

Form 3160-3
(June 2015)FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☐ DRILL ☐ REENTER 1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other 1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone		5. Lease Serial No. 6. If Indian, Allottee or Tribe Name 7. If Unit or CA Agreement, Name and No. 8. Lease Name and Well No.
2. Name of Operator		9. API Well No. 30-043-21505
3a. Address	3b. Phone No. (include area code)	10. Field and Pool, or Exploratory
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		11. Sec., T. R. M. or Blk. and Survey or Area
14. Distance in miles and direction from nearest town or post office*		12. County or Parish
13. State		
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
24. Attachments		

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	Name (Printed/Typed)	Date
Title		
Approved by (Signature)	Name (Printed/Typed)	Date
Title		
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.

(Continued on page 2)

*(Instructions on page 2)



Approval Date: 09/13/2022

DISTRICT I1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-6161 Fax: (575) 748-0720**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) 476-3462State of New Mexico
Energy, Minerals & Natural Resources DepartmentForm C-102
Revised August 1, 2011OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505Submit one copy to appropriate
District Office☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-043-21505		² Pool Code 42289		³ Pool Name LYBROOK GALLUP OIL POOL	
⁴ Property Code 325271		⁵ Property Name VENADO CANYON UNIT			⁶ Well Number 101H
⁷ OGRID No. 371838		⁸ Operator Name DJR OPERATING, LLC			⁹ Elevation 6941'

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
M	01	22N	06W		930'	SOUTH	370'	WEST	SANDOVAL

¹¹ Bottom Hole Location If Different From Surface

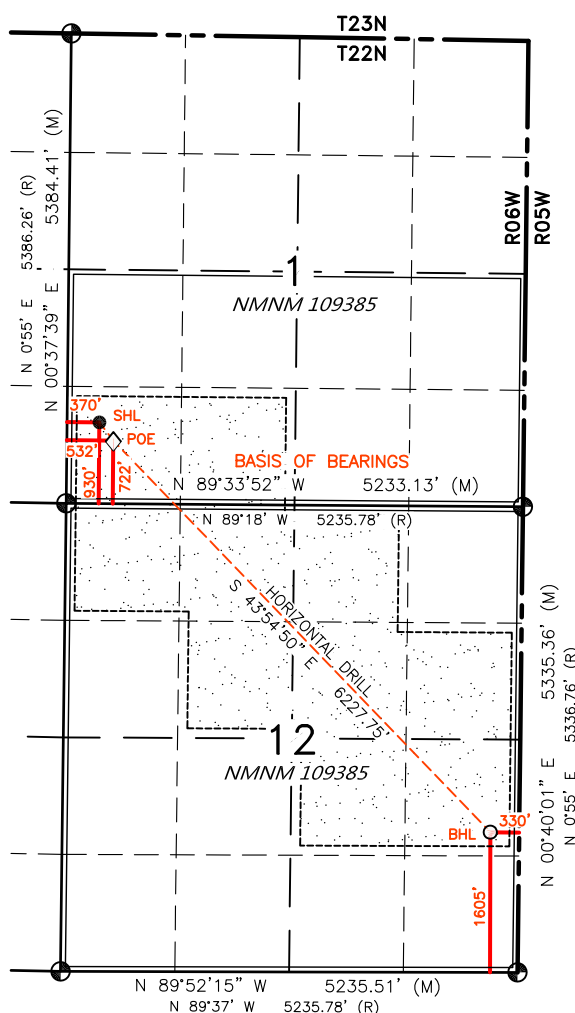
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	12	22N	06W		1605'	SOUTH	330'	EAST	SANDOVAL

¹² Dedicated Acres
PENETRATED SPACING UNIT;
SEC 1: SW/SW & SE/SW (80 AC.); SEC 12:
NW/NW, NE/NW, SE/NW, NW/NE, SW/NE, SE/NE,
NW/SE & NE/SE (320 AC.) = 400 ACRES¹³ Joint or Infill¹⁴ Consolidation Code¹⁵ 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

FND 2 1/2" BC
GLO 1948

17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Shaw-Marie Ford 01/19/22
Signature Date

Shaw-Marie Ford

Printed Name

sford@djrlc.com

E-mail Address

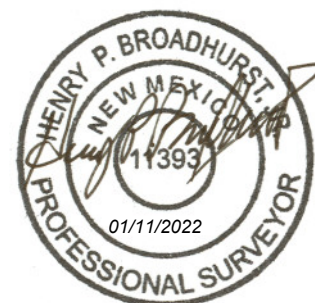
SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

JUNE 1, 2021

Date of Survey

Signature and Seal of Professional Surveyor:



Certificate Number

11393

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:** 09 / 29 / 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 101H	TBD	M-01-22N-06W	930 FSL x 370 FWL	400	590	140
Venado Canyon Unit 513H	TBD	M-01-22N-06W	922 FSL x 352 FWL	340	260	120
Venado Canyon Unit 514H	TBD	M-01-22N-06W	938 FSL x 389 FWL	300	230	110

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 101H	TBD	02/16/2023	02/27/2023	03/17/2023	03/27/2023	03/29/2023
Venado Canyon Unit 513H	TBD	02/17/2023	02/28/2023	03/18/2023	03/28/2023	03/29/2023
Venado Canyon Unit 514H	TBD	02/18/2023	02/29/2023	03/19/2023	03/29/2023	03/29/2023

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: 09/29/2022
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 101H, 513H and 514H
SWSW M-01-22N-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 separator will be set for the individual well.
- The separator 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 separator will 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 the 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 separator.
- Oil will be separated from the produced water and the oil/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 101H, 513H and 514H
SWSW M-01-22N-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.
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Venado Canyon Unit 101H, 513H and 514H
SWSW M-01-22N-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 101H, 513H and 514H
SWSW M-01-22N-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 0



DRILLING PLAN

Venado Canyon #101H

Sandoval County, New Mexico

Surface Location

370-ft FWL & 930-ft FSL
 Sec 1 T22N R06W
 Graded Elevation 6941' MSL
 RKB Elevation 6955' (14' KB)

SHL Geographical Coordinates (NAD-83)

Latitude 36.1620430° N
 Longitude 107.4278260° W

Kick Off Point for Horizontal Build Curve

4649-ft MD
 4632-ft TVD

Local Coordinates (from SHL)

253-ft North
 277-ft West

Heel Location (Pay zone entry)

532-ft FWL & 722-ft FSL
 Sec 1 T22N R06W

Heel Geographical Coordinates (NAD-83)

Latitude 36.1614657° N
 Longitude 107.42728723° W

Bottom Hole Location (TD)

330-ft FEL & 1605-ft FSL
 Sec 12 T22N R06W

BHL Geographical Coordinates (NAD-83)

Latitude 36.149091° N
 Longitude 107.4127200° W

Well objectives

This well is planned as a 6230-ft lateral in the Gallup C sand.

Bottom Hole temperature and pressure

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

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

Name	MD (ft)	TVD (ft)	Lithology	Pore fluid	Expected Pore Pressure (ppg)	Planned Mud Weight (ppg)
Ojo Alamo	1327	1324	Sd	W	8.3	8.4 – 8.8
Kirtland	1426	1422	Sh	-	8.3	8.4 – 8.8
Fruitland	1627	1623	C	G	8.3	9.0 - 9.5
Pictured Cliffs	1829	1824	Sd	W	8.3	9.0 - 9.5
Lewis	1935	1929	Sh	-		9.0 - 9.5
Chacra	2686	2677	Sd	-	8.3	9.0 - 9.5
Menefee	3391	3379	Sd, C	G	8.3	9.0 - 9.5
Point Lookout	4099	4084	Sd	-	8.3	9.0 - 9.5
Mancos	4241	4226	Sh	-		9.0 - 9.5
Mancos Silt	4599	4582	Slt	O/G	6.6	9.0 - 9.5
Gallup A	5146	5095	Slt	O/G	6.6	9.0 - 9.5
Gallup B	5189	5127	Sd	O/G	6.6	8.8 - 9.0
Gallup C	5328	5217	Sd	O/G	6.6	8.8 - 9.0
Target	5710	5327	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	5652	surf	5325	surface
4-1/2"	6-1/8"	11.6	P-110	BTC	5374	11938	5242	5303	5374

Note: all casing will be new

Rev 0

**Casing Design Load Cases**

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

Note #

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

Casing Design Factors

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

Cement Design9-5/8" Surface Casing

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

7" Intermediate Casing

	<u>Lead</u>	<u>Tail</u>
	BJ Services	BJ Services
Type	III	Poz/G
Planned top	Surface	4149-ft
Density (ppg)	12.30	13.50
Yield (cf/sx)	2.34	1.50
Mix water (gal/sx)	13.26	7.20
Volume (sx)	403	240
Volume (bbls)	168	64
Volume (cu.ft.)	944	359
Excess %	55	55



Rev 0

4-1/2" Production Liner

	BJ Services
Type	Poz/G
Planned top	5374-ft
Density (ppg)	13.3
Yield (cf/sx)	1.56
Mix water (gal/sx)	7.71
Volume (sx)	551
Volume (bbls)	153
Volume (cu.ft)	862
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 – 5652	9.0 – 9.5	38 – 45	8 – 14	<20
Production	Low solids, non-dispersed	5652 – 11938	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.



Company: DJR Operating
Project: Venado Canyon Unit
Site: M01 2206 Pad
Well: # 101H
Wellbore: Original drilling
Design: APD

PROJECT DETAILS: Venado Canyon Unit

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



WELL DETAILS: # 101H

GL 6941' & RKB14' @ 6955ft

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0	0	1878530.33	2842790.07	36.16204300	-107.42782600

Plan: APD (# 101H/Original drilling)

Created By: Janie Collins Date: 17:50, May 18 2021

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
101H Heel Rev 1	5327	-210	159	1878320.85	2842949.98	36.16146570	-107.42728723
101H Toe	5303	-4714	4460	1873834.51	2847269.53	36.14909100	-107.41272000

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VFace	Target
0	0.00	0.00	0	0	0	0.00	0.00	0	
400	0.00	0.00	400	0	0	0.00	0.00	0	
662	5.23	312.40	661	8	-9	2.00	312.40	-12	
4649	5.23	312.40	4632	253	-277	0.00	0.00	-374	
5710	90.22	136.32	5327	-210	159	9.00	-176.05	262	101H Heel Rev 1
11938	90.22	136.32	5303	-4714	4460	0.00	0.00	6490	101H Toe



