SE (40 ACRES) .
SEC. 12: SW/SW (40 ACRES) .
SEC. 14: NE/NE, (40 ACRES)
SEC. 13: NW/4, NE/SW, SW/NE,
 SE/4 (400 ACRES)
 TOTAL = 520 ACRES .

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

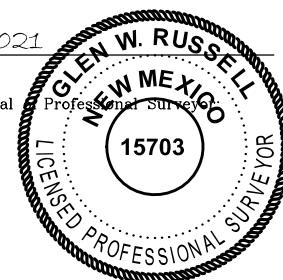
18 SURVEYOR CERTIFICATION

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 20, 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



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

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.



DJR OPERATING, LLC.
OGRID NO: 371838
NATURAL GAS MANAGEMENT PLAN
VENADO CANYON UNIT 504H, 505H, 506H, 507H, 508H, 509H
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 #508H

Sandoval County, New Mexico

Surface Location

1289-ft FEL & 1263-ft FSL
 Sec 11 T22N R06W
 Graded Elevation 7075' MSL
 RKB Elevation 7089' (14' KB)

SHL Geographical Coordinates (NAD-83)

Latitude 36.1483198° N
 Longitude 107.4337153° W

Kick Off Point for Horizontal Build Curve

4423-ft MD
 4391-ft TVD

Local Coordinates (from SHL)

312-ft South
 381-ft East

Heel Location (Pay zone entry)

442-ft FEL & 525-ft FSL
 Sec 11 T22N R6W

Heel Geographical Coordinates (NAD-83)

Latitude 36.1462393° N
 Longitude 107.43088760° W

Bottom Hole Location (TD)

355-ft FEL & 637-ft FSL
 Sec 13 T22N R6W

BHL Geographical Coordinates (NAD-83)

Latitude 36.1317658° N
 Longitude 107.4131471° W

Well objectives

This well is planned as a 7430-ft lateral in the Mancos Silt sand.

Bottom Hole temperature and pressure

The temperature in the Mancos Silt horizontal objective is 136°F. Bottom hole pressure in the Mancos Silt 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	1309	1304	Sd	W	8.3	8.4 – 8.8
Kirtland	1459	1453	Sh	-	8.3	8.4 – 8.8
Fruitland	1682	1674	C	G	8.3	9.0 - 9.5
Pictured Cliffs	1879	1869	Sd	W	8.3	9.0 - 9.5
Lewis	1973	1962	Sh	-		9.0 - 9.5
Chacra	2692	2675	Sd	-	8.3	9.0 - 9.5
Menefee	3375	3352	Sd, C	G	8.3	9.0 - 9.5
Point Lookout	4152	4123	Sd	-	8.3	9.0 - 9.5
Mancos	4298	4267	Sh	-		9.0 - 9.5
Mancos Silt	4674	4627	Slt	O/G	6.6	9.0 - 9.5
Gallup A	NP	NP	Slt	O/G	6.6	9.0 - 9.5
Gallup B	NP	NP	Sd	O/G	6.6	8.8 - 9.0
Gallup C	NP	NP	Sd	O/G	6.6	8.8 - 9.0
Target	5344	4945	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	5284	surf	4943	surface
4-1/2"	6-1/8"	11.6	P-110	BTC	5007	12774	4860	4895	5007

Note: all casing will be new



Rev 1

Casing Design Load Cases

Description		Casing String		
		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

Casing string		Design Factors			
		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

	Lead
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

	Lead	Tail
	BJ Services	BJ Services
Type	III	Poz/G
Planned top	Surface	3923-ft
Density (ppg)	12.30	13.50
Yield (cf/sx)	2.34	1.50
Mix water (gal/sx)	13.26	7.20
Volume (sx)	381	218
Volume (bbls)	159	58
Volume (cu.ft.)	891	326
Excess %	50	50



Rev 1

4-1/2" Production Liner

	BJ Services
Type	Poz/G
Planned top	5007-ft
Density (ppg)	13.3
Yield (cf/sx)	1.56
Mix water (gal/sx)	7.71
Volume (sx)	653
Volume (bbls)	182
Volume (cu.ft)	1020
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 – 5284	9.0 – 9.5	38 – 45	8 – 14	<20
Production	Low solids, non-dispersed	5284 – 12774	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

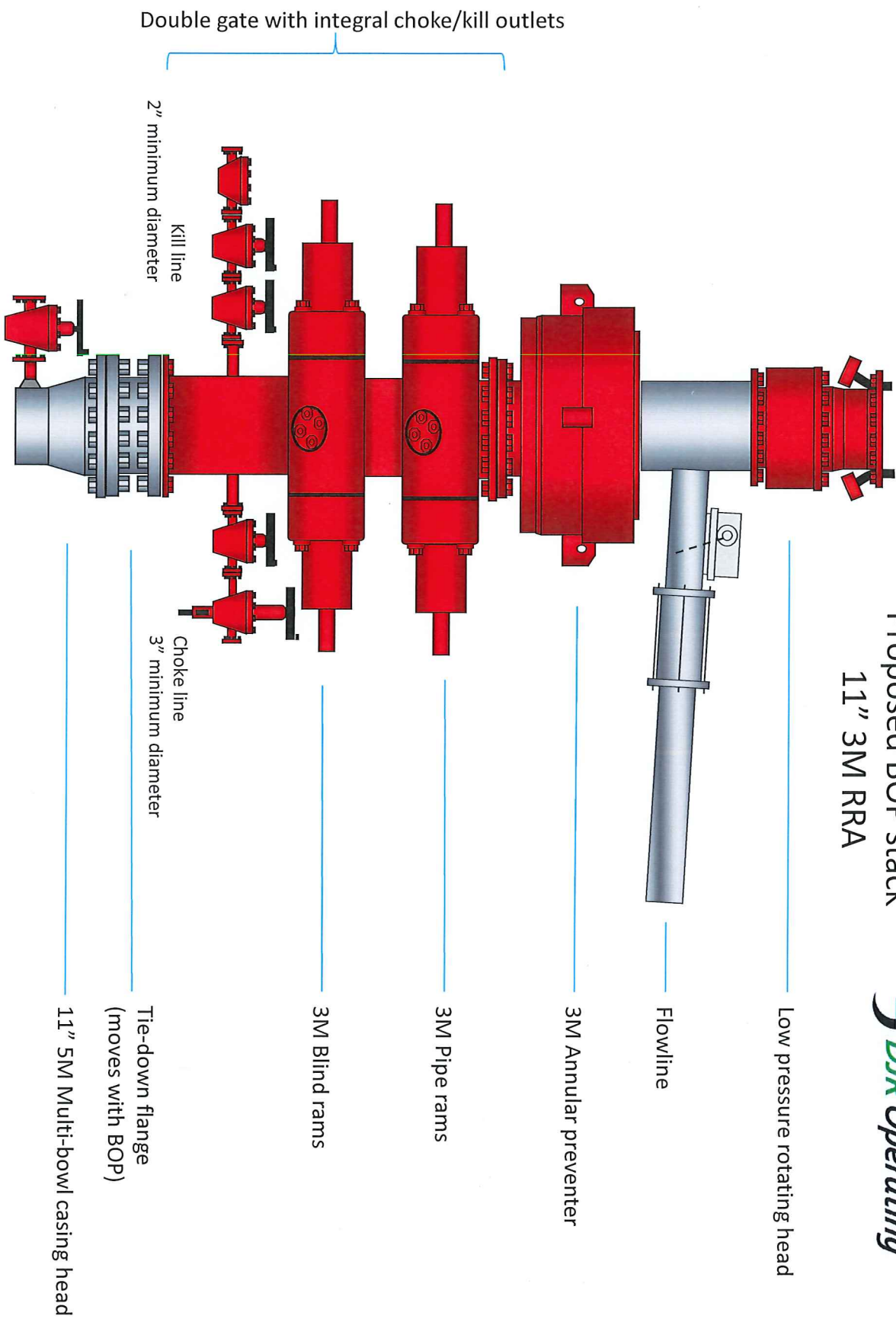
A closed loop, steel tank-based circulating system will be used. In addition to the rig solids control equipment, a dewatering centrifuge and chemical flocculation system will be operational to strip solids from the whole mud. All solids will be collected in 3-sided bins and will then be put into transports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



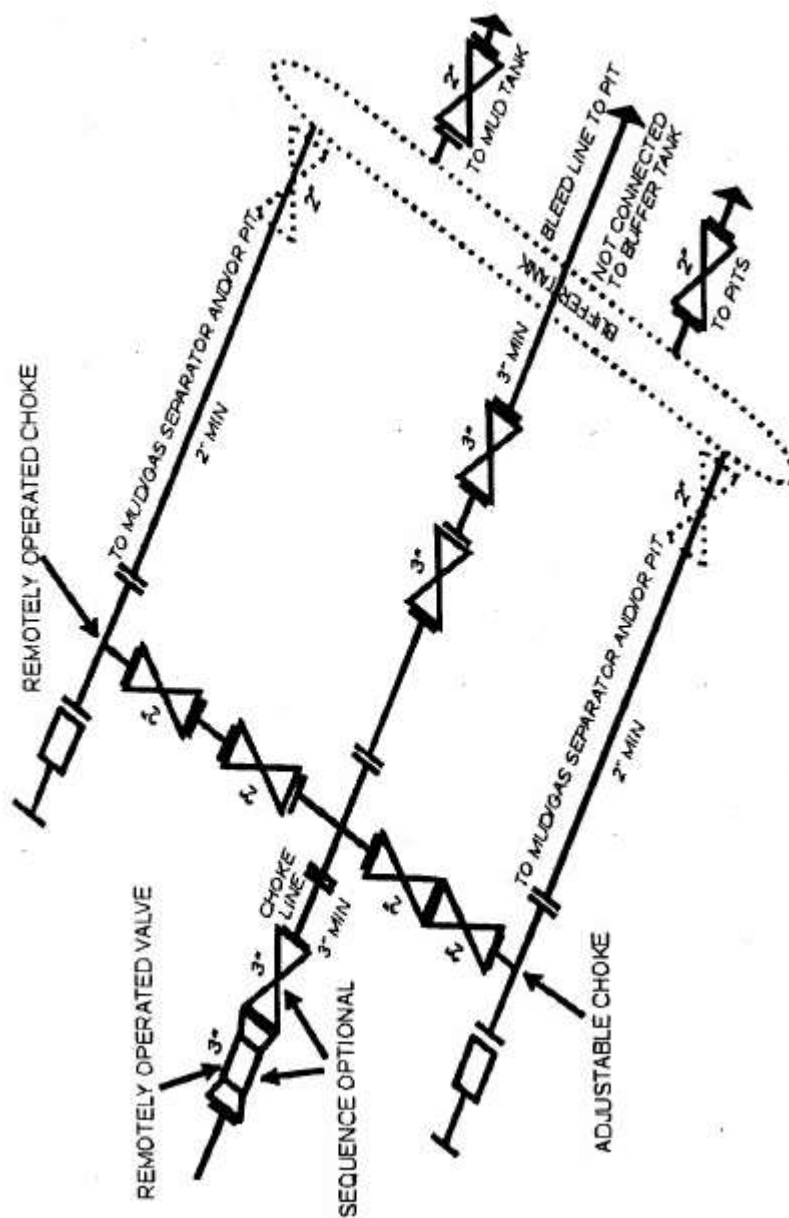
Proposed BOP stack 11" 3M RRA





Choke Manifold

Actual system to conform with Onshore Order 2





Released to Imaging: 2/28/2022 3:34:57 PM



Company: DJR Operating
Project: Venado Canyon Unit
Site: O11 2206 Pad
Well: # 508H
Wellbore: Original Drilling
Design: APD

WELL DETAILS: # 508H

+N/-S		Northing		Easting		Longitude	
0	0	1873527.61	2841072.20	36.14831980	-107.43371530	6	

GL 7075' & RKB 14' @ 7089ft

DESIGN TARGET DETAILS

Time	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
508H Heel	4945	-757	835	1872773.71	2841910.17	36.14623930	-107.43088760
508H Toe	4895	-6025	6074	1867527.26	2841710.71	36.13776580	-107.41314710