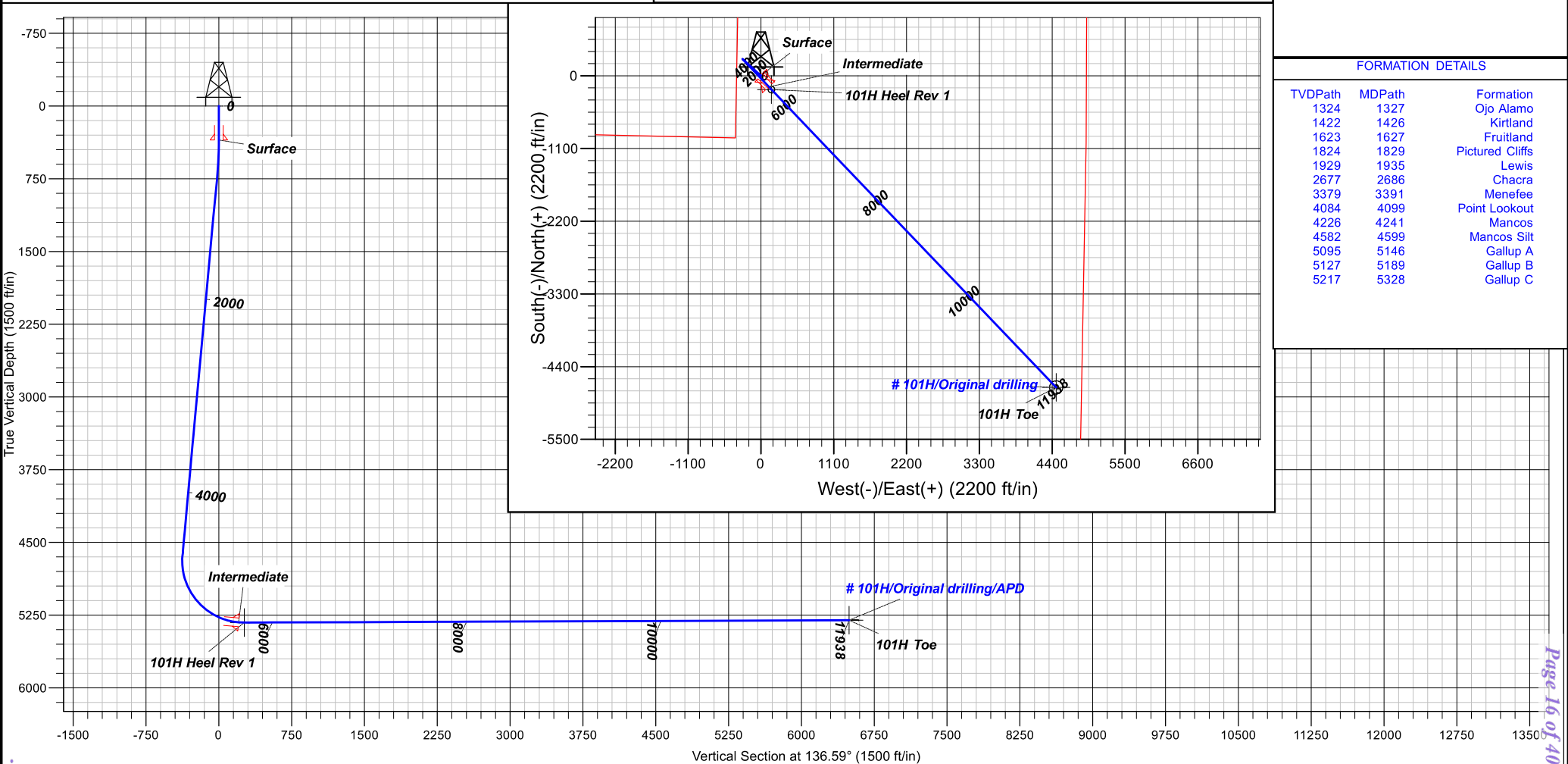
Azimuths to True North
Magnetic North: 82.8°
Magnetic Field
Strength: 49355.0 nT
Dip Angle: 62.8°
Date: 2/17/2021
Model: IGRF2015

CASING DETAILS

TVD	MD	Name
350	350	Surface
5325	5652	Intermediate

FORMATION DETAILS

TVDPath	MDPath	Formation
1324	1327	Ojo Alamo
1422	1426	Kirtland
1623	1627	Fruitland
1824	1829	Pictured Cliffs
1929	1935	Lewis
2677	2686	Chacra
3379	3391	Menefee
4084	4099	Point Lookout
4226	4241	Mancos
4582	4599	Mancos Silt
5095	5146	Gallup A
5127	5189	Gallup B
5217	5328	Gallup C





DJR Operating

Venado Canyon Unit

M01 2206 Pad

101H - Slot 2

Original drilling

Plan: APD

Standard Planning Report

18 May, 2021





Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 101H - Slot 2
Company:	DJR Operating	TVD Reference:	GL 6941' & RKB14' @ 6955ft
Project:	Venado Canyon Unit	MD Reference:	GL 6941' & RKB14' @ 6955ft
Site:	M01 2206 Pad	North Reference:	True
Well:	# 101H	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	M01 2206 Pad		
Site Position:		Northing:	1,878,522.25 usft
From:	Lat/Long	Easting:	2,842,771.80 usft
Position Uncertainty:	0 ft	Slot Radius:	13.20 in
		Latitude:	36.16202100
		Longitude:	-107.42788800
		Grid Convergence:	0.24 °

Well	# 101H - Slot 2		
Well Position	+N/-S	8 ft	Northing:
	+E/-W	18 ft	Easting:
Position Uncertainty	0 ft	Wellhead Elevation:	
		Latitude:	36.16204300
		Longitude:	-107.42782600
		Ground Level:	6941 ft

Wellbore	Original drilling				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/17/2021	8.68	62.86	49,355.82594468

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	136.59

Plan Survey Tool Program	Date	5/18/2021		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0	11,938	APD (Original drilling)	MWD+IGRF
				OWSG MWD + IGRF or WMM

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	
400	0.00	0.00	400	0	0	0.00	0.00	0.00	0.00	
662	5.23	312.40	661	8	-9	2.00	2.00	0.00	312.40	
4649	5.23	312.40	4632	253	-277	0.00	0.00	0.00	0.00	
5710	90.22	136.32	5327	-210	159	9.00	8.01	-16.60	-176.05	101H Heel Rev 1
11,938	90.22	136.32	5303	-4714	4460	0.00	0.00	0.00	0.00	101H Toe



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 101H - Slot 2
Company:	DJR Operating	TVD Reference:	GL 6941' & RKB14' @ 6955ft
Project:	Venado Canyon Unit	MD Reference:	GL 6941' & RKB14' @ 6955ft
Site:	M01 2206 Pad	North Reference:	True
Well:	# 101H	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
500	2.00	312.40	500	1	-1	-2	2.00	2.00	0.00
600	4.00	312.40	600	5	-5	-7	2.00	2.00	0.00
662	5.23	312.40	661	8	-9	-12	2.00	2.00	0.00
700	5.23	312.40	699	10	-11	-15	0.00	0.00	0.00
800	5.23	312.40	799	17	-18	-24	0.00	0.00	0.00
900	5.23	312.40	899	23	-25	-34	0.00	0.00	0.00
1000	5.23	312.40	998	29	-32	-43	0.00	0.00	0.00
1100	5.23	312.40	1098	35	-38	-52	0.00	0.00	0.00
1200	5.23	312.40	1197	41	-45	-61	0.00	0.00	0.00
1300	5.23	312.40	1297	47	-52	-70	0.00	0.00	0.00
1400	5.23	312.40	1397	53	-59	-79	0.00	0.00	0.00
1500	5.23	312.40	1496	60	-65	-88	0.00	0.00	0.00
1600	5.23	312.40	1596	66	-72	-97	0.00	0.00	0.00
1700	5.23	312.40	1695	72	-79	-106	0.00	0.00	0.00
1800	5.23	312.40	1795	78	-85	-115	0.00	0.00	0.00
1900	5.23	312.40	1894	84	-92	-125	0.00	0.00	0.00
2000	5.23	312.40	1994	90	-99	-134	0.00	0.00	0.00
2100	5.23	312.40	2094	96	-106	-143	0.00	0.00	0.00
2200	5.23	312.40	2193	103	-112	-152	0.00	0.00	0.00
2300	5.23	312.40	2293	109	-119	-161	0.00	0.00	0.00
2400	5.23	312.40	2392	115	-126	-170	0.00	0.00	0.00
2500	5.23	312.40	2492	121	-133	-179	0.00	0.00	0.00
2600	5.23	312.40	2592	127	-139	-188	0.00	0.00	0.00
2700	5.23	312.40	2691	133	-146	-197	0.00	0.00	0.00
2800	5.23	312.40	2791	139	-153	-206	0.00	0.00	0.00
2900	5.23	312.40	2890	146	-160	-215	0.00	0.00	0.00
3000	5.23	312.40	2990	152	-166	-225	0.00	0.00	0.00
3100	5.23	312.40	3089	158	-173	-234	0.00	0.00	0.00
3200	5.23	312.40	3189	164	-180	-243	0.00	0.00	0.00
3300	5.23	312.40	3289	170	-186	-252	0.00	0.00	0.00
3400	5.23	312.40	3388	176	-193	-261	0.00	0.00	0.00
3500	5.23	312.40	3488	183	-200	-270	0.00	0.00	0.00
3600	5.23	312.40	3587	189	-207	-279	0.00	0.00	0.00
3700	5.23	312.40	3687	195	-213	-288	0.00	0.00	0.00
3800	5.23	312.40	3787	201	-220	-297	0.00	0.00	0.00
3900	5.23	312.40	3886	207	-227	-306	0.00	0.00	0.00
4000	5.23	312.40	3986	213	-234	-315	0.00	0.00	0.00
4100	5.23	312.40	4085	219	-240	-325	0.00	0.00	0.00
4200	5.23	312.40	4185	226	-247	-334	0.00	0.00	0.00
4300	5.23	312.40	4284	232	-254	-343	0.00	0.00	0.00
4400	5.23	312.40	4384	238	-261	-352	0.00	0.00	0.00
4500	5.23	312.40	4484	244	-267	-361	0.00	0.00	0.00
4600	5.23	312.40	4583	250	-274	-370	0.00	0.00	0.00
4649	5.23	312.40	4632	253	-277	-374	0.00	0.00	0.00
4700	0.76	288.10	4683	255	-279	-377	9.00	-8.84	-48.07
4800	8.34	138.78	4783	250	-275	-370	9.00	7.58	-149.32
4900	17.33	137.48	4880	233	-260	-348	9.00	9.00	-1.30
5000	26.33	137.05	4973	206	-235	-311	9.00	9.00	-0.43
5100	35.33	136.83	5059	168	-200	-260	9.00	9.00	-0.22