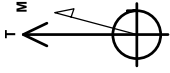
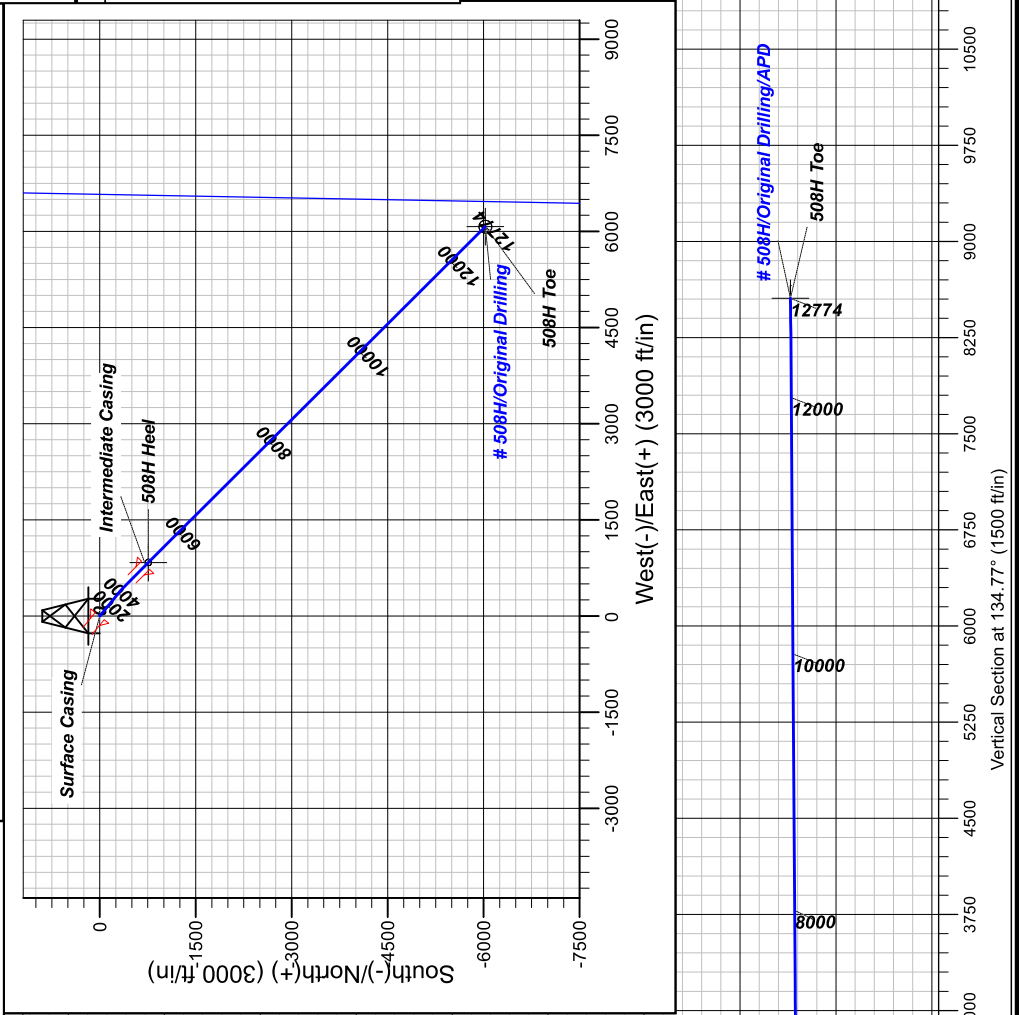
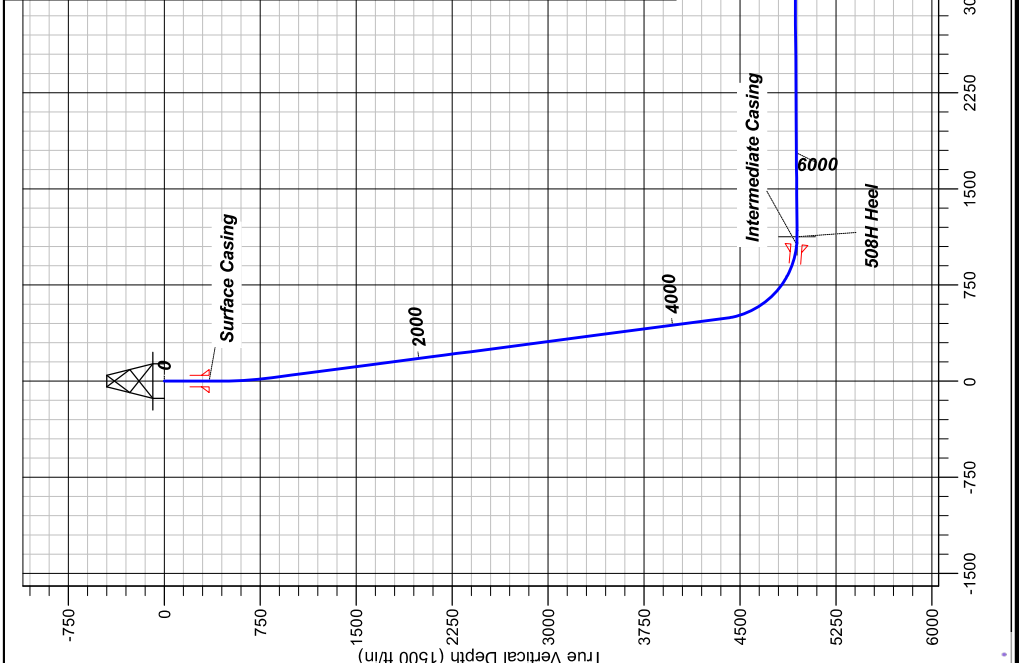
PROJECT DETAILS: Venado Canyon Unit

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

Plan: APD (# 508H/Original Drilling)
Created By: Janie Collins Date: 16:27, May 04 2021

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	
823	7.48	129.28	823	-15	19	2.00	128.28	24	
433	7.48	129.28	433	-31	38	0.00	0.00	450	508H Heel
534	90.39	133.78	534	-757	835	9.00	6.92	1126	508H Toe
12774	90.39	135.16	4895	-6025	6074	0.00	0.00	8555	



Azimuths to True North
Magnetic North: 8.33°
Magnetic Field
Strength: 49466.62
Dip Angle: 62.83°
Date: 12/31/2019
Model: IGRF2015

CASING DETAILS

	MD	Ne
TVD	350	Surface Casing
	4943	Intermediate Casing

FORMATION DETAILS

MDPath	Formation
1304	Ojo Alamo
1453	Kirtland
1674	Fruitland
1869	Pictured Cliffs
1962	Lewis
2675	Chacra
3352	Menefee
4123	Point Lookout
4287	Mancos
4627	Mancos Silt



DJR Operating

Venado Canyon Unit

O11 2206 Pad

508H - Slot 6

Original Drilling

Plan: APD

Standard Planning Report

04 May, 2021





Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 508H - Slot 6
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:	# 508H	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	# 508H - Slot 6					
Well Position	+N/-S	84 ft	Northing:	1,873,527.61 usft	Latitude:	36.1483198
	+E/-W	55 ft	Easting:	2,841,072.20 usft	Longitude:	-107.4337153
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	49,466.54359132

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	134.77

Plan Survey Tool Program	Date	5/4/2021		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0	12,774	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	
824	7.48	129.28	823	-15	19	2.00	2.00	0.00	129.28	
4423	7.48	129.28	4391	-312	381	0.00	0.00	0.00	0.00	
5344	90.39	135.16	4945	-757	835	9.00	9.00	0.64	5.92	508H Heel
12,774	90.39	135.16	4895	-6025	6074	0.00	0.00	0.00	0.00	508H Toe



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 508H - Slot 6
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:	# 508H	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	129.28	500	0	0	0	2.00	2.00	0.00
600	3.00	129.28	600	-2	3	4	2.00	2.00	0.00
700	5.00	129.28	700	-7	8	11	2.00	2.00	0.00
800	7.00	129.28	799	-14	17	21	2.00	2.00	0.00
824	7.48	129.28	823	-15	19	24	2.00	2.00	0.00
900	7.48	129.28	898	-22	27	34	0.00	0.00	0.00
1000	7.48	129.28	997	-30	37	47	0.00	0.00	0.00
1100	7.48	129.28	1097	-38	47	60	0.00	0.00	0.00
1200	7.48	129.28	1196	-46	57	73	0.00	0.00	0.00
1300	7.48	129.28	1295	-55	67	86	0.00	0.00	0.00
1400	7.48	129.28	1394	-63	77	99	0.00	0.00	0.00
1500	7.48	129.28	1493	-71	87	112	0.00	0.00	0.00
1600	7.48	129.28	1592	-79	97	125	0.00	0.00	0.00
1700	7.48	129.28	1691	-88	107	138	0.00	0.00	0.00
1800	7.48	129.28	1791	-96	117	151	0.00	0.00	0.00
1900	7.48	129.28	1890	-104	127	164	0.00	0.00	0.00
2000	7.48	129.28	1989	-112	137	177	0.00	0.00	0.00
2100	7.48	129.28	2088	-121	147	190	0.00	0.00	0.00
2200	7.48	129.28	2187	-129	157	203	0.00	0.00	0.00
2300	7.48	129.28	2286	-137	168	215	0.00	0.00	0.00
2400	7.48	129.28	2386	-145	178	228	0.00	0.00	0.00
2500	7.48	129.28	2485	-154	188	241	0.00	0.00	0.00
2600	7.48	129.28	2584	-162	198	254	0.00	0.00	0.00
2700	7.48	129.28	2683	-170	208	267	0.00	0.00	0.00
2800	7.48	129.28	2782	-178	218	280	0.00	0.00	0.00
2900	7.48	129.28	2881	-187	228	293	0.00	0.00	0.00
3000	7.48	129.28	2980	-195	238	306	0.00	0.00	0.00
3100	7.48	129.28	3080	-203	248	319	0.00	0.00	0.00
3200	7.48	129.28	3179	-211	258	332	0.00	0.00	0.00
3300	7.48	129.28	3278	-219	268	345	0.00	0.00	0.00
3400	7.48	129.28	3377	-228	278	358	0.00	0.00	0.00
3500	7.48	129.28	3476	-236	288	371	0.00	0.00	0.00
3600	7.48	129.28	3575	-244	299	384	0.00	0.00	0.00
3700	7.48	129.28	3674	-252	309	397	0.00	0.00	0.00
3800	7.48	129.28	3774	-261	319	410	0.00	0.00	0.00
3900	7.48	129.28	3873	-269	329	423	0.00	0.00	0.00
4000	7.48	129.28	3972	-277	339	436	0.00	0.00	0.00
4100	7.48	129.28	4071	-285	349	449	0.00	0.00	0.00
4200	7.48	129.28	4170	-294	359	462	0.00	0.00	0.00
4300	7.48	129.28	4269	-302	369	475	0.00	0.00	0.00
4400	7.48	129.28	4369	-310	379	488	0.00	0.00	0.00
4423	7.48	129.28	4391	-312	381	490	0.00	0.00	0.00
4500	14.43	132.16	4467	-322	392	505	9.00	8.97	3.72
4600	23.42	133.38	4561	-344	416	538	9.00	8.99	1.21
4700	32.42	133.94	4650	-376	450	584	9.00	9.00	0.56
4800	41.42	134.28	4730	-418	493	644	9.00	9.00	0.34
4900	50.42	134.52	4799	-468	544	716	9.00	9.00	0.24
5000	59.41	134.70	4856	-525	603	798	9.00	9.00	0.18



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 508H - Slot 6
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:	# 508H	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	68.41	134.85	4900	-589	666	888	9.00	9.00	0.15	
5200	77.41	134.98	4930	-656	734	983	9.00	9.00	0.13	
5300	86.41	135.11	4944	-726	804	1082	9.00	9.00	0.12	
5344	90.39	135.16	4945	-757	835	1126	9.00	9.00	0.12	
5400	90.39	135.16	4945	-797	874	1182	0.00	0.00	0.00	
5500	90.39	135.16	4944	-868	945	1282	0.00	0.00	0.00	
5600	90.39	135.16	4943	-939	1015	1382	0.00	0.00	0.00	
5700	90.39	135.16	4943	-1010	1086	1482	0.00	0.00	0.00	
5800	90.39	135.16	4942	-1081	1156	1582	0.00	0.00	0.00	
5900	90.39	135.16	4941	-1151	1227	1682	0.00	0.00	0.00	
6000	90.39	135.16	4941	-1222	1297	1782	0.00	0.00	0.00	
6100	90.39	135.16	4940	-1293	1368	1882	0.00	0.00	0.00	
6200	90.39	135.16	4939	-1364	1438	1982	0.00	0.00	0.00	
6300	90.39	135.16	4939	-1435	1509	2082	0.00	0.00	0.00	
6400	90.39	135.16	4938	-1506	1579	2182	0.00	0.00	0.00	
6500	90.39	135.16	4937	-1577	1650	2282	0.00	0.00	0.00	
6600	90.39	135.16	4937	-1648	1720	2382	0.00	0.00	0.00	
6700	90.39	135.16	4936	-1719	1791	2482	0.00	0.00	0.00	
6800	90.39	135.16	4935	-1790	1861	2582	0.00	0.00	0.00	
6900	90.39	135.16	4935	-1861	1932	2682	0.00	0.00	0.00	
7000	90.39	135.16	4934	-1931	2002	2782	0.00	0.00	0.00	
7100	90.39	135.16	4933	-2002	2073	2882	0.00	0.00	0.00	
7200	90.39	135.16	4932	-2073	2143	2982	0.00	0.00	0.00	
7300	90.39	135.16	4932	-2144	2214	3082	0.00	0.00	0.00	
7400	90.39	135.16	4931	-2215	2285	3182	0.00	0.00	0.00	
7500	90.39	135.16	4930	-2286	2355	3282	0.00	0.00	0.00	
7600	90.39	135.16	4930	-2357	2426	3382	0.00	0.00	0.00	
7700	90.39	135.16	4929	-2428	2496	3482	0.00	0.00	0.00	
7800	90.39	135.16	4928	-2499	2567	3582	0.00	0.00	0.00	
7900	90.39	135.16	4928	-2570	2637	3682	0.00	0.00	0.00	
8000	90.39	135.16	4927	-2640	2708	3782	0.00	0.00	0.00	
8100	90.39	135.16	4926	-2711	2778	3882	0.00	0.00	0.00	
8200	90.39	135.16	4926	-2782	2849	3982	0.00	0.00	0.00	
8300	90.39	135.16	4925	-2853	2919	4082	0.00	0.00	0.00	
8400	90.39	135.16	4924	-2924	2990	4182	0.00	0.00	0.00	
8500	90.39	135.16	4924	-2995	3060	4282	0.00	0.00	0.00	
8600	90.39	135.16	4923	-3066	3131	4382	0.00	0.00	0.00	
8700	90.39	135.16	4922	-3137	3201	4482	0.00	0.00	0.00	
8800	90.39	135.16	4922	-3208	3272	4582	0.00	0.00	0.00	
8900	90.39	135.16	4921	-3279	3342	4682	0.00	0.00	0.00	
9000	90.39	135.16	4920	-3350	3413	4782	0.00	0.00	0.00	
9100	90.39	135.16	4920	-3420	3483	4882	0.00	0.00	0.00	
9200	90.39	135.16	4919	-3491	3554	4982	0.00	0.00	0.00	
9300	90.39	135.16	4918	-3562	3624	5082	0.00	0.00	0.00	
9400	90.39	135.16	4918	-3633	3695	5182	0.00	0.00	0.00	
9500	90.39	135.16	4917	-3704	3765	5282	0.00	0.00	0.00	
9600	90.39	135.16	4916	-3775	3836	5382	0.00	0.00	0.00	
9700	90.39	135.16	4916	-3846	3906	5482	0.00	0.00	0.00	
9800	90.39	135.16	4915	-3917	3977	5582	0.00	0.00	0.00	
9900	90.39	135.16	4914	-3988	4047	5682	0.00	0.00	0.00	
10,000	90.39	135.16	4914	-4059	4118	5782	0.00	0.00	0.00	
10,100	90.39	135.16	4913	-4129	4188	5882	0.00	0.00	0.00	
10,200	90.39	135.16	4912	-4200	4259	5982	0.00	0.00	0.00	
10,300	90.39	135.16	4912	-4271	4329	6082	0.00	0.00	0.00	



Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 508H - Slot 6
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:	# 508H	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	90.39	135.16	4911	-4342	4400	6182	0.00	0.00	0.00	
10,500	90.39	135.16	4910	-4413	4470	6282	0.00	0.00	0.00	
10,600	90.39	135.16	4910	-4484	4541	6382	0.00	0.00	0.00	
10,700	90.39	135.16	4909	-4555	4611	6482	0.00	0.00	0.00	
10,800	90.39	135.16	4908	-4626	4682	6582	0.00	0.00	0.00	
10,900	90.39	135.16	4908	-4697	4752	6682	0.00	0.00	0.00	
11,000	90.39	135.16	4907	-4768	4823	6782	0.00	0.00	0.00	
11,100	90.39	135.16	4906	-4839	4893	6882	0.00	0.00	0.00	
11,200	90.39	135.16	4906	-4909	4964	6982	0.00	0.00	0.00	
11,300	90.39	135.16	4905	-4980	5035	7082	0.00	0.00	0.00	
11,400	90.39	135.16	4904	-5051	5105	7182	0.00	0.00	0.00	
11,500	90.39	135.16	4904	-5122	5176	7282	0.00	0.00	0.00	
11,600	90.39	135.16	4903	-5193	5246	7382	0.00	0.00	0.00	
11,700	90.39	135.16	4902	-5264	5317	7482	0.00	0.00	0.00	
11,800	90.39	135.16	4902	-5335	5387	7582	0.00	0.00	0.00	
11,900	90.39	135.16	4901	-5406	5458	7682	0.00	0.00	0.00	
12,000	90.39	135.16	4900	-5477	5528	7782	0.00	0.00	0.00	
12,100	90.39	135.16	4900	-5548	5599	7882	0.00	0.00	0.00	
12,200	90.39	135.16	4899	-5618	5669	7982	0.00	0.00	0.00	
12,300	90.39	135.16	4898	-5689	5740	8082	0.00	0.00	0.00	
12,400	90.39	135.16	4897	-5760	5810	8182	0.00	0.00	0.00	
12,500	90.39	135.16	4897	-5831	5881	8282	0.00	0.00	0.00	
12,600	90.39	135.16	4896	-5902	5951	8382	0.00	0.00	0.00	
12,700	90.39	135.16	4895	-5973	6022	8482	0.00	0.00	0.00	
12,774	90.39	135.16	4895	-6025	6074	8555	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
- hit/miss target									
- Shape									
508H Toe	0.00	0.00	4895	-6025	6074	1,867,527.26	2,847,170.72	36.13176580	-107.41314710
- plan hits target center									
- Circle (radius 100)									
508H Heel	0.00	0.00	4945	-757	835	1,872,773.71	2,841,910.18	36.14623930	-107.43088760
- plan hits target center									
- Circle (radius 50)									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
350	350	Surface Casing	9.62	12.25	
5284	4943	Intermediate Casing	7.00	8.75	



Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 508H - Slot 6
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:	# 508H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1309	1304	Ojo Alamo		0.00	0.00	
1459	1453	Kirtland		0.00	0.00	
1682	1674	Fruitland		0.00	0.00	
1879	1869	Pictured Cliffs		0.00	0.00	
1973	1962	Lewis		0.00	0.00	
2692	2675	Chacra		0.00	0.00	
3375	3352	Menefee		0.00	0.00	
4152	4123	Point Lookout		0.00	0.00	
4298	4267	Mancos		0.00	0.00	
4674	4627	Mancos Silt		0.00	0.00	



DJR Operating

Venado Canyon Unit

O11 2206 Pad

508H

Original Drilling

APD

Anticollision Report

04 May, 2021





Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 508H - Slot 6
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:	# 508H	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	12,774	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	450	450	60	57	21.313	CC
# 504H - Original Drilling - APD	500	499	60	57	19.112	ES
# 504H - Original Drilling - APD	824	817	77	72	14.374	SF
# 505H - Original Drilling - APD	402	402	80	77	32.336	CC
# 505H - Original Drilling - APD	450	449	80	77	28.449	ES
# 505H - Original Drilling - APD	12,774	12,369	1245	834	3.027	SF
# 506H - Original Drilling - APD	450	450	40	37	14.178	CC
# 506H - Original Drilling - APD	500	499	40	37	12.743	ES
# 506H - Original Drilling - APD	12,774	13,191	766	411	2.157	SF
# 507H - Original Drilling - APD	450	450	100	97	35.517	CC, ES
# 507H - Original Drilling - APD	1000	978	145	138	21.979	SF
# 509H - Original Drilling - APD	450	450	20	17	7.081	CC
# 509H - Original Drilling - APD	500	500	20	17	6.372	ES
# 509H - Original Drilling - APD	700	699	25	20	5.453	SF

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)				
0	0	0	0	0	0	-146.59	-50	-33	60					
100	100	100	100	0	0	-146.59	-50	-33	60	60	0.31	194.788		
200	200	200	200	1	1	-146.59	-50	-33	60	59	1.03	58.573		
300	300	300	300	1	1	-146.59	-50	-33	60	58	1.74	34.469		
400	400	400	400	1	1	-146.59	-50	-33	60	58	2.46	24.419		
450	450	450	450	1	1	-146.59	-50	-33	60	57	2.82	21.313 CC		
500	500	499	499	2	2	84.29	-51	-33	60	57	3.16	19.112 ES		
600	600	597	597	2	2	85.49	-54	-33	63	59	3.82	16.421		
700	700	696	695	2	2	87.62	-61	-32	68	63	4.50	15.017		
800	799	793	793	3	3	90.28	-71	-32	75	70	5.20	14.429		
824	823	817	816	3	3	90.94	-74	-32	77	72	5.37	14.374 SF		
900	898	891	889	3	3	92.55	-84	-31	85	79	5.92	14.377		
1000	997	988	985	3	3	92.98	-100	-30	98	91	6.65	14.670		
1100	1097	1085	1079	4	4	92.09	-120	-28	112	105	7.39	15.204		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 508H - Slot 6
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:	# 508H	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		
1200	1196	1180	1172	4	4	90.38	-142	-27	130	121	8.13	15.927		
1300	1295	1276	1265	5	5	88.28	-168	-25	149	140	8.88	16.771		
1400	1394	1374	1359	5	5	86.49	-194	-23	169	159	9.67	17.492		
1500	1493	1472	1453	5	6	85.08	-221	-22	189	179	10.46	18.105		
1600	1592	1570	1547	6	6	83.94	-247	-20	210	198	11.25	18.633		
1700	1691	1667	1641	6	6	83.00	-274	-18	230	218	12.05	19.091		
1800	1791	1765	1735	7	7	82.22	-301	-16	251	238	12.85	19.492		
1900	1890	1863	1830	7	7	81.55	-327	-15	271	257	13.66	19.845		
2000	1989	1961	1924	7	8	80.98	-354	-13	292	277	14.46	20.158		
2100	2088	2059	2018	8	8	80.49	-380	-11	312	297	15.27	20.437		
2200	2187	2157	2112	8	9	80.05	-407	-9	333	317	16.08	20.688		
2300	2286	2254	2206	9	9	79.67	-433	-7	353	336	16.89	20.914		
2400	2386	2352	2300	9	10	79.32	-460	-6	374	356	17.70	21.120		
2500	2485	2450	2395	9	10	79.02	-486	-4	394	376	18.51	21.306		
2600	2584	2548	2489	10	11	78.74	-513	-2	415	396	19.32	21.477		
2700	2683	2646	2583	10	12	78.49	-539	0	436	416	20.14	21.634		
2800	2782	2744	2677	11	12	78.26	-566	1	456	435	20.95	21.778		
2900	2881	2841	2771	11	13	78.06	-592	3	477	455	21.77	21.912		
3000	2980	2939	2865	11	13	77.86	-619	5	498	475	22.58	22.035		
3100	3080	3037	2959	12	14	77.69	-645	7	518	495	23.40	22.150		
3200	3179	3135	3054	12	14	77.53	-672	8	539	515	24.21	22.256		
3300	3278	3233	3148	13	15	77.38	-699	10	559	534	25.03	22.356		
3400	3377	3331	3242	13	15	77.24	-725	12	580	554	25.84	22.449		
3500	3476	3428	3336	13	16	77.11	-752	14	601	574	26.66	22.537		
3600	3575	3526	3430	14	16	76.99	-778	16	621	594	27.48	22.619		
3700	3674	3624	3524	14	17	76.87	-805	17	642	614	28.29	22.696		
3800	3774	3722	3618	15	17	76.77	-831	19	663	634	29.11	22.769		
3900	3873	3820	3713	15	18	76.67	-858	21	683	654	29.93	22.837		
4000	3972	3918	3807	15	18	76.57	-884	23	704	673	30.75	22.902		
4100	4071	4015	3901	16	19	76.49	-911	24	725	693	31.56	22.964		
4200	4170	4113	3995	16	19	76.40	-937	26	745	713	32.38	23.022		
4300	4269	4211	4089	17	20	76.32	-964	28	766	733	33.20	23.077		
4400	4369	4309	4183	17	20	76.25	-990	30	787	753	34.02	23.130		
4423	4391	4331	4205	17	20	76.23	-996	30	791	757	34.20	23.142		
4450	4418	4358	4230	17	21	74.32	-1004	31	797	763	34.43	23.146		
4500	4467	4407	4278	17	21	72.42	-1017	32	806	771	34.89	23.101		
4550	4515	4456	4325	18	21	71.55	-1030	32	814	778	35.38	22.993		
4600	4561	4504	4371	18	21	71.31	-1043	33	820	784	35.92	22.823		
4650	4606	4552	4417	18	22	71.52	-1056	34	825	789	36.51	22.599		
4700	4650	4599	4462	19	22	72.10	-1069	35	829	792	37.14	22.326		
4750	4691	4644	4506	19	22	72.98	-1081	36	832	795	37.82	22.011		
4800	4729	4688	4548	19	22	74.09	-1093	37	835	797	38.55	21.662		
4850	4766	4729	4588	20	22	75.37	-1104	37	837	798	39.34	21.287		
4900	4799	4772	4629	20	23	76.91	-1116	38	840	799	40.21	20.881		
4950	4829	4814	4670	21	23	78.65	-1125	37	842	801	41.14	20.465		
5000	4856	4847	4702	21	23	80.14	-1132	35	845	803	42.06	20.084		
5050	4880	4873	4727	22	23	81.23	-1136	32	849	806	42.98	19.756		
5100	4900	4892	4746	23	23	81.87	-1138	30	855	811	43.88	19.483		
5150	4917	4905	4760	24	23	82.02	-1140	28	863	818	44.76	19.274		
5200	4930	4914	4768	24	23	81.70	-1140	26	872	827	45.60	19.134		
5250	4939	4919	4773	25	23	80.94	-1141	26	884	838	46.40	19.060		
5300	4944	4921	4775	26	23	79.77	-1141	25	898	851	47.14	19.052		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 508H - Slot 6
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:	# 508H	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
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	Warning	
5344	4945	4920	4774	27	23	78.43	-1141	25	912	864	47.75	19.097		
5400	4945	4918	4772	28	23	78.28	-1141	26	932	883	48.46	19.226		
5500	4944	4914	4769	30	23	78.06	-1140	26	974	924	49.54	19.659		
5600	4943	4912	4766	32	23	77.87	-1140	27	1024	974	50.40	20.324		
5700	4943	4900	4754	34	23	77.10	-1139	29	1082	1031	50.93	21.239		
5800	4942	4900	4754	36	23	77.10	-1139	29	1145	1093	51.42	22.261		
5900	4941	4900	4754	38	23	77.10	-1139	29	1213	1161	51.78	23.424		
6000	4941	4900	4754	40	23	77.10	-1139	29	1285	1233	52.02	24.705		
6100	4940	4900	4754	43	23	77.10	-1139	29	1361	1309	52.17	26.084		
6200	4939	4900	4754	45	23	77.10	-1139	29	1440	1387	52.26	27.546		
6300	4939	4900	4754	47	23	77.10	-1139	29	1521	1469	52.31	29.076		
6400	4938	4900	4754	50	23	77.10	-1139	29	1604	1552	52.31	30.665		
6500	4937	4900	4754	52	23	77.10	-1139	29	1689	1637	52.30	32.304		
6600	4937	4900	4754	55	23	77.10	-1139	29	1776	1724	52.26	33.984		
6700	4936	4900	4754	57	23	77.10	-1139	29	1864	1812	52.22	35.700		
6800	4935	4900	4754	59	23	77.10	-1139	29	1953	1901	52.16	37.447		
6900	4935	4900	4754	62	23	77.10	-1139	29	2044	1991	52.10	39.220		
7000	4934	4900	4754	64	23	77.10	-1139	29	2135	2083	52.04	41.016		
7100	4933	4900	4754	67	23	77.10	-1139	29	2226	2174	51.98	42.832		
7200	4932	4900	4754	69	23	77.10	-1139	29	2319	2267	51.92	44.665		
7300	4932	4900	4754	72	23	77.10	-1139	29	2412	2360	51.86	46.512		
7400	4931	4900	4754	74	23	77.10	-1139	29	2506	2454	51.80	48.372		
7500	4930	4900	4754	77	23	77.10	-1139	29	2600	2548	51.74	50.244		
7600	4930	4900	4754	79	23	77.10	-1139	29	2694	2643	51.69	52.125		
7700	4929	4900	4754	82	23	77.10	-1139	29	2789	2738	51.64	54.015		
7800	4928	4900	4754	84	23	77.10	-1139	29	2885	2833	51.59	55.912		
7900	4928	4900	4754	87	23	77.10	-1139	29	2980	2929	51.55	57.815		
8000	4927	4900	4754	89	23	77.10	-1139	29	3076	3024	51.50	59.723		
8100	4926	4900	4754	92	23	77.10	-1139	29	3172	3121	51.46	61.637		
8200	4926	4900	4754	94	23	77.10	-1139	29	3268	3217	51.43	63.554		
8300	4925	4900	4754	97	23	77.10	-1139	29	3365	3314	51.39	65.474		
8400	4924	4900	4754	100	23	77.10	-1139	29	3462	3410	51.36	67.397		
8500	4924	4900	4754	102	23	77.10	-1139	29	3559	3507	51.34	69.322		
8600	4923	4900	4754	105	23	77.10	-1139	29	3656	3604	51.31	71.249		
8700	4922	4900	4754	107	23	77.10	-1139	29	3753	3702	51.29	73.177		
8800	4922	4900	4754	110	23	77.10	-1139	29	3850	3799	51.27	75.106		
8900	4921	4900	4754	112	23	77.10	-1139	29	3948	3897	51.25	77.036		
9000	4920	4900	4754	115	23	77.10	-1139	29	4046	3994	51.23	78.965		
9100	4920	4900	4754	117	23	77.10	-1139	29	4143	4092	51.22	80.895		
9200	4919	4900	4754	120	23	77.10	-1139	29	4241	4190	51.21	82.824		
9300	4918	4900	4754	122	23	77.10	-1139	29	4339	4288	51.20	84.753		
9400	4918	4900	4754	125	23	77.10	-1139	29	4437	4386	51.19	86.680		
9500	4917	4900	4754	128	23	77.10	-1139	29	4535	4484	51.18	88.606		
9600	4916	4900	4754	130	23	77.10	-1139	29	4634	4582	51.18	90.531		
9700	4916	4900	4754	133	23	77.10	-1139	29	4732	4681	51.18	92.455		
9800	4915	4900	4754	135	23	77.10	-1139	29	4830	4779	51.18	94.376		
9900	4914	4900	4754	138	23	77.10	-1139	29	4929	4877	51.18	96.296		
10,000	4914	4900	4754	140	23	77.10	-1139	29	5027	4976	51.19	98.214		
10,100	4913	4900	4754	143	23	77.10	-1139	29	5126	5074	51.19	100.129		
10,200	4912	4900	4754	146	23	77.10	-1139	29	5224	5173	51.20	102.042		
10,300	4912	4900	4754	148	23	77.10	-1139	29	5323	5272	51.21	103.952		
10,400	4911	4900	4754	151	23	77.10	-1139	29	5422	5370	51.21	105.860		