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 101H - Slot 2
Company:	DJR Operating	TVD Reference:	GL 6941' & RKB14' @ 6955ft
Project:	Venado Canyon Unit	MD Reference:	GL 6941' & RKB14' @ 6955ft
Site:	M01 2206 Pad	North Reference:	True
Well:	# 101H	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)
5200	44.33	136.69	5135	122	-156	-196	9.00	9.00	-0.14
5300	53.33	136.59	5201	67	-105	-121	9.00	9.00	-0.10
5400	62.33	136.51	5254	6	-46	-36	9.00	9.00	-0.08
5500	71.33	136.45	5294	-61	17	56	9.00	9.00	-0.07
5600	80.33	136.39	5318	-131	84	153	9.00	9.00	-0.06
5700	89.33	136.33	5327	-203	152	252	9.00	9.00	-0.06
5710	90.22	136.32	5327	-210	159	262	9.01	9.01	-0.06
5800	90.22	136.32	5327	-275	221	352	0.00	0.00	0.00
5900	90.22	136.32	5326	-348	290	452	0.00	0.00	0.00
6000	90.22	136.32	5326	-420	359	552	0.00	0.00	0.00
6100	90.22	136.32	5325	-492	428	652	0.00	0.00	0.00
6200	90.22	136.32	5325	-565	498	752	0.00	0.00	0.00
6300	90.22	136.32	5325	-637	567	852	0.00	0.00	0.00
6400	90.22	136.32	5324	-709	636	952	0.00	0.00	0.00
6500	90.22	136.32	5324	-782	705	1052	0.00	0.00	0.00
6600	90.22	136.32	5324	-854	774	1152	0.00	0.00	0.00
6700	90.22	136.32	5323	-926	843	1252	0.00	0.00	0.00
6800	90.22	136.32	5323	-999	912	1352	0.00	0.00	0.00
6900	90.22	136.32	5322	-1071	981	1452	0.00	0.00	0.00
7000	90.22	136.32	5322	-1143	1050	1552	0.00	0.00	0.00
7100	90.22	136.32	5322	-1216	1119	1652	0.00	0.00	0.00
7200	90.22	136.32	5321	-1288	1188	1752	0.00	0.00	0.00
7300	90.22	136.32	5321	-1360	1257	1852	0.00	0.00	0.00
7400	90.22	136.32	5320	-1433	1326	1952	0.00	0.00	0.00
7500	90.22	136.32	5320	-1505	1395	2052	0.00	0.00	0.00
7600	90.22	136.32	5320	-1577	1464	2152	0.00	0.00	0.00
7700	90.22	136.32	5319	-1650	1533	2252	0.00	0.00	0.00
7800	90.22	136.32	5319	-1722	1602	2352	0.00	0.00	0.00
7900	90.22	136.32	5319	-1794	1671	2452	0.00	0.00	0.00
8000	90.22	136.32	5318	-1866	1741	2552	0.00	0.00	0.00
8100	90.22	136.32	5318	-1939	1810	2652	0.00	0.00	0.00
8200	90.22	136.32	5317	-2011	1879	2752	0.00	0.00	0.00
8300	90.22	136.32	5317	-2083	1948	2852	0.00	0.00	0.00
8400	90.22	136.32	5317	-2156	2017	2952	0.00	0.00	0.00
8500	90.22	136.32	5316	-2228	2086	3052	0.00	0.00	0.00
8600	90.22	136.32	5316	-2300	2155	3152	0.00	0.00	0.00
8700	90.22	136.32	5315	-2373	2224	3252	0.00	0.00	0.00
8800	90.22	136.32	5315	-2445	2293	3352	0.00	0.00	0.00
8900	90.22	136.32	5315	-2517	2362	3452	0.00	0.00	0.00
9000	90.22	136.32	5314	-2590	2431	3552	0.00	0.00	0.00
9100	90.22	136.32	5314	-2662	2500	3652	0.00	0.00	0.00
9200	90.22	136.32	5314	-2734	2569	3752	0.00	0.00	0.00
9300	90.22	136.32	5313	-2807	2638	3852	0.00	0.00	0.00
9400	90.22	136.32	5313	-2879	2707	3952	0.00	0.00	0.00
9500	90.22	136.32	5312	-2951	2776	4052	0.00	0.00	0.00
9600	90.22	136.32	5312	-3024	2845	4152	0.00	0.00	0.00
9700	90.22	136.32	5312	-3096	2915	4252	0.00	0.00	0.00
9800	90.22	136.32	5311	-3168	2984	4352	0.00	0.00	0.00
9900	90.22	136.32	5311	-3241	3053	4452	0.00	0.00	0.00
10,000	90.22	136.32	5310	-3313	3122	4552	0.00	0.00	0.00
10,100	90.22	136.32	5310	-3385	3191	4652	0.00	0.00	0.00
10,200	90.22	136.32	5310	-3458	3260	4752	0.00	0.00	0.00
10,300	90.22	136.32	5309	-3530	3329	4852	0.00	0.00	0.00
10,400	90.22	136.32	5309	-3602	3398	4952	0.00	0.00	0.00



Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 101H - Slot 2
Company:	DJR Operating	TVD Reference:	GL 6941' & RKB14' @ 6955ft
Project:	Venado Canyon Unit	MD Reference:	GL 6941' & RKB14' @ 6955ft
Site:	M01 2206 Pad	North Reference:	True
Well:	# 101H	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)	
10,500	90.22	136.32	5309	-3675	3467	5052	0.00	0.00	0.00	
10,600	90.22	136.32	5308	-3747	3536	5152	0.00	0.00	0.00	
10,700	90.22	136.32	5308	-3819	3605	5252	0.00	0.00	0.00	
10,800	90.22	136.32	5307	-3892	3674	5352	0.00	0.00	0.00	
10,900	90.22	136.32	5307	-3964	3743	5452	0.00	0.00	0.00	
11,000	90.22	136.32	5307	-4036	3812	5552	0.00	0.00	0.00	
11,100	90.22	136.32	5306	-4109	3881	5652	0.00	0.00	0.00	
11,200	90.22	136.32	5306	-4181	3950	5752	0.00	0.00	0.00	
11,300	90.22	136.32	5305	-4253	4019	5852	0.00	0.00	0.00	
11,400	90.22	136.32	5305	-4326	4088	5952	0.00	0.00	0.00	
11,500	90.22	136.32	5305	-4398	4158	6052	0.00	0.00	0.00	
11,600	90.22	136.32	5304	-4470	4227	6152	0.00	0.00	0.00	
11,700	90.22	136.32	5304	-4543	4296	6252	0.00	0.00	0.00	
11,800	90.22	136.32	5304	-4615	4365	6352	0.00	0.00	0.00	
11,900	90.22	136.32	5303	-4687	4434	6452	0.00	0.00	0.00	
11,938	90.22	136.32	5303	-4714	4460	6490	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										
101H Toe	0.00	0.00	5303	-4714	4460	1,873,834.51	2,847,269.53	36.14909100		-107.41272000
- plan hits target center										
- Circle (radius 100)										
101H Heel Rev 1	0.00	0.00	5327	-210	159	1,878,320.85	2,842,949.98	36.16146570		-107.42728723
- 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	9.63	12.25	
5652	5325	Intermediate	7.00	8.75	



Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 101H - Slot 2
Company:	DJR Operating	TVD Reference:	GL 6941' & RKB14' @ 6955ft
Project:	Venado Canyon Unit	MD Reference:	GL 6941' & RKB14' @ 6955ft
Site:	M01 2206 Pad	North Reference:	True
Well:	# 101H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original drilling		
Design:	APD		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1327	1324	Ojo Alamo		0.00	0.00	
1426	1422	Kirtland		0.00	0.00	
1627	1623	Fruitland		0.00	0.00	
1829	1824	Pictured Cliffs		0.00	0.00	
1935	1929	Lewis		0.00	0.00	
2686	2677	Chacra		0.00	0.00	
3391	3379	Menefee		0.00	0.00	
4099	4084	Point Lookout		0.00	0.00	
4241	4226	Mancos		0.00	0.00	
4599	4582	Mancos Silt		0.00	0.00	
5146	5095	Gallup A		0.00	0.00	
5189	5127	Gallup B		0.00	0.00	
5328	5217	Gallup C		0.00	0.00	



DJR Operating

Venado Canyon Unit

M01 2206 Pad

101H

Original drilling

APD

Anticollision Report

18 May, 2021





Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 101H - Slot 2
Project:	Venado Canyon Unit	TVD Reference:	GL 6941' & RKB14' @ 6955ft
Reference Site:	M01 2206 Pad	MD Reference:	GL 6941' & RKB14' @ 6955ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 101H	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	5/18/2021		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0	11,938	APD (Original drilling)	MWD+IGRF	OWSG MWD + IGRF or WMM	

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						
E01 2206 Pad						
Chaco 2206 02P 227H - OH - OH	3927	4106	140	104	3.942	CC, ES, SF
M01 2206 Pad						
# 513H - Original drilling - APD	454	454	20	17	6.988	CC
# 513H - Original drilling - APD	500	500	20	17	6.356	ES
# 513H - Original drilling - APD	11,938	11,063	911	621	3.142	SF
# 514H - Original drilling - APD	400	400	20	18	8.176	CC, ES
# 514H - Original drilling - APD	11,500	11,039	655	409	2.660	SF