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 508H - Slot 6
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:	# 508H	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)			
10,500	4910	4900	4754	153	23	77.10	-1139	29	5520	5469	51.23	107.765	
10,600	4910	4900	4754	156	23	77.10	-1139	29	5619	5568	51.24	109.666	
10,700	4909	4900	4754	158	23	77.10	-1139	29	5718	5667	51.25	111.565	
10,800	4908	4900	4754	161	23	77.10	-1139	29	5817	5766	51.27	113.461	
10,900	4908	4900	4754	164	23	77.10	-1139	29	5916	5864	51.28	115.353	
11,000	4907	4900	4754	166	23	77.10	-1139	29	6015	5963	51.30	117.242	
11,100	4906	4900	4754	169	23	77.10	-1139	29	6114	6062	51.32	119.127	
11,200	4906	4900	4754	171	23	77.10	-1139	29	6213	6161	51.34	121.009	
11,300	4905	4900	4754	174	23	77.10	-1139	29	6312	6260	51.36	122.887	
11,400	4904	4900	4754	176	23	77.10	-1139	29	6411	6359	51.38	124.762	
11,500	4904	4900	4754	179	23	77.10	-1139	29	6510	6459	51.41	126.633	
11,600	4903	4900	4754	182	23	77.10	-1139	29	6609	6558	51.43	128.499	
11,700	4902	4900	4754	184	23	77.10	-1139	29	6708	6657	51.46	130.362	
11,800	4902	4900	4754	187	23	77.10	-1139	29	6807	6756	51.49	132.220	
11,900	4901	4900	4754	189	23	77.10	-1139	29	6907	6855	51.51	134.075	
12,000	4900	4900	4754	192	23	77.10	-1139	29	7006	6954	51.54	135.925	
12,100	4900	4900	4754	194	23	77.10	-1139	29	7105	7054	51.57	137.771	
12,200	4899	4900	4754	197	23	77.10	-1139	29	7204	7153	51.60	139.613	
12,300	4898	4900	4754	200	23	77.10	-1139	29	7304	7252	51.63	141.450	
12,400	4897	4900	4754	202	23	77.10	-1139	29	7403	7351	51.67	143.283	
12,500	4897	4900	4754	205	23	77.10	-1139	29	7502	7451	51.70	145.111	
12,600	4896	4900	4754	207	23	77.10	-1139	29	7602	7550	51.73	146.935	
12,700	4895	4900	4754	210	23	77.10	-1139	29	7701	7649	51.77	148.754	
12,774	4895	4900	4754	211	23	77.10	-1139	29	7774	7721	53.81	144.481	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 508H - Slot 6
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:	# 508H	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		
0	0	0	0	0	0	-146.62	-67	-44	80					
100	100	100	100	0	0	-146.62	-67	-44	80	80	0.31	259.193		
200	200	200	200	1	1	-146.62	-67	-44	80	79	1.03	77.939		
300	300	300	300	1	1	-146.62	-67	-44	80	78	1.74	45.865		
400	400	400	400	1	1	-146.62	-67	-44	80	77	2.46	32.494		
402	402	402	402	1	1	-146.62	-67	-44	80	77	2.47	32.336 CC		
450	450	449	449	1	1	-146.67	-67	-44	80	77	2.81	28.449 ES		
500	500	498	498	2	2	83.97	-68	-44	81	77	3.15	25.585		
600	600	596	596	2	2	84.48	-72	-44	84	80	3.81	21.924		
700	700	694	693	2	2	85.75	-79	-43	89	84	4.49	19.800		
800	799	791	790	3	3	87.53	-90	-42	97	92	5.19	18.640		
824	823	814	813	3	3	88.01	-93	-42	99	94	5.36	18.465		
900	898	888	886	3	3	89.22	-104	-41	107	101	5.91	18.123		
1000	997	984	981	3	3	89.58	-121	-40	120	113	6.64	18.056		
1100	1097	1080	1074	4	4	88.91	-141	-38	135	128	7.38	18.310		
1200	1196	1175	1166	4	4	87.56	-164	-36	153	145	8.11	18.814		
1300	1295	1269	1257	5	5	85.80	-190	-34	173	164	8.85	19.524		
1400	1394	1361	1345	5	5	83.85	-218	-32	196	186	9.58	20.409		
1500	1493	1452	1430	5	6	81.84	-248	-29	221	211	10.30	21.452		
1600	1592	1542	1514	6	6	79.87	-281	-27	249	238	11.01	22.634		
1700	1691	1632	1597	6	7	77.95	-316	-24	280	268	11.73	23.861		
1800	1791	1727	1684	7	7	76.28	-354	-21	312	299	12.52	24.882		
1900	1890	1821	1770	7	8	74.91	-392	-18	343	330	13.32	25.786		
2000	1989	1916	1857	7	8	73.77	-429	-15	375	361	14.11	26.591		
2100	2088	2010	1944	8	9	72.81	-467	-12	407	392	14.91	27.310		
2200	2187	2105	2030	8	10	71.99	-504	-9	439	424	15.72	27.957		
2300	2286	2199	2117	9	10	71.28	-542	-6	472	455	16.53	28.540		
2400	2386	2294	2204	9	11	70.66	-579	-2	504	487	17.34	29.068		
2500	2485	2388	2290	9	11	70.12	-617	1	536	518	18.15	29.549		
2600	2584	2483	2377	10	12	69.64	-655	4	569	550	18.96	29.987		
2700	2683	2578	2464	10	13	69.21	-692	7	601	581	19.77	30.390		
2800	2782	2672	2550	11	13	68.82	-730	10	633	613	20.59	30.759		
2900	2881	2767	2637	11	14	68.47	-767	13	666	644	21.41	31.100		
3000	2980	2861	2724	11	15	68.16	-805	16	698	676	22.22	31.416		
3100	3080	2956	2811	12	15	67.87	-842	19	731	708	23.04	31.708		
3200	3179	3050	2897	12	16	67.60	-880	22	763	739	23.86	31.980		
3300	3278	3145	2984	13	16	67.36	-918	25	796	771	24.68	32.234		
3400	3377	3239	3071	13	17	67.14	-955	28	828	803	25.50	32.471		
3500	3476	3334	3157	13	18	66.93	-993	31	861	834	26.32	32.692		
3600	3575	3428	3244	14	18	66.74	-1030	34	893	866	27.15	32.900		
3700	3674	3523	3331	14	19	66.56	-1068	37	926	898	27.97	33.096		
3800	3774	3617	3417	15	20	66.40	-1105	40	958	929	28.79	33.280		
3900	3873	3712	3504	15	20	66.24	-1143	43	991	961	29.61	33.453		
4000	3972	3806	3591	15	21	66.09	-1180	46	1023	993	30.44	33.617		
4100	4071	3901	3677	16	21	65.96	-1218	49	1056	1025	31.26	33.771		
4200	4170	3995	3764	16	22	65.83	-1256	52	1088	1056	32.09	33.918		
4300	4269	4090	3851	17	23	65.71	-1293	55	1121	1088	32.91	34.057		
4400	4369	4184	3937	17	23	65.60	-1331	58	1153	1120	33.74	34.189		
4423	4391	4206	3957	17	24	65.57	-1339	59	1161	1127	33.92	34.218		
4450	4418	4232	3981	17	24	63.40	-1350	60	1169	1135	34.16	34.239		
4500	4467	4280	4025	17	24	61.01	-1369	61	1184	1149	34.61	34.203		
4550	4515	4328	4069	18	24	59.62	-1388	63	1196	1161	35.10	34.073		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 508H - Slot 6
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:	# 508H	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			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
4600	4561	4376	4113	18	25	58.83	-1407	64	1206	1171	35.63	33.851
4650	4606	4424	4157	18	25	58.48	-1426	66	1214	1178	36.21	33.542
4700	4650	4471	4200	19	25	58.49	-1445	67	1221	1184	36.83	33.150
4750	4691	4517	4242	19	26	58.81	-1463	69	1225	1188	37.49	32.680
4800	4729	4562	4284	19	26	59.40	-1481	70	1228	1190	38.20	32.137
4850	4766	4605	4324	20	26	60.23	-1498	72	1229	1190	38.97	31.528
4900	4799	4647	4362	20	27	61.26	-1515	73	1228	1188	39.80	30.860
4950	4829	4687	4398	21	27	62.46	-1531	74	1227	1186	40.70	30.139
5000	4856	4725	4433	21	27	63.80	-1545	76	1224	1182	41.66	29.375
5050	4880	4760	4465	22	27	65.23	-1559	77	1220	1177	42.69	28.578
5100	4900	4791	4494	23	28	66.66	-1572	78	1216	1172	43.79	27.769
5150	4917	4812	4513	24	28	67.79	-1580	79	1211	1167	44.87	27.001
5200	4930	4833	4531	24	28	68.95	-1589	80	1207	1161	46.03	26.220
5250	4939	4850	4547	25	28	70.00	-1597	82	1203	1155	47.24	25.459
5300	4944	4873	4567	26	28	71.30	-1608	85	1199	1150	48.60	24.662
5344	4945	4891	4582	27	28	72.31	-1616	87	1195	1146	49.82	23.996
5400	4945	4914	4602	28	28	73.30	-1628	91	1193	1141	51.41	23.195
5451	4944	4938	4622	29	29	74.32	-1641	95	1192	1139	52.95	22.507
5500	4944	4965	4644	30	29	75.41	-1655	101	1192	1138	54.44	21.901
5600	4943	5033	4696	32	30	78.03	-1694	119	1198	1140	57.71	20.759
5700	4943	5124	4759	34	30	81.18	-1752	151	1208	1146	61.25	19.715
5800	4942	5247	4830	36	32	84.65	-1836	206	1219	1154	65.16	18.705
5900	4941	5408	4892	38	34	87.66	-1952	297	1228	1159	69.54	17.661
6000	4941	5596	4917	40	37	88.90	-2090	423	1232	1158	74.36	16.566
6100	4940	5695	4916	43	39	88.91	-2160	493	1232	1154	78.49	15.697
6200	4939	5795	4916	45	40	88.91	-2231	563	1232	1150	82.75	14.892
6300	4939	5895	4915	47	42	88.92	-2302	633	1232	1145	87.11	14.149
6400	4938	5995	4915	50	44	88.93	-2373	704	1233	1141	91.55	13.464
6500	4937	6095	4914	52	46	88.93	-2444	774	1233	1137	96.08	12.832
6600	4937	6195	4914	55	48	88.94	-2515	844	1233	1132	100.66	12.250
6700	4936	6295	4913	57	50	88.94	-2586	915	1233	1128	105.30	11.712
6800	4935	6395	4913	59	52	88.95	-2657	985	1233	1123	109.99	11.214
6900	4935	6495	4912	62	54	88.95	-2728	1056	1234	1119	114.72	10.753
7000	4934	6595	4911	64	57	88.96	-2799	1126	1234	1114	119.49	10.326
7100	4933	6695	4911	67	59	88.97	-2871	1196	1234	1110	124.30	9.928
7200	4932	6795	4910	69	61	88.97	-2942	1267	1234	1105	129.13	9.558
7300	4932	6895	4910	72	64	88.98	-3013	1337	1234	1100	133.99	9.213
7400	4931	6995	4909	74	66	88.98	-3084	1407	1235	1096	138.87	8.890
7500	4930	7095	4909	77	68	88.99	-3155	1478	1235	1091	143.77	8.589
7600	4930	7195	4908	79	71	88.99	-3226	1548	1235	1086	148.70	8.306
7700	4929	7295	4908	82	73	89.00	-3297	1619	1235	1082	153.64	8.040
7800	4928	7395	4907	84	75	89.01	-3368	1689	1235	1077	158.59	7.790
7900	4928	7495	4906	87	78	89.01	-3439	1759	1236	1072	163.56	7.555
8000	4927	7595	4906	89	80	89.02	-3510	1830	1236	1067	168.54	7.332
8100	4926	7695	4905	92	83	89.02	-3581	1900	1236	1062	173.53	7.123
8200	4926	7795	4905	94	85	89.03	-3652	1970	1236	1058	178.53	6.924
8300	4925	7895	4904	97	87	89.04	-3723	2041	1236	1053	183.54	6.736
8400	4924	7995	4904	100	90	89.04	-3794	2111	1237	1048	188.57	6.558
8500	4924	8095	4903	102	92	89.05	-3865	2182	1237	1043	193.59	6.388
8600	4923	8195	4903	105	95	89.05	-3936	2252	1237	1038	198.63	6.227
8700	4922	8295	4902	107	97	89.06	-4007	2322	1237	1033	203.68	6.074
8800	4922	8395	4902	110	100	89.06	-4078	2393	1237	1029	208.73	5.928



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 508H - Slot 6
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:	# 508H	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						Rule Assigned:					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		
8900	4921	8495	4901	112	102	89.07	-4149	2463	1238	1024	213.78	5.789		
9000	4920	8595	4900	115	105	89.08	-4220	2533	1238	1019	218.84	5.656		
9100	4920	8695	4900	117	107	89.08	-4291	2604	1238	1014	223.91	5.529		
9200	4919	8795	4899	120	110	89.09	-4362	2674	1238	1009	228.98	5.407		
9300	4918	8895	4899	122	112	89.09	-4433	2745	1238	1004	234.06	5.291		
9400	4918	8995	4898	125	115	89.10	-4505	2815	1239	999	239.14	5.179		
9500	4917	9095	4898	128	117	89.10	-4576	2885	1239	994	244.22	5.072		
9600	4916	9195	4897	130	120	89.11	-4647	2956	1239	990	249.31	4.969		
9700	4916	9295	4897	133	122	89.12	-4718	3026	1239	985	254.40	4.871		
9800	4915	9395	4896	135	125	89.12	-4789	3096	1239	980	259.50	4.776		
9900	4914	9495	4895	138	127	89.13	-4860	3167	1239	975	264.60	4.684		
10,000	4914	9595	4895	140	130	89.13	-4931	3237	1240	970	269.70	4.597		
10,100	4913	9695	4894	143	132	89.14	-5002	3307	1240	965	274.80	4.512		
10,200	4912	9795	4894	146	135	89.14	-5073	3378	1240	960	279.91	4.430		
10,300	4912	9895	4893	148	137	89.15	-5144	3448	1240	955	285.02	4.352		
10,400	4911	9995	4893	151	140	89.16	-5215	3519	1240	950	290.13	4.276		
10,500	4910	10,095	4892	153	143	89.16	-5286	3589	1241	945	295.24	4.202		
10,600	4910	10,195	4892	156	145	89.17	-5357	3659	1241	940	300.36	4.131		
10,700	4909	10,295	4891	158	148	89.17	-5428	3730	1241	936	305.48	4.063		
10,800	4908	10,395	4891	161	150	89.18	-5499	3800	1241	931	310.60	3.996		
10,900	4908	10,495	4890	164	153	89.18	-5570	3870	1241	926	315.72	3.932		
11,000	4907	10,595	4889	166	155	89.19	-5641	3941	1242	921	320.84	3.870		
11,100	4906	10,695	4889	169	158	89.20	-5712	4011	1242	916	325.96	3.810		
11,200	4906	10,795	4888	171	160	89.20	-5783	4082	1242	911	331.09	3.751		
11,300	4905	10,895	4888	174	163	89.21	-5854	4152	1242	906	336.22	3.695		
11,400	4904	10,995	4887	176	165	89.21	-5925	4222	1242	901	341.35	3.640		
11,500	4904	11,095	4887	179	168	89.22	-5996	4293	1243	896	346.48	3.586		
11,600	4903	11,195	4886	182	171	89.22	-6067	4363	1243	891	351.61	3.535		
11,700	4902	11,295	4886	184	173	89.23	-6139	4433	1243	886	356.74	3.484		
11,800	4902	11,395	4885	187	176	89.24	-6210	4504	1243	881	361.88	3.435		
11,900	4901	11,495	4884	189	178	89.24	-6281	4574	1243	876	367.01	3.388		
12,000	4900	11,595	4884	192	181	89.25	-6352	4645	1244	871	372.15	3.342		
12,100	4900	11,695	4883	194	183	89.25	-6423	4715	1244	866	377.28	3.297		
12,200	4899	11,795	4883	197	186	89.26	-6494	4785	1244	862	382.42	3.253		
12,300	4898	11,895	4882	200	188	89.26	-6565	4856	1244	857	387.56	3.210		
12,400	4897	11,995	4882	202	191	89.27	-6636	4926	1244	852	392.70	3.169		
12,500	4897	12,095	4881	205	194	89.28	-6707	4996	1245	847	397.84	3.128		
12,600	4896	12,195	4881	207	196	89.28	-6778	5067	1245	842	402.98	3.089		
12,700	4895	12,295	4880	210	199	89.29	-6849	5137	1245	837	408.13	3.050		
12,774	4895	12,369	4880	211	201	89.29	-6901	5189	1245	834	411.30	3.027 SF		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 508H - Slot 6
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:	# 508H	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 - # 506H - 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	-146.49	-33	-22	40					
100	100	100	100	0	0	-146.49	-33	-22	40	40	0.31	129.580		
200	200	200	200	1	1	-146.49	-33	-22	40	39	1.03	38.965		
300	300	300	300	1	1	-146.49	-33	-22	40	38	1.74	22.930		
400	400	400	400	1	1	-146.49	-33	-22	40	37	2.46	16.245		
450	450	450	450	1	1	-146.49	-33	-22	40	37	2.82	14.178 CC		
500	500	499	499	2	2	84.46	-34	-22	40	37	3.16	12.743 ES		
600	600	598	598	2	2	86.25	-37	-22	43	39	3.82	11.161		
700	700	697	697	2	2	89.25	-44	-21	48	43	4.51	10.569		
800	799	795	795	3	3	92.70	-54	-21	55	50	5.21	10.608		
824	823	819	818	3	3	93.52	-57	-21	57	52	5.38	10.683		
900	898	893	892	3	3	95.29	-67	-20	66	60	5.93	11.049		
1000	997	992	989	3	3	95.85	-84	-19	78	71	6.67	11.619		
1100	1097	1091	1087	4	4	96.19	-100	-18	90	82	7.44	12.061		
1200	1196	1191	1185	4	4	96.45	-116	-17	102	94	8.20	12.408		
1300	1295	1290	1283	5	5	96.65	-132	-16	114	105	8.98	12.685		
1400	1394	1389	1381	5	5	96.81	-148	-15	126	116	9.76	12.911		
1500	1493	1489	1479	5	5	96.95	-165	-14	138	128	10.55	13.098		
1600	1592	1588	1577	6	6	97.06	-181	-13	150	139	11.34	13.255		
1700	1691	1687	1675	6	6	97.16	-197	-12	162	150	12.13	13.390		
1800	1791	1786	1772	7	7	97.24	-213	-11	175	162	12.93	13.505		
1900	1890	1886	1870	7	7	97.32	-230	-10	187	173	13.73	13.605		
2000	1989	1985	1968	7	7	97.38	-246	-8	199	184	14.52	13.693		
2100	2088	2084	2066	8	8	97.44	-262	-7	211	196	15.32	13.771		
2200	2187	2183	2164	8	8	97.49	-278	-6	223	207	16.12	13.840		
2300	2286	2283	2262	9	9	97.53	-295	-5	235	218	16.92	13.901		
2400	2386	2382	2360	9	9	97.57	-311	-4	247	230	17.73	13.957		
2500	2485	2481	2458	9	10	97.61	-327	-3	260	241	18.53	14.007		
2600	2584	2580	2556	10	10	97.64	-343	-2	272	252	19.33	14.052		
2700	2683	2680	2654	10	10	97.67	-360	-1	284	264	20.14	14.094		
2800	2782	2779	2752	11	11	97.70	-376	0	296	275	20.94	14.132		
2900	2881	2878	2850	11	11	97.73	-392	1	308	286	21.75	14.167		
3000	2980	2977	2947	11	12	97.75	-408	2	320	298	22.55	14.199		
3100	3080	3077	3045	12	12	97.77	-425	3	332	309	23.36	14.229		
3200	3179	3176	3143	12	13	97.79	-441	4	344	320	24.16	14.256		
3300	3278	3275	3241	13	13	97.81	-457	5	357	332	24.97	14.282		
3400	3377	3374	3339	13	13	97.83	-473	6	369	343	25.78	14.306		
3500	3476	3474	3437	13	14	97.85	-490	7	381	354	26.58	14.328		
3600	3575	3573	3535	14	14	97.86	-506	8	393	366	27.39	14.349		
3700	3674	3672	3633	14	15	97.88	-522	9	405	377	28.20	14.369		
3800	3774	3772	3731	15	15	97.89	-538	10	417	388	29.00	14.387		
3900	3873	3871	3829	15	15	97.91	-555	11	429	400	29.81	14.404		
4000	3972	3970	3927	15	16	97.92	-571	12	442	411	30.62	14.421		
4100	4071	4069	4025	16	16	97.93	-587	13	454	422	31.43	14.436		
4200	4170	4169	4122	16	17	97.94	-603	14	466	434	32.24	14.451		
4300	4269	4268	4220	17	17	97.95	-620	15	478	445	33.04	14.465		
4400	4369	4367	4318	17	18	97.96	-636	16	490	456	33.85	14.478		
4423	4391	4389	4340	17	18	97.96	-640	17	493	459	34.03	14.481		
4450	4418	4417	4367	17	18	96.27	-644	17	496	462	34.26	14.482		
4500	4467	4466	4416	17	18	94.81	-652	17	502	468	34.70	14.477		
4550	4515	4515	4464	18	18	94.41	-660	18	509	474	35.18	14.464		
4600	4561	4563	4512	18	18	94.64	-668	18	516	480	35.68	14.448		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 508H - Slot 6
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:	# 508H	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 - # 506H - 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	
4650	4606	4610	4558	18	19	95.30	-676	19	523	487	36.22	14.435	
4700	4650	4656	4603	19	19	96.26	-683	19	531	494	36.78	14.435	
4750	4691	4700	4647	19	19	97.40	-690	20	540	503	37.36	14.456	
4800	4729	4742	4688	19	19	98.60	-697	20	551	513	37.96	14.509	
4850	4766	4782	4727	20	19	99.78	-704	21	563	525	38.56	14.602	
4900	4799	4819	4764	20	20	100.82	-710	21	577	538	39.17	14.744	
4950	4829	4854	4799	21	20	101.63	-716	21	594	554	39.76	14.944	
5000	4856	4898	4842	21	20	102.98	-723	22	613	573	40.42	15.169	
5050	4880	4957	4899	22	20	105.21	-737	27	634	592	41.18	15.383	
5100	4900	5026	4964	23	21	107.72	-757	37	655	613	41.94	15.611	
5150	4917	5107	5037	24	21	110.61	-786	55	676	634	42.64	15.860	
5200	4930	5206	5120	24	22	113.96	-831	86	697	654	43.22	16.135	
5250	4939	5330	5210	25	23	117.68	-898	138	717	673	43.62	16.432	
5300	4944	5486	5298	26	24	121.35	-996	222	733	689	43.90	16.689	
5344	4945	5654	5354	27	26	123.84	-1113	328	742	697	44.44	16.693	
5400	4945	5817	5369	28	29	124.74	-1229	441	744	698	46.14	16.135	
5500	4944	5917	5368	30	30	124.73	-1300	511	745	696	49.21	15.135	
5600	4943	6017	5368	32	32	124.72	-1371	582	745	693	52.46	14.204	
5700	4943	6117	5367	34	34	124.72	-1442	652	745	690	55.85	13.345	
5800	4942	6217	5367	36	36	124.71	-1513	722	746	686	59.38	12.557	
5900	4941	6317	5366	38	38	124.70	-1584	792	746	683	63.01	11.839	
6000	4941	6417	5365	40	40	124.70	-1655	863	746	679	66.72	11.184	
6100	4940	6517	5365	43	42	124.69	-1727	933	747	676	70.51	10.587	
6200	4939	6617	5364	45	45	124.68	-1798	1003	747	672	74.37	10.042	
6300	4939	6717	5364	47	47	124.67	-1869	1074	747	669	78.27	9.545	
6400	4938	6817	5363	50	49	124.67	-1940	1144	747	665	82.22	9.089	
6500	4937	6917	5362	52	52	124.66	-2011	1214	748	661	86.22	8.672	
6600	4937	7017	5362	55	54	124.65	-2082	1285	748	658	90.24	8.288	
6700	4936	7117	5361	57	56	124.65	-2153	1355	748	654	94.30	7.935	
6800	4935	7217	5361	59	59	124.64	-2224	1425	749	650	98.38	7.608	
6900	4935	7317	5360	62	61	124.63	-2295	1496	749	646	102.49	7.306	
7000	4934	7417	5359	64	64	124.63	-2367	1566	749	642	106.61	7.026	
7100	4933	7517	5359	67	66	124.62	-2438	1636	749	639	110.76	6.766	
7200	4932	7617	5358	69	68	124.61	-2509	1706	750	635	114.92	6.523	
7300	4932	7717	5358	72	71	124.60	-2580	1777	750	631	119.10	6.297	
7400	4931	7817	5357	74	73	124.60	-2651	1847	750	627	123.29	6.085	
7500	4930	7917	5357	77	76	124.59	-2722	1917	751	623	127.49	5.887	
7600	4930	8017	5356	79	78	124.58	-2793	1988	751	619	131.71	5.701	
7700	4929	8117	5355	82	81	124.58	-2864	2058	751	615	135.93	5.526	
7800	4928	8217	5355	84	83	124.57	-2935	2128	751	611	140.16	5.361	
7900	4928	8317	5354	87	86	124.56	-3007	2199	752	607	144.41	5.205	
8000	4927	8417	5354	89	88	124.55	-3078	2269	752	603	148.66	5.058	
8100	4926	8517	5353	92	91	124.55	-3149	2339	752	599	152.91	4.919	
8200	4926	8617	5352	94	93	124.54	-3220	2410	753	595	157.18	4.788	
8300	4925	8717	5352	97	96	124.53	-3291	2480	753	591	161.45	4.663	
8400	4924	8817	5351	100	98	124.53	-3362	2550	753	587	165.72	4.544	
8500	4924	8917	5351	102	101	124.52	-3433	2620	753	583	170.00	4.432	
8600	4923	9017	5350	105	103	124.51	-3504	2691	754	579	174.29	4.324	
8700	4922	9117	5350	107	106	124.51	-3575	2761	754	575	178.58	4.222	
8800	4922	9217	5349	110	108	124.50	-3647	2831	754	571	182.87	4.124	
8900	4921	9317	5348	112	111	124.49	-3718	2902	755	567	187.17	4.031	
9000	4920	9417	5348	115	113	124.48	-3789	2972	755	563	191.48	3.942	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 508H - Slot 6