Offset Design: E01 2206 Pad - Chaco 2206 02P 227H - OH - OH													Offset Site Error: 0 ft	
Survey Program: 465-MWD								Rule Assigned:					Offset Well Error: 0 ft	
Reference	Offset	Semi Major Axis		Offset Wellbore Centre			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)			
0	0	3	3	0	0	-103.87	-294	-1192	1228					
100	100	105	105	0	0	-103.88	-294	-1192	1228	1227	0.27	4,531.865		
200	200	208	208	1	0	-103.91	-295	-1191	1227	1227	0.74	1,652.727		
300	300	310	310	1	0	-103.95	-296	-1191	1227	1226	1.21	1,010.334		
400	400	412	412	1	0	-104.02	-297	-1190	1226	1224	1.69	727.290		
500	500	529	529	2	1	-56.62	-299	-1188	1224	1222	2.24	546.641		
600	600	645	645	2	1	-57.01	-299	-1184	1218	1216	2.84	428.567		
662	661	731	731	2	1	-57.37	-298	-1181	1213	1210	3.25	373.231		
700	699	774	774	2	1	-57.51	-297	-1178	1209	1205	3.48	347.084		
800	799	890	890	3	1	-57.83	-293	-1171	1197	1193	4.10	292.129		
900	899	1058	1056	3	2	-58.07	-280	-1158	1183	1178	4.83	244.823		
1000	998	1263	1258	3	3	-58.14	-257	-1128	1162	1156	5.67	204.772		
1100	1098	1435	1423	4	3	-58.03	-231	-1089	1131	1125	6.46	174.986		
1200	1197	1584	1564	4	4	-57.74	-203	-1049	1096	1088	7.24	151.401		
1300	1297	1702	1674	5	5	-57.42	-179	-1013	1056	1048	7.96	132.726		
1400	1397	1784	1750	5	6	-57.16	-162	-988	1016	1008	8.60	118.168		
1500	1496	1893	1851	5	6	-56.77	-139	-955	977	968	9.30	105.008		
1600	1596	1987	1938	6	7	-56.39	-118	-925	936	926	10.02	93.424		
1700	1695	2064	2009	6	7	-56.06	-102	-900	896	885	10.69	83.743		
1800	1795	2152	2090	7	8	-55.65	-83	-874	856	845	11.40	75.103		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 101H - Slot 2
Project:	Venado Canyon Unit	TVD Reference:	GL 6941' & RKB14' @ 6955ft
Reference Site:	M01 2206 Pad	MD Reference:	GL 6941' & RKB14' @ 6955ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 101H	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: E01 2206 Pad - Chaco 2206 02P 227H - OH - OH													Offset Site Error:	0 ft	
Survey Program:		465-MWD				Rule Assigned:								Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis		Highside		Offset Wellbore Centre		Distance		Minimum		Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Separation (ft)		Factor		
1900	1894	2229	2163	7	9	-55.25	-67	-851	818	806	12.11	67.548			
2000	1994	2338	2264	7	9	-54.67	-45	-819	780	767	12.85	60.718			
2100	2094	2434	2354	8	10	-54.12	-25	-789	740	727	13.60	54.449			
2200	2193	2524	2437	8	11	-53.51	-6	-762	701	687	14.35	48.846			
2300	2293	2624	2529	9	11	-52.72	16	-730	661	646	15.13	43.683			
2400	2392	2711	2609	9	12	-51.90	35	-703	621	605	15.93	38.963			
2500	2492	2794	2686	9	12	-50.99	54	-677	581	565	16.75	34.709			
2600	2592	2885	2771	10	13	-49.83	74	-650	543	526	17.61	30.851			
2700	2691	2977	2856	10	14	-48.46	95	-623	505	487	18.50	27.319			
2800	2791	3068	2941	11	14	-47.09	114	-596	468	448	19.39	24.121			
2900	2890	3157	3024	11	15	-45.54	133	-570	431	410	20.33	21.191			
3000	2990	3251	3112	11	16	-43.64	152	-542	394	373	21.30	18.512			
3100	3089	3348	3202	12	16	-41.16	173	-513	357	335	22.36	15.979			
3200	3189	3440	3287	12	17	-38.18	193	-484	320	297	23.54	13.614			
3300	3289	3530	3371	13	18	-34.43	213	-456	284	260	24.91	11.422			
3400	3388	3622	3456	13	18	-29.76	233	-429	251	224	26.42	9.483			
3500	3488	3713	3540	13	19	-23.72	253	-401	219	190	28.17	7.757			
3600	3587	3806	3626	14	20	-15.71	273	-372	189	159	30.18	6.270			
3700	3687	3896	3709	14	20	-5.63	293	-345	165	133	32.36	5.102			
3800	3787	3989	3795	14	21	7.22	314	-316	149	114	34.31	4.330			
3900	3886	4082	3882	15	22	21.77	333	-288	140	105	35.43	3.963			
3927	3913	4106	3904	15	22	25.76	338	-280	140	104	35.51	3.942	CC, ES, SF		
4000	3986	4173	3966	15	22	36.47	352	-260	143	108	35.27	4.057			
4100	4085	4265	4052	16	23	49.87	371	-232	156	122	34.19	4.576			
4200	4185	4353	4133	16	23	61.09	390	-203	179	146	32.73	5.457			
4300	4284	4441	4213	16	24	70.26	409	-173	209	177	31.48	6.625			
4400	4384	4536	4301	17	25	77.56	430	-141	242	211	30.99	7.820			
4500	4484	4636	4393	17	26	82.63	452	-112	276	245	31.04	8.888			
4600	4583	4739	4490	18	26	86.42	473	-84	308	277	31.37	9.817			
4649	4632	4784	4533	18	27	87.60	482	-73	323	292	31.48	10.271			
4700	4683	4837	4584	18	27	113.72	495	-63	339	307	31.85	10.653			
4750	4733	4901	4644	18	27	-100.02	513	-56	354	321	32.52	10.884			
4800	4783	5006	4745	18	27	-101.23	541	-60	365	331	33.66	10.834			
4850	4832	5080	4816	18	27	-104.69	556	-72	370	336	34.48	10.745			
4900	4880	5141	4875	18	27	-108.71	566	-86	376	341	35.40	10.626			
4950	4927	5198	4928	19	27	-113.26	575	-104	383	347	36.50	10.492			
5000	4973	5244	4971	19	27	-117.28	582	-121	393	355	37.71	10.417			
5050	5017	5273	4996	19	27	-119.26	586	-133	407	368	38.81	10.492			
5100	5059	5295	5016	19	27	-120.32	589	-143	427	387	39.75	10.741			
5150	5098	5313	5032	19	27	-120.38	592	-152	452	412	40.50	11.163			
5200	5135	5327	5044	19	27	-119.38	594	-159	482	441	41.05	11.741			
5250	5170	5337	5052	19	27	-117.05	596	-164	516	475	41.44	12.453			
5300	5201	5343	5056	19	27	-113.28	597	-167	554	512	41.70	13.274			
5350	5229	5345	5058	19	27	-107.92	597	-169	594	552	41.89	14.175			
5400	5254	5344	5058	19	27	-100.93	597	-168	636	594	42.03	15.130			
5450	5276	5341	5055	20	27	-92.42	597	-167	680	637	42.17	16.116			
5500	5293	5336	5051	20	27	-82.83	596	-164	724	682	42.31	17.114			
5550	5308	5329	5045	20	27	-72.89	595	-160	769	726	42.46	18.108			
5600	5318	5320	5038	21	27	-63.40	593	-156	814	771	42.64	19.084			
5650	5324	5307	5026	21	27	-54.66	591	-149	858	815	42.80	20.051			
5700	5327	5307	5026	22	27	-48.28	591	-149	902	859	43.15	20.903			
5710	5327	5307	5026	22	27	-47.12	591	-149	911	867	43.22	21.069			



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 101H - Slot 2
Project:	Venado Canyon Unit	TVD Reference:	GL 6941' & RKB14' @ 6955ft
Reference Site:	M01 2206 Pad	MD Reference:	GL 6941' & RKB14' @ 6955ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 101H	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: E01 2206 Pad - Chaco 2206 02P 227H - OH - OH											Offset Site Error:	0 ft
Survey Program: 465-MWD											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
5800	5327	5278	5001	23	27	-45.46	587	-136	989	945	43.56	22.704
5900	5326	5243	4970	24	27	-43.48	582	-121	1078	1034	43.88	24.562
6000	5326	5243	4970	26	27	-43.48	582	-121	1167	1123	44.42	26.279
6100	5325	5216	4945	27	27	-42.03	578	-110	1258	1213	44.71	28.134
6200	5325	5192	4923	29	27	-40.74	574	-102	1349	1304	45.00	29.987
6300	5325	5180	4912	31	27	-40.12	573	-98	1441	1396	45.31	31.810
6400	5324	5154	4887	33	27	-38.76	568	-90	1534	1488	45.51	33.698
6500	5324	5138	4872	35	27	-37.94	566	-85	1627	1581	45.74	35.563
6600	5324	5116	4851	37	27	-36.84	562	-80	1720	1674	45.93	37.454
6700	5323	5104	4840	39	27	-36.22	560	-77	1814	1768	46.13	39.334
6800	5323	5080	4817	42	27	-35.04	556	-72	1909	1862	46.26	41.258
6900	5322	5052	4790	44	27	-33.71	550	-66	2003	1957	46.37	43.196
7000	5322	5052	4790	46	27	-33.71	550	-66	2098	2051	46.56	45.054
7100	5322	5029	4768	48	27	-32.63	546	-63	2193	2146	46.65	47.007
7200	5321	5017	4756	51	27	-32.08	543	-61	2288	2241	46.77	48.926
7300	5321	5006	4746	53	27	-31.56	541	-60	2384	2337	46.88	50.848
7400	5320	4988	4728	55	27	-30.69	537	-58	2480	2433	46.96	52.807
7500	5320	4980	4720	58	27	-30.33	535	-57	2576	2529	47.05	54.742
7600	5320	4926	4668	60	27	-27.76	521	-55	2672	2625	46.90	56.968
7700	5319	4925	4667	62	27	-27.70	520	-55	2768	2721	47.02	58.869
7800	5319	4925	4667	65	27	-27.70	520	-55	2864	2817	47.13	60.768
7900	5319	4925	4667	67	27	-27.70	520	-55	2961	2914	47.24	62.674
8000	5318	4925	4667	69	27	-27.70	520	-55	3058	3010	47.34	64.586
8100	5318	4925	4667	72	27	-27.70	520	-55	3155	3107	47.44	66.502
8200	5317	4925	4667	74	27	-27.70	520	-55	3252	3204	47.53	68.422
8300	5317	4896	4640	76	27	-26.33	512	-56	3349	3301	47.44	70.590
8400	5317	4893	4637	79	27	-26.18	511	-56	3446	3399	47.50	72.544
8500	5316	4890	4634	81	27	-26.03	510	-57	3544	3496	47.57	74.499
8600	5316	4862	4607	84	27	-24.71	502	-59	3642	3594	47.47	76.713
8700	5315	4862	4607	86	27	-24.71	502	-59	3739	3692	47.55	78.642
8800	5315	4862	4607	89	27	-24.71	502	-59	3837	3789	47.62	80.572
8900	5315	4862	4607	91	27	-24.71	502	-59	3935	3887	47.70	82.502
9000	5314	4862	4607	93	27	-24.71	502	-59	4033	3985	47.76	84.433
9100	5314	4862	4607	96	27	-24.71	502	-59	4131	4083	47.83	86.363
9200	5314	4862	4607	98	27	-24.71	502	-59	4229	4181	47.90	88.292
9300	5313	4862	4607	101	27	-24.71	502	-59	4327	4279	47.96	90.221
9400	5313	4862	4607	103	27	-24.71	502	-59	4426	4378	48.03	92.149
9500	5312	4862	4607	105	27	-24.71	502	-59	4524	4476	48.09	94.075
9600	5312	4862	4607	108	27	-24.71	502	-59	4623	4574	48.15	95.999
9700	5312	4862	4607	110	27	-24.71	502	-59	4721	4673	48.21	97.921
9800	5311	4862	4607	113	27	-24.71	502	-59	4820	4771	48.27	99.841
9900	5311	4862	4607	115	27	-24.71	502	-59	4918	4870	48.33	101.759
10,000	5310	4862	4607	118	27	-24.71	502	-59	5017	4969	48.39	103.674
10,100	5310	4862	4607	120	27	-24.71	502	-59	5116	5067	48.45	105.586
10,200	5310	4862	4607	123	27	-24.71	502	-59	5215	5166	48.51	107.494
10,300	5309	4862	4607	125	27	-24.71	502	-59	5313	5265	48.57	109.400
10,400	5309	4862	4607	127	27	-24.71	502	-59	5412	5364	48.63	111.302
10,500	5309	4862	4607	130	27	-24.71	502	-59	5511	5463	48.69	113.201
10,600	5308	4862	4607	132	27	-24.71	502	-59	5610	5561	48.74	115.096
10,700	5308	4862	4607	135	27	-24.71	502	-59	5709	5660	48.80	116.987
10,800	5307	4862	4607	137	27	-24.71	502	-59	5808	5759	48.86	118.874
10,900	5307	4862	4607	140	27	-24.71	502	-59	5907	5858	48.92	120.757