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:	# 508H	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 - # 506H - 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)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
9100	4920	9517	5347	117	116	124.48	-3860	3042	755	559	195.78	3.857	
9200	4919	9617	5347	120	119	124.47	-3931	3113	755	555	200.10	3.775	
9300	4918	9717	5346	122	121	124.46	-4002	3183	756	551	204.41	3.697	
9400	4918	9817	5345	125	124	124.46	-4073	3253	756	547	208.73	3.622	
9500	4917	9917	5345	128	126	124.45	-4144	3324	756	543	213.05	3.550	
9600	4916	10,017	5344	130	129	124.44	-4215	3394	757	539	217.37	3.481	
9700	4916	10,117	5344	133	131	124.44	-4286	3464	757	535	221.69	3.414	
9800	4915	10,217	5343	135	134	124.43	-4358	3534	757	531	226.02	3.350	
9900	4914	10,317	5342	138	136	124.42	-4429	3605	757	527	230.35	3.288	
10,000	4914	10,417	5342	140	139	124.42	-4500	3675	758	523	234.69	3.229	
10,100	4913	10,517	5341	143	141	124.41	-4571	3745	758	519	239.02	3.171	
10,200	4912	10,617	5341	146	144	124.40	-4642	3816	758	515	243.36	3.116	
10,300	4912	10,717	5340	148	147	124.39	-4713	3886	759	511	247.70	3.062	
10,400	4911	10,817	5340	151	149	124.39	-4784	3956	759	507	252.04	3.011	
10,500	4910	10,917	5339	153	152	124.38	-4855	4027	759	503	256.39	2.961	
10,600	4910	11,017	5338	156	154	124.37	-4926	4097	759	499	260.73	2.913	
10,700	4909	11,117	5338	158	157	124.37	-4998	4167	760	495	265.08	2.866	
10,800	4908	11,217	5337	161	159	124.36	-5069	4238	760	491	269.43	2.821	
10,900	4908	11,317	5337	164	162	124.35	-5140	4308	760	487	273.78	2.777	
11,000	4907	11,417	5336	166	164	124.35	-5211	4378	761	482	278.13	2.735	
11,100	4906	11,517	5335	169	167	124.34	-5282	4448	761	478	282.49	2.694	
11,200	4906	11,617	5335	171	170	124.33	-5353	4519	761	474	286.84	2.654	
11,300	4905	11,717	5334	174	172	124.33	-5424	4589	761	470	291.20	2.615	
11,400	4904	11,817	5334	176	175	124.32	-5495	4659	762	466	295.56	2.577	
11,500	4904	11,917	5333	179	177	124.31	-5566	4730	762	462	299.92	2.541	
11,600	4903	12,017	5333	182	180	124.31	-5638	4800	762	458	304.28	2.505	
11,700	4902	12,117	5332	184	182	124.30	-5709	4870	763	454	308.64	2.471	
11,800	4902	12,217	5331	187	185	124.29	-5780	4941	763	450	313.01	2.437	
11,900	4901	12,317	5331	189	188	124.29	-5851	5011	763	446	317.37	2.405	
12,000	4900	12,417	5330	192	190	124.28	-5922	5081	763	442	321.74	2.373	
12,100	4900	12,517	5330	194	193	124.27	-5993	5152	764	438	326.11	2.342	
12,200	4899	12,617	5329	197	195	124.26	-6064	5222	764	434	330.48	2.312	
12,300	4898	12,717	5328	200	198	124.26	-6135	5292	764	429	334.85	2.283	
12,400	4897	12,817	5328	202	200	124.25	-6206	5362	765	425	339.22	2.254	
12,500	4897	12,917	5327	205	203	124.24	-6278	5433	765	421	343.59	2.226	
12,600	4896	13,017	5327	207	206	124.24	-6349	5503	765	417	347.97	2.199	
12,700	4895	13,117	5326	210	208	124.23	-6420	5573	765	413	352.34	2.173	
12,774	4895	13,191	5326	211	210	124.23	-6472	5625	766	411	355.03	2.157 SF	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 508H - Slot 6
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:	# 508H	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		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	-146.60	-84	-55	100					
100	100	100	100	0	0	-146.60	-84	-55	100	100	0.31	324.611		
200	200	200	200	1	1	-146.60	-84	-55	100	99	1.03	97.610		
300	300	300	300	1	1	-146.60	-84	-55	100	98	1.74	57.441		
400	400	400	400	1	1	-146.60	-84	-55	100	98	2.46	40.695		
450	450	450	450	1	1	-146.60	-84	-55	100	97	2.82	35.517 CC, ES		
500	500	498	498	2	2	84.26	-84	-55	100	97	3.16	31.828		
600	600	595	595	2	2	85.39	-87	-56	103	99	3.81	27.067		
700	700	692	691	2	2	87.45	-94	-57	109	104	4.49	24.276		
800	799	788	787	3	3	90.14	-103	-59	118	113	5.18	22.750		
824	823	811	810	3	3	90.83	-106	-60	120	115	5.34	22.523		
900	898	883	882	3	3	92.87	-116	-62	130	124	5.88	22.077		
1000	997	978	975	3	3	94.51	-131	-65	145	138	6.59	21.979 SF		
1100	1097	1072	1068	4	4	95.21	-150	-68	163	155	7.31	22.266		
1200	1196	1166	1158	4	4	95.22	-171	-73	183	175	8.03	22.828		
1300	1295	1258	1247	5	4	94.76	-194	-77	206	198	8.74	23.612		
1400	1394	1348	1334	5	5	93.98	-221	-82	232	223	9.45	24.554		
1500	1493	1438	1418	5	5	93.01	-249	-88	261	250	10.16	25.641		
1600	1592	1525	1500	6	6	91.95	-279	-94	291	281	10.85	26.851		
1700	1691	1613	1582	6	6	90.83	-312	-101	325	313	11.56	28.103		
1800	1791	1707	1668	7	7	89.79	-348	-108	359	347	12.35	29.089		
1900	1890	1801	1755	7	7	88.93	-383	-115	394	380	13.14	29.950		
2000	1989	1895	1841	7	8	88.21	-419	-122	428	414	13.94	30.707		
2100	2088	1988	1927	8	9	87.59	-455	-129	463	448	14.74	31.377		
2200	2187	2082	2014	8	9	87.06	-490	-136	497	482	15.55	31.973		
2300	2286	2176	2100	9	10	86.60	-526	-144	532	515	16.35	32.507		
2400	2386	2270	2187	9	10	86.19	-562	-151	566	549	17.17	32.988		
2500	2485	2363	2273	9	11	85.84	-597	-158	601	583	17.98	33.423		
2600	2584	2457	2359	10	12	85.52	-633	-165	635	617	18.79	33.819		
2700	2683	2551	2446	10	12	85.23	-669	-172	670	651	19.61	34.179		
2800	2782	2645	2532	11	13	84.97	-704	-179	705	684	20.42	34.509		
2900	2881	2738	2619	11	13	84.74	-740	-186	739	718	21.24	34.813		
3000	2980	2832	2705	11	14	84.53	-776	-193	774	752	22.06	35.092		
3100	3080	2926	2792	12	15	84.33	-811	-201	809	786	22.88	35.350		
3200	3179	3020	2878	12	15	84.15	-847	-208	844	820	23.70	35.590		
3300	3278	3114	2964	13	16	83.99	-883	-215	878	854	24.52	35.813		
3400	3377	3207	3051	13	16	83.84	-918	-222	913	888	25.35	36.020		
3500	3476	3301	3137	13	17	83.69	-954	-229	948	922	26.17	36.214		
3600	3575	3395	3224	14	18	83.56	-990	-236	982	955	26.99	36.395		
3700	3674	3489	3310	14	18	83.44	-1025	-243	1017	989	27.82	36.565		
3800	3774	3582	3396	15	19	83.33	-1061	-250	1052	1023	28.64	36.724		
3900	3873	3676	3483	15	19	83.22	-1097	-258	1087	1057	29.47	36.874		
4000	3972	3770	3569	15	20	83.12	-1132	-265	1121	1091	30.29	37.016		
4100	4071	3864	3656	16	21	83.03	-1168	-272	1156	1125	31.12	37.149		
4200	4170	3957	3742	16	21	82.94	-1204	-279	1191	1159	31.95	37.275		
4300	4269	4051	3828	17	22	82.85	-1239	-286	1226	1193	32.78	37.395		
4400	4369	4145	3915	17	23	82.78	-1275	-293	1260	1227	33.60	37.508		
4423	4391	4166	3934	17	23	82.76	-1283	-295	1268	1234	33.79	37.533		
4450	4418	4192	3958	17	23	80.43	-1293	-297	1278	1244	34.02	37.553		
4500	4467	4239	4002	17	23	77.69	-1311	-300	1294	1260	34.48	37.535		
4550	4515	4286	4045	18	23	75.88	-1328	-304	1310	1275	34.97	37.449		
4600	4561	4333	4088	18	24	74.61	-1346	-308	1324	1288	35.50	37.296		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 508H - Slot 6
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:	# 508H	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					Rule Assigned:							Offset Well Error:	0 ft
Reference	Offset	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			
4650	4606	4379	4130	18	24	73.73	-1364	-311	1337	1301	36.07	37.078			
4700	4650	4424	4172	19	24	73.14	-1381	-314	1350	1313	36.68	36.800			
4750	4691	4475	4219	19	25	72.97	-1400	-319	1361	1324	37.41	36.396			
4800	4729	4527	4268	19	25	73.21	-1417	-326	1372	1334	38.20	35.916			
4850	4766	4571	4310	20	25	73.55	-1429	-335	1381	1343	38.96	35.455			
4900	4799	4607	4343	20	25	73.83	-1437	-343	1391	1351	39.72	35.013			
4950	4829	4635	4370	21	26	73.96	-1442	-351	1400	1359	40.47	34.593			
5000	4856	4656	4390	21	26	73.89	-1446	-357	1409	1368	41.22	34.188			
5050	4880	4672	4404	22	26	73.61	-1448	-362	1419	1377	41.98	33.800			
5100	4900	4682	4414	23	26	73.11	-1449	-366	1429	1386	42.76	33.424			
5150	4917	4689	4420	24	26	72.43	-1450	-368	1440	1396	43.54	33.060			
5200	4930	4692	4423	24	26	71.57	-1450	-369	1451	1406	44.35	32.710			
5250	4939	4692	4423	25	26	70.57	-1450	-369	1462	1417	45.16	32.374			
5300	4944	4689	4421	26	26	69.46	-1450	-368	1474	1428	45.97	32.054			
5344	4945	4685	4417	27	26	68.41	-1449	-367	1484	1437	46.69	31.785			
5400	4945	4680	4412	28	26	68.19	-1449	-365	1498	1451	47.59	31.479			
5500	4944	4671	4404	30	26	67.85	-1448	-362	1528	1479	49.19	31.073			
5600	4943	4664	4397	32	26	67.56	-1447	-360	1564	1514	50.72	30.847			
5700	4943	4650	4384	34	26	67.02	-1445	-356	1606	1554	52.05	30.853			
5800	4942	4650	4384	36	26	67.02	-1445	-356	1652	1599	53.44	30.916			
5900	4941	4650	4384	38	26	67.02	-1445	-356	1703	1648	54.70	31.132			
6000	4941	4650	4384	40	26	67.02	-1445	-356	1758	1702	55.84	31.485			
6100	4940	4650	4384	43	26	67.02	-1445	-356	1817	1760	56.86	31.959			
6200	4939	4650	4384	45	26	67.02	-1445	-356	1880	1822	57.76	32.540			
6300	4939	4650	4384	47	26	67.02	-1445	-356	1945	1887	58.56	33.217			
6400	4938	4631	4366	50	26	66.27	-1441	-350	2013	1954	58.98	34.136			
6500	4937	4628	4364	52	26	66.18	-1441	-349	2084	2025	59.56	34.993			
6600	4937	4626	4362	55	26	66.09	-1441	-349	2157	2097	60.07	35.915			
6700	4936	4624	4360	57	26	66.01	-1440	-348	2233	2172	60.51	36.895			
6800	4935	4623	4358	59	26	65.94	-1440	-348	2310	2249	60.90	37.926			
6900	4935	4621	4357	62	26	65.87	-1440	-347	2389	2327	61.24	39.003			
7000	4934	4619	4355	64	26	65.81	-1439	-347	2469	2407	61.54	40.121			
7100	4933	4600	4337	67	25	65.05	-1435	-342	2551	2489	61.52	41.465			
7200	4932	4600	4337	69	25	65.05	-1435	-342	2634	2572	61.77	42.642			
7300	4932	4600	4337	72	25	65.05	-1435	-342	2718	2656	61.98	43.849			
7400	4931	4600	4337	74	25	65.05	-1435	-342	2803	2741	62.18	45.084			
7500	4930	4600	4337	77	25	65.05	-1435	-342	2889	2827	62.34	46.343			
7600	4930	4600	4337	79	25	65.05	-1435	-342	2976	2914	62.49	47.625			
7700	4929	4600	4337	82	25	65.05	-1435	-342	3064	3001	62.62	48.927			
7800	4928	4600	4337	84	25	65.05	-1435	-342	3152	3090	62.74	50.247			
7900	4928	4600	4337	87	25	65.05	-1435	-342	3242	3179	62.84	51.583			
8000	4927	4600	4337	89	25	65.05	-1435	-342	3331	3268	62.93	52.935			
8100	4926	4600	4337	92	25	65.05	-1435	-342	3422	3359	63.02	54.300			
8200	4926	4600	4337	94	25	65.05	-1435	-342	3513	3450	63.09	55.678			
8300	4925	4600	4337	97	25	65.05	-1435	-342	3604	3541	63.15	57.067			
8400	4924	4600	4337	100	25	65.05	-1435	-342	3696	3633	63.21	58.467			
8500	4924	4600	4337	102	25	65.05	-1435	-342	3788	3725	63.26	59.876			
8600	4923	4600	4337	105	25	65.05	-1435	-342	3881	3817	63.31	61.294			
8700	4922	4600	4337	107	25	65.05	-1435	-342	3974	3910	63.35	62.719			
8800	4922	4600	4337	110	25	65.05	-1435	-342	4067	4003	63.39	64.152			
8900	4921	4600	4337	112	25	65.05	-1435	-342	4160	4097	63.43	65.592			
9000	4920	4600	4337	115	25	65.05	-1435	-342	4254	4191	63.46	67.038			



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 508H - Slot 6
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:	# 508H	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		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	4920	4600	4337	117	25	65.05	-1435	-342	4348	4285	63.49	68.489	
9200	4919	4600	4337	120	25	65.05	-1435	-342	4443	4379	63.52	69.945	
9300	4918	4600	4337	122	25	65.05	-1435	-342	4538	4474	63.55	71.406	
9400	4918	4600	4337	125	25	65.05	-1435	-342	4632	4569	63.57	72.871	
9500	4917	4600	4337	128	25	65.05	-1435	-342	4728	4664	63.59	74.339	
9600	4916	4600	4337	130	25	65.05	-1435	-342	4823	4759	63.62	75.811	
9700	4916	4600	4337	133	25	65.05	-1435	-342	4918	4855	63.64	77.287	
9800	4915	4600	4337	135	25	65.05	-1435	-342	5014	4950	63.66	78.765	
9900	4914	4600	4337	138	25	65.05	-1435	-342	5110	5046	63.68	80.245	
10,000	4914	4600	4337	140	25	65.05	-1435	-342	5206	5142	63.70	81.728	
10,100	4913	4600	4337	143	25	65.05	-1435	-342	5302	5238	63.72	83.212	
10,200	4912	4600	4337	146	25	65.05	-1435	-342	5398	5334	63.73	84.699	
10,300	4912	4600	4337	148	25	65.05	-1435	-342	5495	5431	63.75	86.187	
10,400	4911	4600	4337	151	25	65.05	-1435	-342	5591	5527	63.77	87.676	
10,500	4910	4600	4337	153	25	65.05	-1435	-342	5688	5624	63.79	89.166	
10,600	4910	4600	4337	156	25	65.05	-1435	-342	5785	5721	63.81	90.657	
10,700	4909	4600	4337	158	25	65.05	-1435	-342	5881	5818	63.82	92.149	
10,800	4908	4600	4337	161	25	65.05	-1435	-342	5978	5915	63.84	93.642	
10,900	4908	4600	4337	164	25	65.05	-1435	-342	6075	6012	63.86	95.135	
11,000	4907	4600	4337	166	25	65.05	-1435	-342	6173	6109	63.88	96.628	
11,100	4906	4600	4337	169	25	65.05	-1435	-342	6270	6206	63.90	98.121	
11,200	4906	4600	4337	171	25	65.05	-1435	-342	6367	6303	63.92	99.615	
11,300	4905	4600	4337	174	25	65.05	-1435	-342	6465	6401	63.94	101.108	
11,400	4904	4600	4337	176	25	65.05	-1435	-342	6562	6498	63.96	102.601	
11,500	4904	4600	4337	179	25	65.05	-1435	-342	6660	6596	63.98	104.093	
11,600	4903	4600	4337	182	25	65.05	-1435	-342	6757	6693	64.00	105.585	
11,700	4902	4600	4337	184	25	65.05	-1435	-342	6855	6791	64.02	107.077	
11,800	4902	4600	4337	187	25	65.05	-1435	-342	6953	6889	64.04	108.568	
11,900	4901	4600	4337	189	25	65.05	-1435	-342	7051	6987	64.06	110.058	
12,000	4900	4600	4337	192	25	65.05	-1435	-342	7149	7085	64.09	111.547	
12,100	4900	4600	4337	194	25	65.05	-1435	-342	7247	7182	64.11	113.035	
12,200	4899	4600	4337	197	25	65.05	-1435	-342	7345	7280	64.13	114.522	
12,300	4898	4600	4337	200	25	65.05	-1435	-342	7443	7378	64.16	116.008	
12,400	4897	4600	4337	202	25	65.05	-1435	-342	7541	7477	64.18	117.493	
12,500	4897	4600	4337	205	25	65.05	-1435	-342	7639	7575	64.21	118.976	
12,600	4896	4600	4337	207	25	65.05	-1435	-342	7737	7673	64.23	120.459	
12,700	4895	4600	4337	210	25	65.05	-1435	-342	7835	7771	64.26	121.939	
12,774	4895	4600	4337	211	25	65.05	-1435	-342	7908	7842	65.65	120.457	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 508H - Slot 6
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:	# 508H	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		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	-146.50	-17	-11	20					
100	100	100	100	0	0	-146.50	-17	-11	20	20	0.31	64.715		
200	200	200	200	1	1	-146.50	-17	-11	20	19	1.03	19.460		
300	300	300	300	1	1	-146.50	-17	-11	20	18	1.74	11.452		
400	400	400	400	1	1	-146.50	-17	-11	20	17	2.46	8.113		
450	450	450	450	1	1	-146.50	-17	-11	20	17	2.82	7.081 CC		
500	500	500	500	2	2	84.40	-17	-11	20	17	3.16	6.372 ES		
600	600	599	599	2	2	85.73	-20	-9	22	18	3.83	5.649		
700	700	699	699	2	2	87.90	-26	-7	25	20	4.52	5.453 SF		
800	799	798	798	3	3	90.29	-36	-2	29	24	5.23	5.583		
824	823	822	821	3	3	90.91	-39	-1	31	25	5.40	5.645		
900	898	898	897	3	3	93.09	-47	3	35	29	5.97	5.818		
1000	997	998	996	3	3	95.26	-58	8	40	34	6.72	5.998		
1100	1097	1098	1095	4	4	96.90	-70	13	46	38	7.49	6.140		
1200	1196	1198	1194	4	4	98.18	-81	19	52	43	8.26	6.252		
1300	1295	1298	1293	5	5	99.20	-92	24	57	48	9.04	6.344		
1400	1394	1397	1392	5	5	100.04	-104	29	63	53	9.82	6.420		
1500	1493	1497	1491	5	5	100.74	-115	34	69	58	10.60	6.484		
1600	1592	1597	1590	6	6	101.34	-126	39	74	63	11.39	6.538		
1700	1691	1697	1689	6	6	101.85	-138	44	80	68	12.18	6.585		
1800	1791	1797	1788	7	6	102.29	-149	50	86	73	12.97	6.625		
1900	1890	1897	1887	7	7	102.67	-160	55	92	78	13.77	6.661		
2000	1989	1996	1986	7	7	103.01	-172	60	97	83	14.56	6.692		
2100	2088	2096	2085	8	8	103.31	-183	65	103	88	15.36	6.720		
2200	2187	2196	2184	8	8	103.58	-194	70	109	93	16.15	6.745		
2300	2286	2296	2283	9	8	103.83	-205	75	115	98	16.95	6.767		
2400	2386	2396	2382	9	9	104.05	-217	81	120	103	17.75	6.788		
2500	2485	2496	2482	9	9	104.25	-228	86	126	108	18.55	6.806		
2600	2584	2595	2581	10	10	104.43	-239	91	132	113	19.34	6.823		
2700	2683	2695	2680	10	10	104.59	-251	96	138	118	20.14	6.838		
2800	2782	2795	2779	11	10	104.75	-262	101	144	123	20.94	6.852		
2900	2881	2895	2878	11	11	104.89	-273	107	149	128	21.74	6.865		
3000	2980	2995	2977	11	11	105.02	-285	112	155	132	22.54	6.877		
3100	3080	3095	3076	12	12	105.14	-296	117	161	137	23.34	6.888		
3200	3179	3194	3175	12	12	105.26	-307	122	167	142	24.14	6.899		
3300	3278	3294	3274	13	12	105.36	-318	127	172	147	24.94	6.908		
3400	3377	3394	3373	13	13	105.46	-330	132	178	152	25.75	6.918		
3500	3476	3494	3472	13	13	105.55	-341	138	184	157	26.55	6.926		
3600	3575	3594	3571	14	14	105.64	-352	143	190	162	27.35	6.934		
3700	3674	3694	3670	14	14	105.72	-364	148	195	167	28.15	6.941		
3800	3774	3793	3769	15	14	105.80	-375	153	201	172	28.95	6.949		
3900	3873	3893	3868	15	15	105.87	-386	158	207	177	29.75	6.955		
4000	3972	3993	3967	15	15	105.94	-398	164	213	182	30.56	6.961		
4100	4071	4093	4066	16	16	106.01	-409	169	218	187	31.36	6.967		
4200	4170	4193	4165	16	16	106.07	-420	174	224	192	32.16	6.973		
4300	4269	4290	4262	17	16	106.34	-431	178	230	197	32.94	6.989		
4400	4369	4382	4354	17	17	109.08	-433	175	239	205	33.56	7.108		
4423	4391	4402	4374	17	17	110.07	-432	173	241	207	33.68	7.156		
4450	4418	4426	4398	17	17	109.74	-431	170	245	211	33.80	7.235		
4500	4467	4467	4438	17	17	110.97	-427	164	253	219	33.95	7.457		
4550	4515	4504	4474	18	17	113.07	-421	157	266	232	33.98	7.815		
4600	4561	4537	4505	18	17	115.15	-416	149	282	249	33.86	8.341		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 508H - Slot 6
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:	# 508H	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	
4650	4606	4565	4532	18	17	116.68	-410	141	304	271	33.59	9.056	
4700	4650	4588	4553	19	17	117.33	-404	135	331	298	33.22	9.962	
4750	4691	4600	4564	19	17	115.71	-401	131	362	330	32.57	11.125	
4800	4729	4622	4584	19	17	115.22	-395	124	398	365	32.37	12.282	
4850	4766	4633	4594	20	17	112.11	-392	120	436	404	31.97	13.640	
4900	4799	4650	4609	20	17	109.26	-387	114	477	446	31.90	14.966	
4950	4829	4650	4609	21	17	101.83	-387	114	520	489	31.49	16.531	
5000	4856	4650	4609	21	17	93.04	-387	114	565	534	31.21	18.102	
5050	4880	4650	4609	22	17	83.25	-387	114	610	579	31.07	19.648	
5100	4900	4650	4609	23	17	73.09	-387	114	656	625	31.03	21.150	
5150	4917	4650	4609	24	17	63.32	-387	114	702	671	31.08	22.594	
5200	4930	4637	4597	24	17	52.54	-391	119	748	717	30.90	24.202	
5250	4939	4630	4591	25	17	44.66	-393	121	793	762	30.95	25.620	
5300	4944	4622	4584	26	17	38.23	-395	124	837	806	31.04	26.979	
5344	4945	4600	4564	27	17	32.70	-401	131	876	845	30.86	28.385	
5400	4945	4600	4564	28	17	32.70	-401	131	924	893	31.21	29.605	
5500	4944	4600	4564	30	17	32.70	-401	131	1012	980	31.75	31.881	
5600	4943	4572	4538	32	17	30.95	-408	139	1101	1069	31.75	34.683	
5700	4943	4550	4518	34	17	29.63	-413	146	1192	1160	31.82	37.454	
5800	4942	4550	4518	36	17	29.63	-413	146	1283	1251	32.17	39.891	
5900	4941	4550	4518	38	17	29.63	-413	146	1376	1344	32.47	42.386	
6000	4941	4526	4495	40	17	28.32	-418	152	1469	1437	32.45	45.282	
6100	4940	4500	4470	43	17	26.95	-422	158	1564	1531	32.39	48.270	
6200	4939	4500	4470	45	17	26.95	-422	158	1658	1625	32.61	50.834	
6300	4939	4500	4470	47	17	26.95	-422	158	1753	1720	32.80	53.427	
6400	4938	4500	4470	50	17	26.95	-422	158	1848	1815	32.98	56.043	
6500	4937	4500	4470	52	17	26.95	-422	158	1944	1911	33.13	58.679	
6600	4937	4500	4470	55	17	26.95	-422	158	2040	2007	33.27	61.330	
6700	4936	4477	4447	57	17	25.81	-426	162	2136	2103	33.20	64.347	
6800	4935	4471	4442	59	17	25.57	-426	163	2233	2200	33.28	67.094	
6900	4935	4450	4421	62	17	24.59	-429	167	2330	2297	33.23	70.123	
7000	4934	4450	4421	64	17	24.59	-429	167	2427	2394	33.34	72.796	
7100	4933	4450	4421	67	17	24.59	-429	167	2524	2491	33.45	75.475	
7200	4932	4450	4421	69	17	24.59	-429	167	2622	2588	33.54	78.158	
7300	4932	4450	4421	72	17	24.59	-429	167	2719	2686	33.64	80.845	
7400	4931	4450	4421	74	17	24.59	-429	167	2817	2783	33.72	83.533	
7500	4930	4450	4421	77	17	24.59	-429	167	2915	2881	33.81	86.222	
7600	4930	4450	4421	79	17	24.59	-429	167	3013	2979	33.89	88.911	
7700	4929	4450	4421	82	17	24.59	-429	167	3111	3077	33.97	91.599	
7800	4928	4450	4421	84	17	24.59	-429	167	3210	3175	34.04	94.284	
7900	4928	4450	4421	87	17	24.59	-429	167	3308	3274	34.11	96.968	
8000	4927	4450	4421	89	17	24.59	-429	167	3406	3372	34.18	99.648	
8100	4926	4427	4398	92	17	23.59	-431	170	3504	3470	34.12	102.725	
8200	4926	4424	4396	94	17	23.50	-431	171	3603	3569	34.17	105.439	
8300	4925	4422	4394	97	17	23.41	-431	171	3702	3667	34.23	108.146	
8400	4924	4400	4372	100	17	22.54	-432	173	3801	3767	34.17	111.222	
8500	4924	4400	4372	102	17	22.54	-432	173	3899	3865	34.24	113.880	
8600	4923	4400	4372	105	17	22.54	-432	173	3998	3964	34.31	116.532	
8700	4922	4400	4372	107	17	22.54	-432	173	4097	4063	34.38	119.178	
8800	4922	4400	4372	110	17	22.54	-432	173	4196	4161	34.44	121.818	
8900	4921	4400	4372	112	17	22.54	-432	173	4295	4260	34.51	124.451	
9000	4920	4400	4372	115	17	22.54	-432	173	4394	4359	34.57	127.076	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 508H - Slot 6
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:	# 508H	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	
9100	4920	4400	4372	117	17	22.54	-432	173	4493	4458	34.64	129.695	
9200	4919	4400	4372	120	17	22.54	-432	173	4592	4557	34.70	132.305	
9300	4918	4400	4372	122	17	22.54	-432	173	4691	4656	34.77	134.908	
9400	4918	4400	4372	125	17	22.54	-432	173	4790	4755	34.83	137.503	
9500	4917	4400	4372	128	17	22.54	-432	173	4889	4854	34.90	140.089	
9600	4916	4400	4372	130	17	22.54	-432	173	4988	4953	34.96	142.667	
9700	4916	4400	4372	133	17	22.54	-432	173	5087	5052	35.03	145.235	
9800	4915	4400	4372	135	17	22.54	-432	173	5187	5152	35.09	147.795	
9900	4914	4400	4372	138	17	22.54	-432	173	5286	5251	35.16	150.345	
10,000	4914	4400	4372	140	17	22.54	-432	173	5385	5350	35.22	152.886	
10,100	4913	4400	4372	143	17	22.54	-432	173	5485	5449	35.29	155.417	
10,200	4912	4400	4372	146	17	22.54	-432	173	5584	5549	35.36	157.939	
10,300	4912	4400	4372	148	17	22.54	-432	173	5683	5648	35.42	160.451	
10,400	4911	4400	4372	151	17	22.54	-432	173	5783	5747	35.49	162.953	
10,500	4910	4400	4372	153	17	22.54	-432	173	5882	5847	35.55	165.444	
10,600	4910	4400	4372	156	17	22.54	-432	173	5982	5946	35.62	167.926	
10,700	4909	4400	4372	158	17	22.54	-432	173	6081	6045	35.69	170.396	
10,800	4908	4400	4372	161	17	22.54	-432	173	6181	6145	35.76	172.857	
10,900	4908	4400	4372	164	17	22.54	-432	173	6280	6244	35.82	175.307	
11,000	4907	4400	4372	166	17	22.54	-432	173	6380	6344	35.89	177.746	
11,100	4906	4400	4372	169	17	22.54	-432	173	6479	6443	35.96	180.174	
11,200	4906	4400	4372	171	17	22.54	-432	173	6579	6543	36.03	182.592	
11,300	4905	4400	4372	174	17	22.54	-432	173	6678	6642	36.10	184.998	
11,400	4904	4400	4372	176	17	22.54	-432	173	6778	6742	36.17	187.394	
11,500	4904	4400	4372	179	17	22.54	-432	173	6877	6841	36.24	189.778	
11,600	4903	4400	4372	182	17	22.54	-432	173	6977	6941	36.31	192.151	
11,700	4902	4400	4372	184	17	22.54	-432	173	7077	7040	36.38	194.513	
11,800	4902	4400	4372	187	17	22.54	-432	173	7176	7140	36.45	196.864	
11,900	4901	4400	4372	189	17	22.54	-432	173	7276	7239	36.52	199.203	
12,000	4900	4400	4372	192	17	22.54	-432	173	7375	7339	36.60	201.531	
12,100	4900	4400	4372	194	17	22.54	-432	173	7475	7438	36.67	203.848	
12,200	4899	4400	4372	197	17	22.54	-432	173	7575	7538	36.74	206.153	
12,300	4898	4377	4349	200	17	21.67	-433	176	7674	7637	36.71	209.018	
12,400	4897	4376	4348	202	17	21.65	-433	176	7774	7737	36.79	211.317	
12,500	4897	4375	4347	205	17	21.63	-433	176	7873	7836	36.86	213.605	
12,600	4896	4375	4347	207	17	21.61	-433	176	7973	7936	36.93	215.880	
12,700	4895	4374	4346	210	17	21.59	-433	176	8073	8036	37.01	218.144	
12,774	4895	4374	4346	211	17	21.57	-433	176	8146	8106	39.77	204.830	