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 101H - Slot 2
Project:	Venado Canyon Unit	TVD Reference:	GL 6941' & RKB14' @ 6955ft
Reference Site:	M01 2206 Pad	MD Reference:	GL 6941' & RKB14' @ 6955ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 101H	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: E01 2206 Pad - Chaco 2206 02P 227H - OH - OH													Offset Site Error:	0 ft
Survey Program: 465-MWD													Offset Well Error:	0 ft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Rule Assigned:				Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)			
11,000	5307	4862	4607	142	27	-24.71	502	-59	6006	5957	48.98	122.636		
11,100	5306	4862	4607	145	27	-24.71	502	-59	6106	6056	49.04	124.511		
11,200	5306	4862	4607	147	27	-24.71	502	-59	6205	6156	49.09	126.381		
11,300	5305	4862	4607	150	27	-24.71	502	-59	6304	6255	49.15	128.246		
11,400	5305	4862	4607	152	27	-24.71	502	-59	6403	6354	49.21	130.107		
11,500	5305	4862	4607	154	27	-24.71	502	-59	6502	6453	49.27	131.963		
11,600	5304	4862	4607	157	27	-24.71	502	-59	6602	6552	49.33	133.814		
11,700	5304	4862	4607	159	27	-24.71	502	-59	6701	6651	49.39	135.660		
11,800	5304	4862	4607	162	27	-24.71	502	-59	6800	6751	49.45	137.501		
11,900	5303	4862	4607	164	27	-24.71	502	-59	6899	6850	49.52	139.337		
11,938	5303	4862	4607	165	27	-24.71	502	-59	6937	6887	49.54	140.029		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 101H - Slot 2
Project:	Venado Canyon Unit	TVD Reference:	GL 6941' & RKB14' @ 6955ft
Reference Site:	M01 2206 Pad	MD Reference:	GL 6941' & RKB14' @ 6955ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 101H	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: M01 2206 Pad - # 513H - Original drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference	Offset	Rule Assigned:												
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Distance		Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S	+E/-W	Between Centres	Between Ellipses	(ft)			
							(ft)	(ft)	(ft)	(ft)	(ft)			
0	0	0	0	0	0	-113.63	-8	-18	20					
100	100	100	100	0	0	-113.63	-8	-18	20	20	0.31	64.801		
200	200	200	200	1	1	-113.63	-8	-18	20	19	1.03	19.485		
300	300	300	300	1	1	-113.63	-8	-18	20	18	1.74	11.467		
400	400	400	400	1	1	-113.63	-8	-18	20	18	2.46	8.124		
454	454	454	454	1	1	-67.53	-8	-18	20	17	2.84	6.988 CC		
500	500	500	500	2	2	-71.83	-9	-19	20	17	3.16	6.356 ES		
600	600	599	598	2	2	-88.67	-12	-21	23	19	3.85	6.025		
662	661	659	659	2	2	-100.11	-16	-23	28	24	4.29	6.504		
700	699	697	697	2	2	-105.98	-18	-25	32	27	4.56	7.019		
800	799	794	793	3	3	-114.87	-27	-31	46	41	5.27	8.724		
900	899	891	889	3	3	-118.44	-39	-39	64	58	5.98	10.645		
1000	998	987	983	3	3	-119.58	-53	-49	85	78	6.69	12.638		
1100	1098	1081	1075	4	4	-119.61	-69	-60	108	101	7.39	14.662		
1200	1197	1178	1170	4	4	-119.39	-87	-72	134	125	8.13	16.421		
1300	1297	1274	1264	5	5	-119.24	-105	-84	159	150	8.88	17.871		
1400	1397	1371	1358	5	5	-119.13	-122	-97	184	174	9.64	19.084		
1500	1496	1468	1453	5	6	-119.05	-140	-109	209	199	10.40	20.114		
1600	1596	1565	1547	6	6	-118.99	-158	-121	234	223	11.16	20.997		
1700	1695	1662	1641	6	7	-118.93	-176	-133	260	248	11.93	21.763		
1800	1795	1758	1736	7	7	-118.89	-194	-145	285	272	12.69	22.433		
1900	1894	1855	1830	7	8	-118.85	-212	-158	310	296	13.46	23.024		
2000	1994	1952	1924	7	8	-118.82	-230	-170	335	321	14.23	23.548		
2100	2094	2049	2019	8	9	-118.80	-248	-182	360	345	15.00	24.017		
2200	2193	2145	2113	8	10	-118.77	-265	-194	386	370	15.78	24.438		
2300	2293	2242	2207	9	10	-118.75	-283	-206	411	394	16.55	24.818		
2400	2392	2339	2301	9	11	-118.74	-301	-219	436	419	17.32	25.163		
2500	2492	2436	2396	9	11	-118.72	-319	-231	461	443	18.10	25.478		
2600	2592	2533	2490	10	12	-118.71	-337	-243	486	467	18.88	25.766		
2700	2691	2629	2584	10	12	-118.69	-355	-255	512	492	19.65	26.031		
2800	2791	2726	2679	11	13	-118.68	-373	-268	537	516	20.43	26.274		
2900	2890	2823	2773	11	13	-118.67	-391	-280	562	541	21.21	26.500		
3000	2990	2920	2867	11	14	-118.66	-409	-292	587	565	21.98	26.709		
3100	3089	3016	2962	12	14	-118.65	-426	-304	612	590	22.76	26.903		
3200	3189	3113	3056	12	15	-118.64	-444	-316	638	614	23.54	27.084		
3300	3289	3210	3150	13	15	-118.64	-462	-329	663	638	24.32	27.253		
3400	3388	3307	3245	13	16	-118.63	-480	-341	688	663	25.10	27.412		
3500	3488	3403	3339	13	16	-118.62	-498	-353	713	687	25.88	27.560		
3600	3587	3500	3433	14	17	-118.62	-516	-365	738	712	26.66	27.700		
3700	3687	3597	3528	14	18	-118.61	-534	-378	764	736	27.44	27.831		
3800	3787	3694	3622	14	18	-118.61	-552	-390	789	761	28.22	27.955		
3900	3886	3791	3716	15	19	-118.60	-569	-402	814	785	29.00	28.072		
4000	3986	3887	3811	15	19	-118.60	-587	-414	839	809	29.78	28.183		
4100	4085	3984	3905	16	20	-118.59	-605	-426	864	834	30.56	28.288		
4200	4185	4081	3999	16	20	-118.59	-623	-439	890	858	31.34	28.387		
4300	4284	4178	4094	16	21	-118.58	-641	-451	915	883	32.12	28.482		
4400	4384	4274	4188	17	21	-118.58	-659	-463	940	907	32.90	28.572		
4500	4484	4371	4282	17	22	-118.58	-677	-475	965	931	33.68	28.658		
4600	4583	4431	4341	18	22	-118.65	-689	-482	992	958	34.13	29.060		
4649	4632	4450	4359	18	22	-118.73	-693	-483	1007	972	34.23	29.406		
4700	4683	4483	4390	18	23	-95.78	-702	-484	1022	987	34.44	29.668		
4750	4733	4500	4407	18	23	49.50	-707	-484	1036	1001	34.42	30.086		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 101H - Slot 2
Project:	Venado Canyon Unit	TVD Reference:	GL 6941' & RKB14' @ 6955ft
Reference Site:	M01 2206 Pad	MD Reference:	GL 6941' & RKB14' @ 6955ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 101H	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: M01 2206 Pad - # 513H - Original drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF												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
4800	4783	4535	4439	18	23	51.41	-719	-484	1048	1014	34.54	30.343	
4850	4832	4550	4454	18	23	51.42	-724	-483	1060	1025	34.42	30.791	
4900	4880	4586	4487	18	23	51.18	-738	-480	1070	1035	34.50	31.014	
4950	4927	4612	4511	19	23	50.89	-748	-477	1079	1045	34.44	31.332	
5000	4973	4638	4534	19	23	50.65	-759	-474	1087	1052	34.35	31.631	
5050	5017	4664	4556	19	24	50.50	-771	-469	1093	1059	34.26	31.902	
5100	5059	4700	4587	19	24	50.54	-788	-462	1098	1064	34.30	32.012	
5150	5098	4716	4600	19	24	50.51	-796	-458	1102	1068	34.08	32.322	
5200	5135	4750	4628	19	24	50.79	-814	-449	1104	1070	34.13	32.344	
5250	5170	4768	4642	19	24	50.99	-824	-444	1105	1071	33.99	32.499	
5300	5201	4800	4667	19	24	51.49	-842	-434	1104	1070	34.10	32.391	
5350	5229	4820	4682	19	25	51.94	-854	-427	1103	1069	34.11	32.332	
5400	5254	4850	4703	19	25	52.66	-871	-416	1100	1065	34.31	32.050	
5450	5276	4873	4719	20	25	53.40	-885	-407	1096	1061	34.53	31.729	
5500	5293	4900	4737	20	25	54.32	-902	-396	1090	1055	34.89	31.246	
5550	5308	4926	4754	20	25	55.36	-919	-385	1084	1048	35.36	30.645	
5600	5318	4950	4768	21	25	56.46	-935	-374	1076	1040	35.91	29.963	
5650	5324	4980	4785	21	26	57.83	-955	-360	1068	1031	36.67	29.113	
5700	5327	5000	4795	22	26	59.08	-968	-350	1058	1021	37.43	28.271	
5710	5327	5012	4802	22	26	59.56	-977	-343	1056	1019	37.69	28.023	
5800	5327	5063	4826	23	26	60.86	-1012	-316	1040	1001	39.53	26.319	
5900	5326	5125	4850	24	27	62.20	-1056	-280	1027	985	41.90	24.501	
6000	5326	5192	4871	26	27	63.31	-1105	-238	1017	972	44.55	22.820	
6100	5325	5263	4885	27	28	64.10	-1156	-192	1010	962	47.41	21.299	
6200	5325	5336	4892	29	29	64.47	-1209	-142	1006	956	50.40	19.959	
6300	5325	5427	4892	31	30	64.45	-1273	-78	1004	951	53.47	18.778	
6400	5324	5527	4891	33	31	64.40	-1344	-8	1002	945	56.90	17.618	
6500	5324	5627	4891	35	33	64.35	-1415	63	1001	940	60.43	16.561	
6600	5324	5727	4890	37	35	64.30	-1486	133	999	935	64.07	15.592	
6700	5323	5827	4890	39	36	64.25	-1557	204	997	930	67.82	14.706	
6800	5323	5927	4889	42	38	64.20	-1628	274	996	924	71.65	13.896	
6900	5322	6027	4889	44	40	64.15	-1699	344	994	918	75.56	13.156	
7000	5322	6127	4889	46	42	64.10	-1770	415	992	913	79.52	12.479	
7100	5322	6227	4888	48	44	64.05	-1841	485	991	907	83.53	11.859	
7200	5321	6326	4888	51	46	64.00	-1912	556	989	901	87.59	11.290	
7300	5321	6426	4887	53	48	63.95	-1983	626	987	896	91.69	10.768	
7400	5320	6526	4887	55	51	63.89	-2054	696	986	890	95.81	10.287	
7500	5320	6626	4886	58	53	63.84	-2125	767	984	884	99.97	9.842	
7600	5320	6726	4886	60	55	63.79	-2196	837	982	878	104.15	9.432	
7700	5319	6826	4885	62	57	63.74	-2267	908	981	872	108.34	9.051	
7800	5319	6926	4885	65	60	63.69	-2338	978	979	866	112.56	8.697	
7900	5319	7026	4885	67	62	63.63	-2409	1048	977	860	116.79	8.368	
8000	5318	7126	4884	69	64	63.58	-2480	1119	976	855	121.03	8.061	
8100	5318	7226	4884	72	66	63.53	-2551	1189	974	849	125.29	7.774	
8200	5317	7326	4883	74	69	63.48	-2622	1260	972	843	129.55	7.505	
8300	5317	7426	4883	76	71	63.42	-2693	1330	971	837	133.82	7.253	
8400	5317	7526	4882	79	74	63.37	-2764	1400	969	831	138.10	7.016	
8500	5316	7626	4882	81	76	63.32	-2835	1471	967	825	142.39	6.793	
8600	5316	7726	4881	84	78	63.26	-2906	1541	966	819	146.68	6.583	
8700	5315	7826	4881	86	81	63.21	-2977	1612	964	813	150.97	6.385	
8800	5315	7926	4881	89	83	63.15	-3048	1682	962	807	155.27	6.197	
8900	5315	8026	4880	91	85	63.10	-3119	1752	961	801	159.57	6.020	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 101H - Slot 2
Project:	Venado Canyon Unit	TVD Reference:	GL 6941' & RKB14' @ 6955ft
Reference Site:	M01 2206 Pad	MD Reference:	GL 6941' & RKB14' @ 6955ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 101H	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: M01 2206 Pad - # 513H - Original drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF												Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre			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	
9000	5314	8126	4880	93	88	63.04	-3190	1823	959	795	163.88	5.851	
9100	5314	8226	4879	96	90	62.99	-3261	1893	957	789	168.18	5.692	
9200	5314	8326	4879	98	93	62.93	-3332	1964	956	783	172.49	5.540	
9300	5313	8426	4878	101	95	62.88	-3403	2034	954	777	176.80	5.396	
9400	5313	8526	4878	103	97	62.82	-3474	2104	952	771	181.11	5.258	
9500	5312	8626	4877	105	100	62.77	-3545	2175	951	765	185.42	5.127	
9600	5312	8726	4877	108	102	62.71	-3616	2245	949	759	189.72	5.002	
9700	5312	8826	4876	110	105	62.66	-3687	2316	947	753	194.03	4.882	
9800	5311	8926	4876	113	107	62.60	-3758	2386	946	747	198.34	4.768	
9900	5311	9026	4876	115	110	62.55	-3829	2456	944	741	202.65	4.658	
10,000	5310	9126	4875	118	112	62.49	-3900	2527	942	735	206.95	4.554	
10,100	5310	9226	4875	120	114	62.43	-3971	2597	941	729	211.25	4.453	
10,200	5310	9326	4874	123	117	62.38	-4042	2668	939	724	215.55	4.357	
10,300	5309	9426	4874	125	119	62.32	-4113	2738	937	718	219.85	4.264	
10,400	5309	9526	4873	127	122	62.26	-4184	2808	936	712	224.15	4.175	
10,500	5309	9626	4873	130	124	62.20	-4255	2879	934	706	228.44	4.089	
10,600	5308	9726	4872	132	127	62.15	-4326	2949	932	700	232.74	4.007	
10,700	5308	9826	4872	135	129	62.09	-4397	3020	931	694	237.03	3.927	
10,800	5307	9926	4872	137	132	62.03	-4468	3090	929	688	241.31	3.851	
10,900	5307	10,026	4871	140	134	61.97	-4539	3160	928	682	245.60	3.777	
11,000	5307	10,126	4871	142	136	61.91	-4610	3231	926	676	249.88	3.705	
11,100	5306	10,226	4870	145	139	61.85	-4681	3301	924	670	254.15	3.637	
11,200	5306	10,326	4870	147	141	61.80	-4752	3372	923	664	258.43	3.570	
11,300	5305	10,426	4869	150	144	61.74	-4823	3442	921	658	262.70	3.506	
11,400	5305	10,526	4869	152	146	61.68	-4894	3512	919	652	266.96	3.444	
11,500	5305	10,626	4868	154	149	61.62	-4965	3583	918	646	271.23	3.384	
11,600	5304	10,726	4868	157	151	61.56	-5036	3653	916	641	275.48	3.325	
11,700	5304	10,826	4868	159	154	61.50	-5107	3724	914	635	279.74	3.269	
11,800	5304	10,926	4867	162	156	61.44	-5178	3794	913	629	283.99	3.214	
11,900	5303	11,026	4867	164	159	61.38	-5249	3864	911	623	288.24	3.161	
11,938	5303	11,063	4866	165	160	61.35	-5276	3891	911	621	289.84	3.142 SF	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 101H - Slot 2
Project:	Venado Canyon Unit	TVD Reference:	GL 6941' & RKB14' @ 6955ft
Reference Site:	M01 2206 Pad	MD Reference:	GL 6941' & RKB14' @ 6955ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 101H	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: M01 2206 Pad - # 514H - Original drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													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	67.65	8	19	20					
100	100	100	100	0	0	67.65	8	19	20	20	0.31	65.221		
200	200	200	200	1	1	67.65	8	19	20	19	1.03	19.612		
300	300	300	300	1	1	67.65	8	19	20	18	1.74	11.541		
400	400	400	400	1	1	67.65	8	19	20	18	2.46	8.176 CC, ES		
500	500	500	500	2	2	118.83	8	19	21	18	3.17	6.613		
600	600	600	600	2	2	122.47	11	18	24	21	3.89	6.281		
662	661	661	661	2	2	123.66	15	18	28	24	4.34	6.429		
700	699	699	699	2	2	123.70	18	18	30	26	4.62	6.584		
800	799	799	798	3	3	120.18	28	18	37	32	5.36	6.994		
900	899	898	896	3	3	113.81	41	17	46	40	6.12	7.472		
1000	998	997	995	3	3	108.60	55	16	55	48	6.89	7.940		
1100	1098	1097	1093	4	4	104.89	69	16	64	56	7.67	8.348		
1200	1197	1196	1192	4	4	102.12	83	15	74	65	8.46	8.701		
1300	1297	1296	1290	5	5	99.99	97	14	83	74	9.24	9.006		
1400	1397	1395	1389	5	5	98.31	112	14	93	83	10.03	9.270		
1500	1496	1495	1487	5	6	96.94	126	13	103	92	10.82	9.501		
1600	1596	1594	1586	6	6	95.82	140	12	113	101	11.61	9.704		
1700	1695	1694	1684	6	6	94.87	154	12	123	110	12.40	9.884		
1800	1795	1793	1783	7	7	94.07	168	11	133	119	13.20	10.043		
1900	1894	1893	1881	7	7	93.38	182	10	142	128	13.99	10.186		
2000	1994	1992	1980	7	8	92.78	196	10	152	138	14.78	10.314		
2100	2094	2092	2078	8	8	92.25	210	9	162	147	15.57	10.430		
2200	2193	2191	2177	8	9	91.79	225	8	172	156	16.37	10.535		
2300	2293	2291	2275	9	9	91.37	239	8	182	165	17.16	10.631		
2400	2392	2390	2374	9	9	91.00	253	7	192	174	17.95	10.719		
2500	2492	2490	2472	9	10	90.67	267	6	202	184	18.75	10.800		
2600	2592	2589	2570	10	10	90.36	281	6	212	193	19.54	10.874		
2700	2691	2689	2669	10	11	90.09	295	5	223	202	20.33	10.943		
2800	2791	2788	2767	11	11	89.83	309	4	233	211	21.13	11.007		
2900	2890	2888	2866	11	12	89.60	324	4	243	221	21.92	11.066		
3000	2990	2987	2964	11	12	89.39	338	3	253	230	22.72	11.121		
3100	3089	3087	3063	12	13	89.19	352	2	263	239	23.51	11.173		
3200	3189	3186	3161	12	13	89.01	366	2	273	248	24.31	11.221		
3300	3289	3286	3260	13	13	88.84	380	1	283	258	25.10	11.267		
3400	3388	3385	3358	13	14	88.68	394	0	293	267	25.89	11.309		
3500	3488	3485	3457	13	14	88.54	408	0	303	276	26.69	11.349		
3600	3587	3584	3555	14	15	88.40	422	-1	313	285	27.48	11.387		
3700	3687	3684	3654	14	15	88.27	437	-2	323	295	28.28	11.423		
3800	3787	3783	3752	14	16	88.15	451	-2	333	304	29.07	11.457		
3900	3886	3883	3851	15	16	88.04	465	-3	343	313	29.87	11.489		
4000	3986	3982	3949	15	16	87.93	479	-4	353	323	30.66	11.519		
4100	4085	4082	4048	16	17	87.83	493	-4	363	332	31.46	11.548		
4200	4185	4181	4146	16	17	87.73	507	-5	373	341	32.25	11.575		
4300	4284	4283	4247	16	18	87.78	521	-5	383	350	33.06	11.596		
4400	4384	4386	4349	17	18	89.74	526	4	392	359	33.85	11.592		
4500	4484	4483	4444	17	18	93.64	519	23	402	367	34.54	11.631		
4600	4583	4570	4526	18	18	98.64	504	49	414	379	35.07	11.814		
4649	4632	4609	4562	18	19	101.27	495	62	423	387	35.22	12.000		
4700	4683	4650	4597	18	19	129.21	483	78	433	397	35.31	12.257		
4750	4733	4684	4626	18	19	-81.25	472	93	444	409	35.21	12.605		
4800	4783	4720	4656	18	19	-75.22	459	109	456	421	35.05	13.004		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 101H - Slot 2
Project:	Venado Canyon Unit	TVD Reference:	GL 6941' & RKB14' @ 6955ft
Reference Site:	M01 2206 Pad	MD Reference:	GL 6941' & RKB14' @ 6955ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 101H	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: M01 2206 Pad - # 514H - Original drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF												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
4850	4832	4756	4683	18	19	-71.40	446	126	468	433	34.81	13.454	
4900	4880	4790	4709	18	19	-68.22	431	144	481	447	34.50	13.946	
4950	4927	4825	4734	19	19	-65.42	415	162	494	460	34.15	14.470	
5000	4973	4859	4757	19	19	-62.89	399	181	507	473	33.77	15.017	
5050	5017	4892	4778	19	18	-60.62	382	201	520	486	33.38	15.575	
5100	5059	4926	4798	19	18	-58.57	364	221	532	499	32.99	16.130	
5150	5098	4959	4816	19	18	-56.73	345	241	544	511	32.63	16.672	
5200	5135	4991	4833	19	18	-55.10	326	262	555	523	32.30	17.185	
5250	5170	5024	4848	19	18	-53.65	307	283	566	533	32.06	17.641	
5300	5201	5050	4859	19	18	-52.47	290	300	575	543	31.74	18.121	
5350	5229	5088	4873	19	19	-51.27	266	326	584	552	31.73	18.399	
5400	5254	5120	4884	19	19	-50.33	245	348	592	560	31.73	18.641	
5450	5276	5150	4892	20	19	-49.56	225	368	598	566	31.81	18.806	
5500	5293	5184	4900	20	20	-48.89	202	392	604	572	32.07	18.830	
5550	5308	5216	4905	20	20	-48.39	180	414	608	576	32.43	18.765	
5600	5318	5250	4910	21	20	-48.02	156	438	612	579	32.92	18.584	
5650	5324	5279	4912	21	21	-47.81	135	458	614	581	33.51	18.327	
5700	5327	5311	4913	22	21	-47.71	112	480	615	581	34.24	17.971	
5710	5327	5318	4913	22	21	-47.71	107	485	615	581	34.39	17.890	
5800	5327	5407	4913	23	22	-47.76	43	547	616	580	36.16	17.030	
5900	5326	5507	4912	24	24	-47.81	-28	617	616	578	38.40	16.053	
6000	5326	5607	4912	26	25	-47.87	-100	687	617	576	40.88	15.094	
6100	5325	5707	4912	27	27	-47.92	-172	756	618	574	43.57	14.178	
6200	5325	5807	4911	29	29	-47.98	-244	826	618	572	46.42	13.320	
6300	5325	5907	4911	31	31	-48.03	-315	896	619	570	49.41	12.526	
6400	5324	6007	4910	33	33	-48.08	-387	965	620	567	52.52	11.795	
6500	5324	6107	4910	35	35	-48.14	-459	1035	620	564	55.74	11.127	
6600	5324	6207	4910	37	37	-48.19	-530	1105	621	562	59.03	10.517	
6700	5323	6307	4909	39	39	-48.24	-602	1174	621	559	62.40	9.959	
6800	5323	6407	4909	42	41	-48.30	-674	1244	622	556	65.82	9.450	
6900	5322	6507	4909	44	44	-48.35	-746	1314	623	553	69.30	8.984	
7000	5322	6607	4908	46	46	-48.40	-817	1383	623	550	72.83	8.558	
7100	5322	6707	4908	48	48	-48.45	-889	1453	624	547	76.40	8.166	
7200	5321	6807	4908	51	51	-48.51	-961	1523	625	544	80.00	7.806	
7300	5321	6907	4907	53	53	-48.56	-1033	1592	625	541	83.64	7.474	
7400	5320	7007	4907	55	55	-48.61	-1104	1662	626	538	87.30	7.167	
7500	5320	7107	4906	58	58	-48.66	-1176	1732	626	535	91.00	6.883	
7600	5320	7207	4906	60	60	-48.72	-1248	1801	627	532	94.71	6.620	
7700	5319	7307	4906	62	62	-48.77	-1320	1871	628	529	98.45	6.375	
7800	5319	7407	4905	65	65	-48.82	-1391	1941	628	526	102.20	6.147	
7900	5319	7507	4905	67	67	-48.87	-1463	2010	629	523	105.97	5.934	
8000	5318	7607	4905	69	69	-48.92	-1535	2080	629	520	109.76	5.735	
8100	5318	7707	4904	72	72	-48.98	-1607	2150	630	517	113.57	5.548	
8200	5317	7807	4904	74	74	-49.03	-1678	2219	631	513	117.39	5.373	
8300	5317	7907	4903	76	77	-49.08	-1750	2289	631	510	121.22	5.208	
8400	5317	8007	4903	79	79	-49.13	-1822	2359	632	507	125.07	5.053	
8500	5316	8107	4903	81	81	-49.18	-1893	2428	633	504	128.93	4.907	
8600	5316	8207	4902	84	84	-49.23	-1965	2498	633	500	132.80	4.768	
8700	5315	8307	4902	86	86	-49.28	-2037	2568	634	497	136.68	4.638	
8800	5315	8407	4902	89	89	-49.34	-2109	2637	634	494	140.57	4.514	
8900	5315	8507	4901	91	91	-49.39	-2180	2707	635	491	144.47	4.396	
9000	5314	8607	4901	93	93	-49.44	-2252	2777	636	487	148.38	4.285	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 101H - Slot 2
Project:	Venado Canyon Unit	TVD Reference:	GL 6941' & RKB14' @ 6955ft
Reference Site:	M01 2206 Pad	MD Reference:	GL 6941' & RKB14' @ 6955ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 101H	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: M01 2206 Pad - # 514H - Original drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF												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	5314	8707	4901	96	96	-49.49	-2324	2846	636	484	152.30	4.178	
9200	5314	8807	4900	98	98	-49.54	-2396	2916	637	481	156.23	4.077	
9300	5313	8907	4900	101	101	-49.59	-2467	2986	638	477	160.17	3.981	
9400	5313	9007	4899	103	103	-49.64	-2539	3055	638	474	164.11	3.889	
9500	5312	9107	4899	105	106	-49.69	-2611	3125	639	471	168.06	3.802	
9600	5312	9207	4899	108	108	-49.74	-2683	3195	640	468	172.02	3.718	
9700	5312	9307	4898	110	111	-49.79	-2754	3264	640	464	175.99	3.638	
9800	5311	9407	4898	113	113	-49.84	-2826	3334	641	461	179.97	3.561	
9900	5311	9507	4898	115	115	-49.89	-2898	3404	641	457	183.95	3.487	
10,000	5310	9607	4897	118	118	-49.94	-2970	3473	642	454	187.94	3.416	
10,100	5310	9707	4897	120	120	-49.99	-3041	3543	643	451	191.93	3.349	
10,200	5310	9807	4897	123	123	-50.04	-3113	3612	643	447	195.93	3.284	
10,300	5309	9907	4896	125	125	-50.09	-3185	3682	644	444	199.94	3.221	
10,400	5309	10,007	4896	127	128	-50.14	-3256	3752	645	441	203.96	3.161	
10,500	5309	10,107	4895	130	130	-50.19	-3328	3821	645	437	207.98	3.103	
10,600	5308	10,207	4895	132	133	-50.24	-3400	3891	646	434	212.01	3.047	
10,700	5308	10,307	4895	135	135	-50.29	-3472	3961	647	430	216.04	2.993	
10,800	5307	10,407	4894	137	138	-50.34	-3543	4030	647	427	220.08	2.941	
10,900	5307	10,507	4894	140	140	-50.38	-3615	4100	648	424	224.12	2.890	
11,000	5307	10,607	4894	142	142	-50.43	-3687	4170	648	420	228.17	2.842	
11,100	5306	10,707	4893	145	145	-50.48	-3759	4239	649	417	232.23	2.795	
11,200	5306	10,807	4893	147	147	-50.53	-3830	4309	650	413	236.29	2.750	
11,300	5305	10,907	4892	150	150	-50.58	-3902	4379	650	410	240.35	2.706	
11,400	5305	11,007	4892	152	152	-50.63	-3974	4449	651	407	244.43	2.663	
11,500	5305	11,039	4892	154	153	-50.64	-3997	4471	655	409	246.32	2.660 SF	
11,600	5304	11,039	4892	157	153	-50.64	-3997	4471	674	431	242.68	2.775	
11,700	5304	11,039	4892	159	153	-50.64	-3997	4471	706	471	234.68	3.007	
11,800	5304	11,039	4892	162	153	-50.64	-3997	4471	750	526	223.84	3.350	
11,900	5303	11,039	4892	164	153	-50.64	-3997	4471	804	593	211.64	3.800	
11,938	5303	11,039	4892	165	153	-50.64	-3997	4471	827	620	206.92	3.996	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 101H - Slot 2
Project:	Venado Canyon Unit	TVD Reference:	GL 6941' & RKB14' @ 6955ft
Reference Site:	M01 2206 Pad	MD Reference:	GL 6941' & RKB14' @ 6955ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 101H	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 6941' & RKB14' @ 6955ft