Lonestar Consulting, LLC

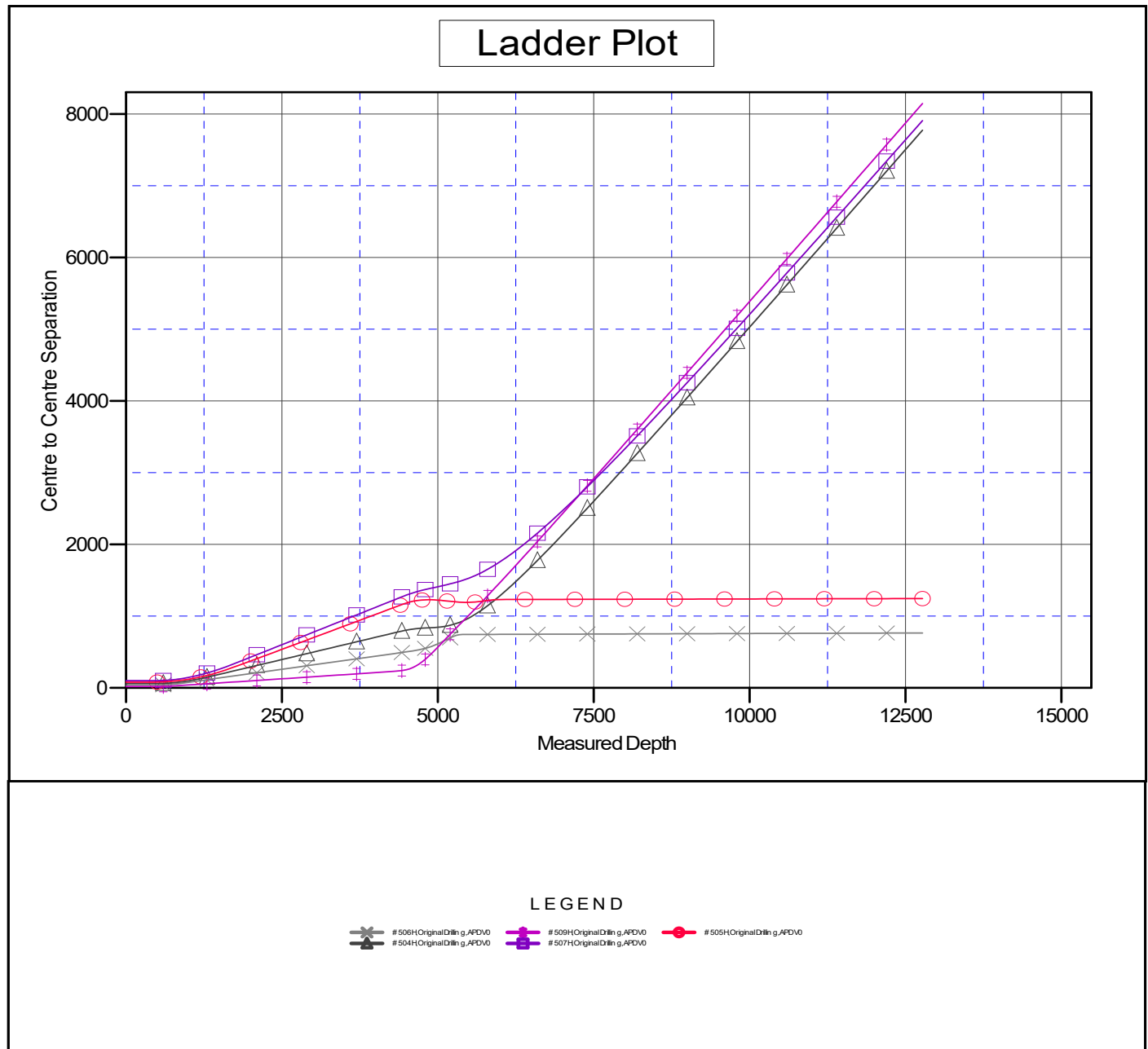
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 508H - Slot 6
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:	# 508H	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: # 508H - Slot 6
 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 # 508H - Slot 6
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:	# 508H	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

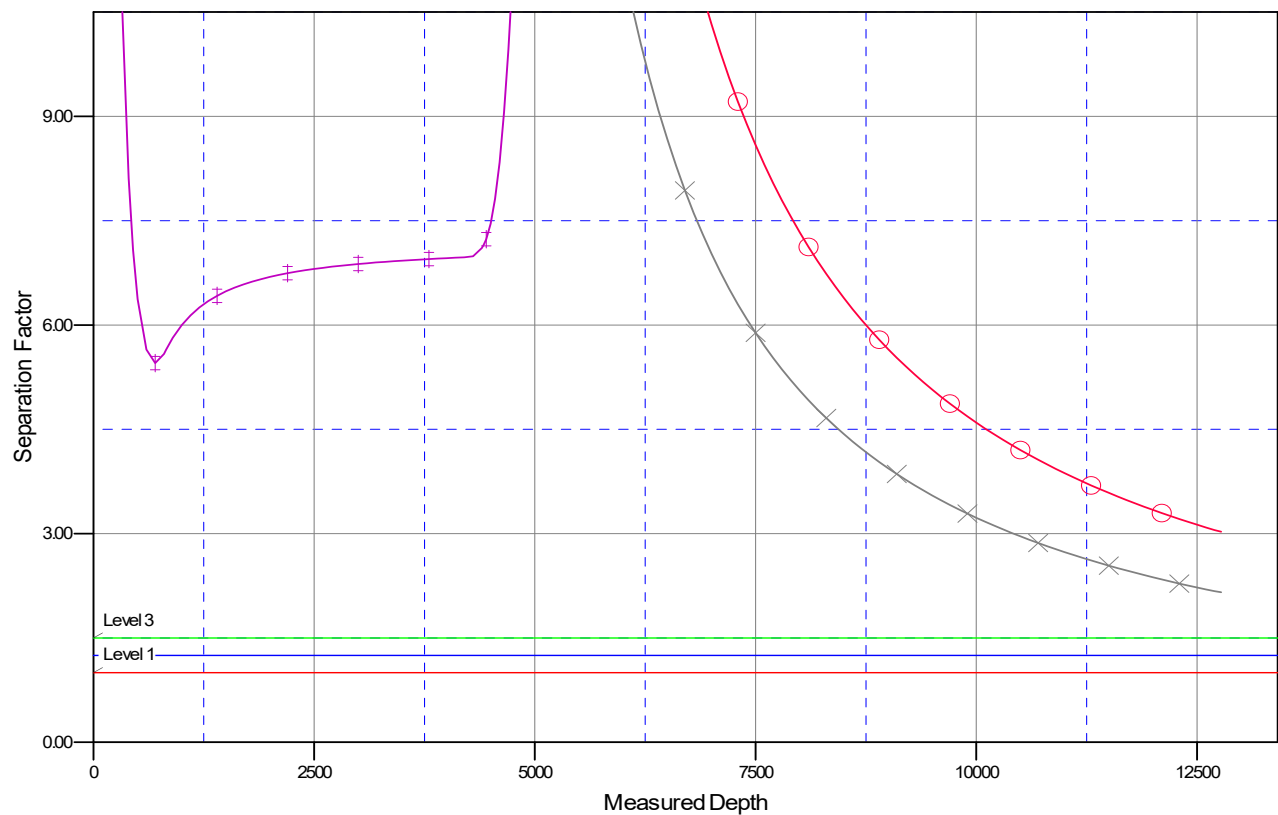
Central Meridian is -107.8333333

Coordinates are relative to: # 508H - Slot 6

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

Grid Convergence at Surface is: 0.24°

Separation Factor Plot



LEGEND

#508H Original Drilling, APOVO
 #504H Original Drilling, APOVO
 #505H Original Drilling, APOVO

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 83661

CONDITIONS

Operator: DJR OPERATING, LLC 1 Road 3263 Aztec, NM 87410	OGRID: 371838
	Action Number: 83661
	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