Offset Depths are relative to Offset Datum

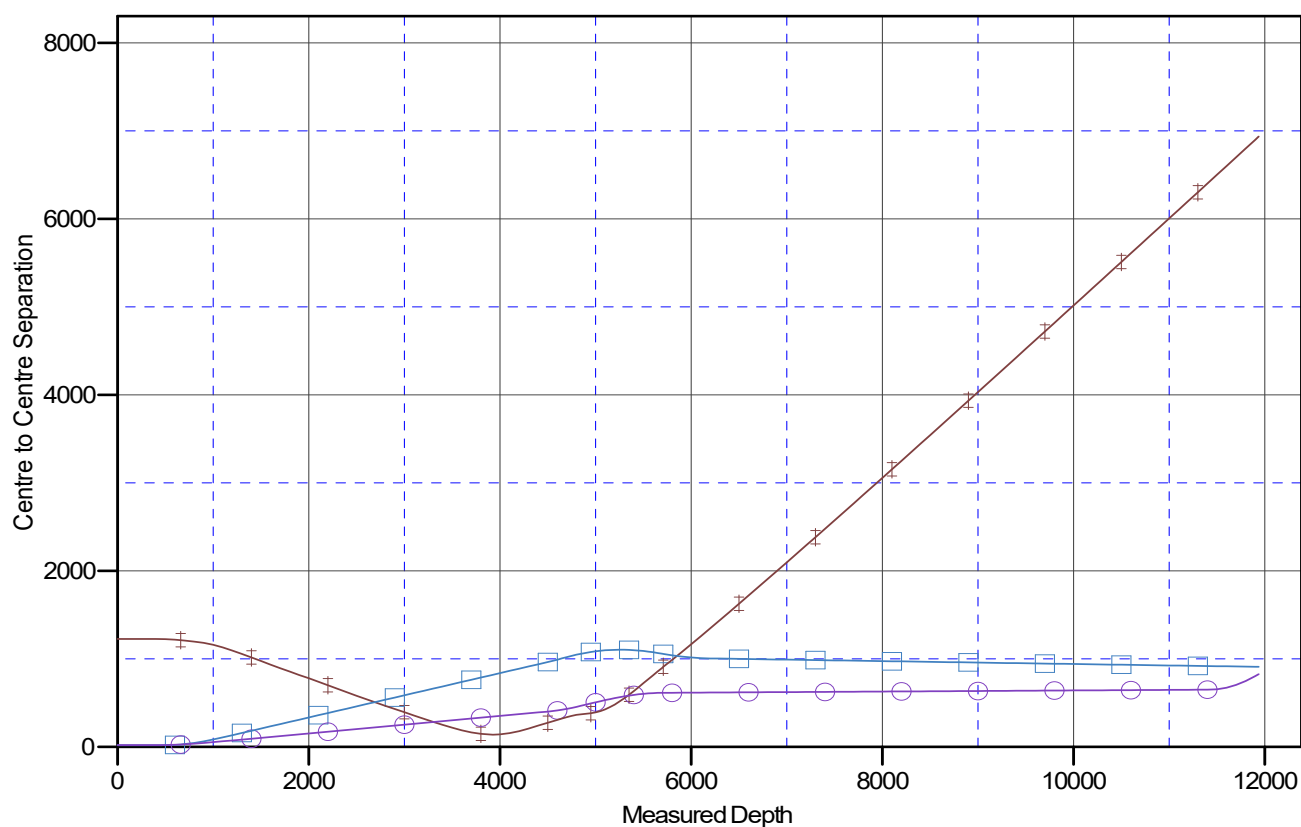
Central Meridian is -107.8333333

Coordinates are relative to: # 101H - Slot 2

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

Grid Convergence at Surface is: 0.24°

Ladder Plot



LEGEND

—■— Chaco 2206 02P227H.OH.QH.VO
 —■— # 513H Original drilling.g.APD.VO
 —○— # 514H Original drilling.g.APD.VO



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 101H - Slot 2
Project:	Venado Canyon Unit	TVD Reference:	GL 6941' & RKB14' @ 6955ft
Reference Site:	M01 2206 Pad	MD Reference:	GL 6941' & RKB14' @ 6955ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 101H	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 6941' & RKB14' @ 6955ft

Offset Depths are relative to Offset Datum

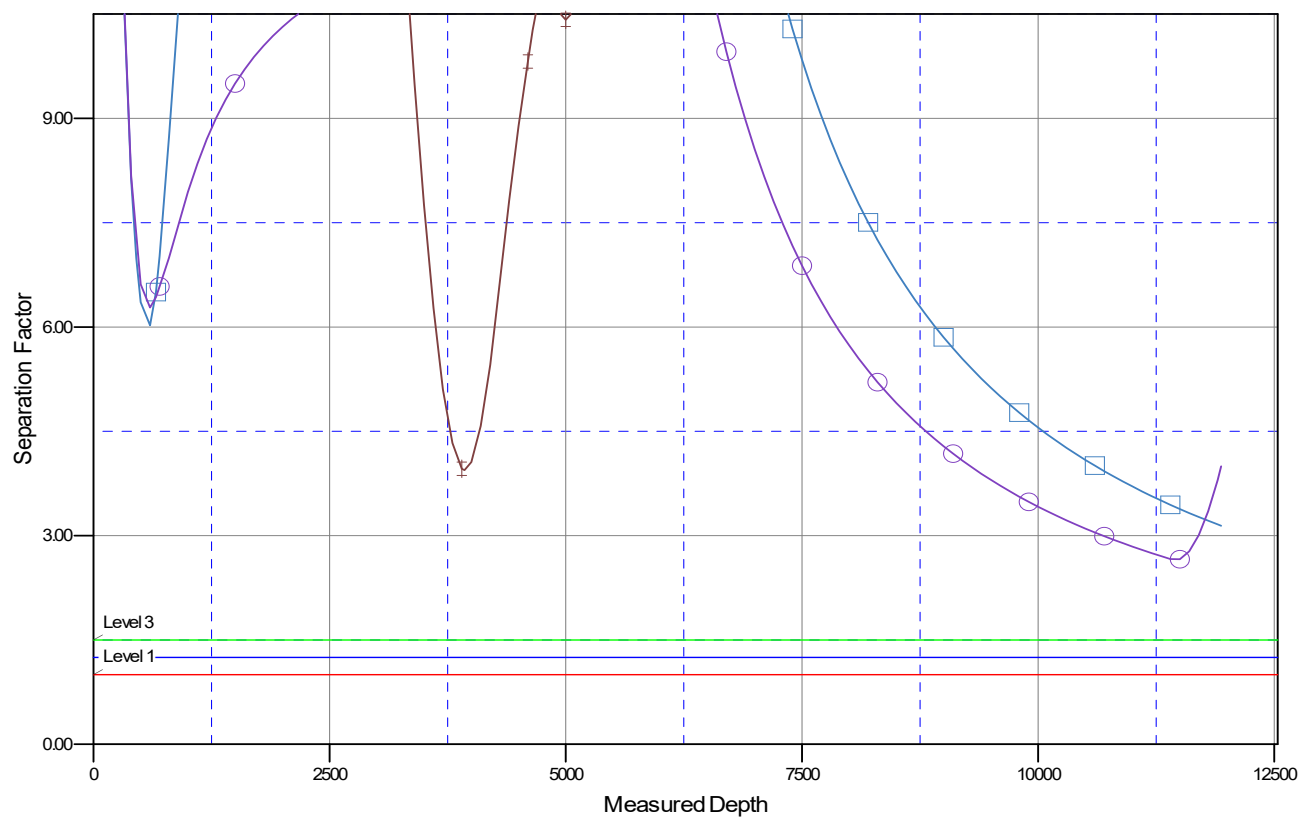
Central Meridian is -107.8333333

Coordinates are relative to: # 101H - Slot 2

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

Grid Convergence at Surface is: 0.24°

Separation Factor Plot



LEGEND

Chaco 2206 (Brown) #513H (Blue) #514H (Purple)



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Farmington District Office
6251 College Blvd, Suite A
Farmington, New Mexico 87402



In Reply Refer To:
3162.3-1(NMF0110)

DJR Operating LLC
#101H Venado Canyon Unit
Lease: NMNM109385 Unit: NMNM13567A
SH: SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 1, T.22 N., R.6 W.
BH: NE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 12, T.22 N., R.6 W.
Sandoval County, New Mexico

***Above Data Required on Well Sign**

GENERAL REQUIREMENTS FOR OIL AND GAS OPERATIONS ON FEDERAL AND INDIAN LEASES

The following special requirements apply and are effective when **checked**:

- A. ☒ Note all surface/drilling conditions of approval attached.
- B. ☒ The required wait on cement (WOC) time will be a minimum of 500 psi compressive strength at 60 degrees. Blowout preventor (BOP) nipple-up operations may then be initiated
- C. ☐ Test the surface casing to a minimum of _____ psi for 30 minutes.
- D. ☒ Test all casing strings below the surface casing to .22 psi/ft. of casing string length or 1500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield burst) for a minimum of 30 minutes.
- E. ☐ Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the Bureau of Land Management, New Mexico State Office, Reservoir Management Group, 301 Dinosaur Trail, Santa Fe, New Mexico 87508.
The effective date of the agreement must be **prior** to any sales.

INTERIOR REGION 7 • UPPER COLORADO BASIN

COLORADO, NEW MEXICO, UTAH, WYOMING

- F. ☒ The use of co-flex hose is authorized contingent upon the following:
1. From the BOP to the choke manifold: the co-flex hose must be hobbled on both ends and saddle to prevent whip.
 2. From the choke manifold to the discharge tank: the co-flex hoses must be as straight as practical, hobbled on both ends and anchored to prevent whip.
 3. The co-flex hose pressure rating must be at least commensurate with approved BOPE.

I. GENERAL

- A. Full compliance with all applicable laws, regulations, and Onshore Orders, with the approved Permit to drill, and with the approved Surface Use and Operations Plan is required. Lessees and/or operators are fully accountable for the actions of their contractors and subcontractors. Failure to comply with these requirements and the filing of required reports will result in strict enforcement pursuant to 43 CFR 3163.1 or 3163.2.
- B. Each well shall have a well sign in legible condition from spud date to final abandonment. The sign should show the operator's name, lease serial number, or unit name, well number, location of the well, and whether lease is Tribal or Allotted, (See 43 CFR 3162.6(b)).
- C. A complete copy of the approved Application for Permit to Drill, along with any conditions of approval, shall be available to authorized personnel at the drill site whenever active drilling operations are under way.
- E. As soon as practical, notice is required of all blowouts, fires and accidents involving life-threatening injuries or loss of life. (See NTL-3A).
- F. Prior approval by the BLM-Authorized Office (Drilling and Production Section) is required for variance from the approved drilling program and before commencing plugging operations, plug back work casing repair work, corrective cementing operations, or suspending drilling operations indefinitely. Emergency approval may be obtained orally, but such approval is contingent upon filing of a notice of intent (on a Sundry Notice, Form 3160-5) within three business days (original and three copies of Federal leases and an original and four copies on Indian leases). **Any changes to the approved plan or any questions regarding drilling operations should be directed to BLM during regular business hours at 505-564-7600. Emergency program changes after hours should be directed to at Virgil Lucero at 505-793-1836.**
- G. **The Inspection and Enforcement Section (I&E), phone number (505-564-7750) is to be notified at least 24 hours in advance of BOP test, spudding, cementing, or plugging operations so that a BLM representative may witness the operations.**
- H. Unless drilling operations are commenced within two years, approval of the Application for Permit to Drill will expire. A written request for a two years extension may be granted if submitted prior to expiration.
- I. From the time drilling operations are initiated and until drilling operations are completed, a member of the drilling crew or the tool pusher shall maintain rig surveillance at all time, unless the well is secured with blowout preventers or cement plugs.

- J. If for any reason, drilling operations are suspended for more than 90 days, a written notice must be provided to this office outlining your plans for this well.

II. REPORTING REQUIREMENTS

- A. For reporting purposes, all well Sundry notices, well completion and other well actions shall be referenced by the appropriate lease, communitization agreement and/or unit agreement numbers.
- B. The following reports shall be filed with the BLM-Authorized Officer within 30 days after the work is completed.
1. Original and three copies on Federal and an Original and five copies on Indian leases of Sundry Notice (Form 3150-5), giving complete information concerning.
 - a. Setting of each string of casing. Show size and depth of hole, grade and weight of casing, depth set, depth of any and all cementing tools that are used, amount (in cubic feet) and types of cement used, whether cement circulated to surface and all cement tops in the casing annulus, casing test method and results, and the date work was done. Show spud date on first report submitted.
 - b. Intervals tested, perforated (include; size, number and location of perforations), acidized, or fractured; and results obtained. Provide date work was done on well completion report and completion sundry notice.
 - c. Subsequent Report of Abandonment, show the manner in which the well was plugged, including depths where casing was cut and pulled, intervals (by depths) where cement plugs were replaced, and dates of the operations.
 2. Well Completion Report (Form 3160-4) will be submitted with 30 days after well has been completed.
 - a. Initial Bottom Hole Pressure (BHP) for the producing formations. Show the BHP on the completion report. The pressure may be: 1) measured with a bottom hole bomb, or; 2) calculated based on shut in surface pressures (minimum seven day buildup) and fluid level shot.
 3. Submit a cement evaluation log, if cement is not circulated to surface.

III. DRILLER'S LOG

The following shall be entered in the daily driller's log: 1) Blowout preventer pressures tests, including test pressures and results. 2) Blowout preventer tests for proper functioning, 3) Blowout prevention drills conducted, 4) Casing run, including size, grade, weight, and depth set, 5) How pipe was cemented, including amount of cement, type, whether cement circulated to surface, location of cementing tools, etc., 6) Waiting on cement time for each casing string, 7) Casing pressure tests after cementing, including test pressure and results and 8) Estimated amounts of oil and gas recovered and/or produced during drill stem test.

IV. GAS FLARING

Gas produced from this well may not be vented or flared beyond an initial, authorized test period of *** 30** Days or 50 MMCF following its (completion)(recompletion), whichever first occurs, without the prior, written approval of the authorized officer. Should gas be vented or flared without approval beyond the test period authorized above, you may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted. You shall be required to compensate the lessor for the portion of the gas vented or flared without approval which is determined to have been avoidably lost.

***30** days, unless a longer test period is specifically approved by the authorized officer. The 30-day period will commence upon the first gas to surface.

V. SAFETY

- A. All rig heating stoves are to be of the explosion-proof type.
- B. Rig safety lines are to be installed.
- C. Hard hats and other Personal Protective Equipment (PPE) must be utilized.

VI. CHANGE OF PLANS OR ABANDONMENT

- A. Any changes of plans required in order to mitigate unanticipated conditions encountered during drilling operations, will require approval as set forth in Section 1.F.
- B. If the well is dry, it is to be plugged in accordance with 43 CFR 3162.3-4, approval of the proposed plugging program is required as set forth in Section 1.F. The report should show the total depth reached, the reason for plugging, and the proposed intervals, by depths, where cement plugs are to be placed, type of plugging mud, etc. A Subsequent Report of Abandonment is required as set forth in Section II.B.1c.
- C. Unless a well has been properly cased and cemented, or properly plugged, the drilling rig must not be moved from the drill site without prior approval from the BLM-Authorized Officer.

VII. PHONE NUMBERS

- A. For BOPE tests, cementing, and plugging operations the phone number is 505-564-7750 and must be called 24 hours in advance in order that a BLM representative may witness the operations.
- B. Emergency program changes after hours contact:

Virgil Lucero (505) 793-1836
BLM 24 Hour Number (505) 564-7750

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 147434

CONDITIONS

Operator: DJR OPERATING, LLC 1 Road 3263 Aztec, NM 87410	OGRID: 371838
	Action Number: 147434
	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	10/5/2022
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104	10/5/2022
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	10/5/2022
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing	10/5/2022
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	10/5/2022