

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

1a. Type of work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NMSF78064
1b. Type of Well: ☒ Oil Well ☒ Gas Well ☐ Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☒ Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator DJR OPERATING LLC		8. Lease Name and Well No. BISTI
3a. Address 1700 LINCOLN STREET, SUITE 2800, DENVER, CO 802		9. API Well No. 30-045-38259
3b. Phone No. (include area code) (505) 632-3476		10. Field and Pool, or Exploratory BASIN MANCOS/BISTI LOWER GALLUP
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NWSW / 2098 FSL / 387 FWL / LAT 36.428698 / LONG -108.070671 At proposed prod. zone SENE / 1880 FNL / 60 FEL / LAT 36.432057 / LONG -108.090121		11. Sec., T. R. M. or Blk. and Survey or Area SEC 1/T25N/R12W/NMP
14. Distance in miles and direction from nearest town or post office* 30 miles		12. County or Parish SAN JUAN
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 387 feet		13. State NM
16. No of acres in lease		17. Spacing Unit dedicated to this well 320.0
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 20 feet		20. BLM/BIA Bond No. in file FED: NMB001464
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6328 feet		22. Approximate date work will start* 11/15/2020
23. Estimated duration 12 days		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 (Electronic Submission)		Name (Printed/Typed) SHAW-MARIE FORD / Ph: (505) 632-3476
Title Regulatory Specialist		Date 05/14/2020
Approved by (Signature) (Electronic Submission)		Name (Printed/Typed) DAVE J MANKIEWICZ / Ph: (505) 564-7761
Title AFM-Minerals		Date 04/01/2022
Office Farmington Field Office		
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Conditions of approval, if any, are attached.		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.		

(Continued on page 2)

*(Instructions on page 2)

DISTRICT I

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

DISTRICT II

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

DISTRICT III

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

DISTRICT IV

1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 1, 2011

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-38259	² Pool Code 97232/5890	³ Pool Name BASIN MANCOS GAS / BISTI LOWER GALLUP
⁴ Property Code 332745	⁵ Property Name BISTI	⁶ Well Number 100H
⁷ OGRID No. 371838	⁸ Operator Name DJR OPERATING, LLC	⁹ Elevation 6328'

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
L	1	25N	12W		2098'	SOUTH	387'	WEST	SAN JUAN

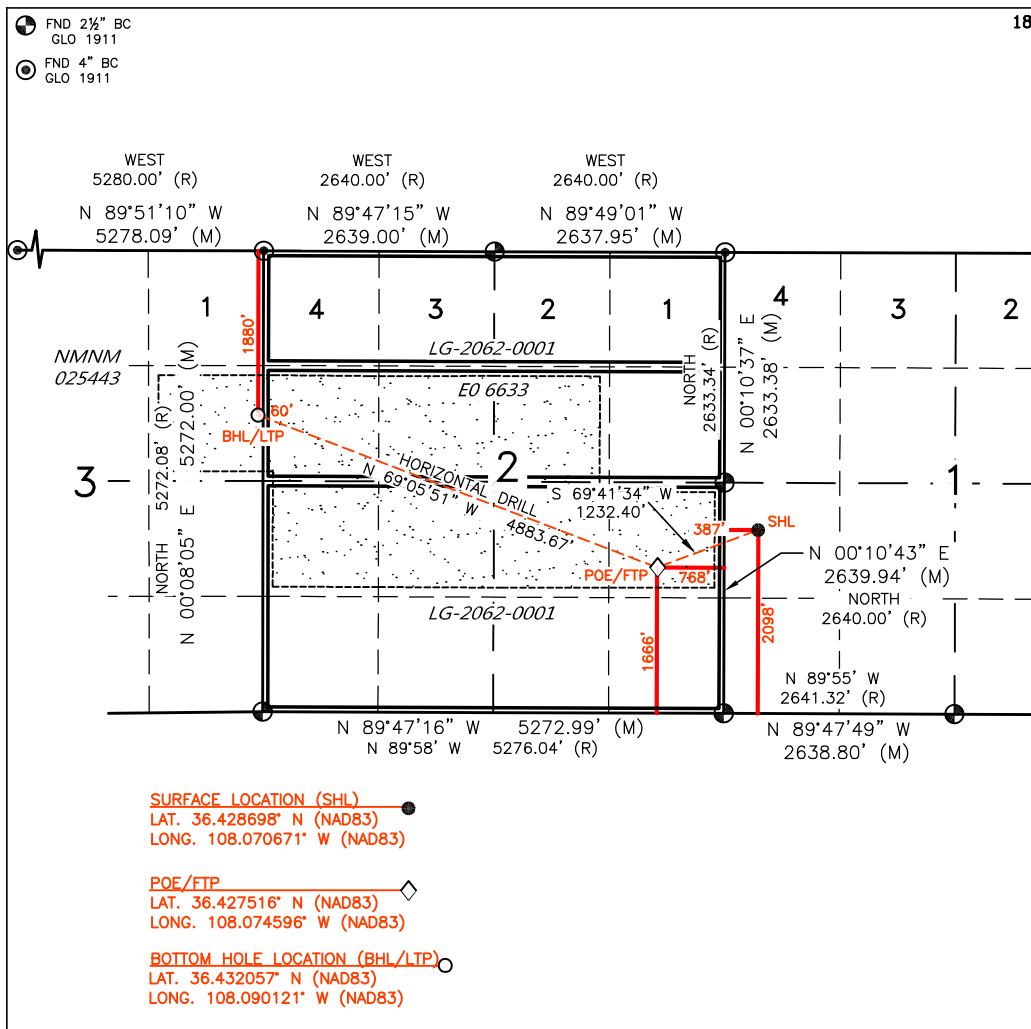
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	3	25N	12W		1880'	NORTH	60'	EAST	SAN JUAN

¹² Dedicated Acres BASIN MANCOS SEC. 2: SW/NW, SE/NW, NE/SW, NW/SW, SW/NW, NW/SE & NE/SE (280 AC.); BISTI LOWER GALLUP SEC. 3: SE/NE (40 AC.) = 320 ACRES TOTAL	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

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17 OPERATOR CERTIFICATION

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

Shaw-Marie Ford 8/4/21
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.

DECEMBER 3, 2019

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:** 04 / 11 / 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
Bisti 100H	TBD	L-01-25N-12W	2098 FSL x 387 FWL	134	154	50

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
Bisti 100H	TBD	04/11/2023	04/21/2023	07/01/2023	07/11/2023	07/13/2023

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: 04/11/2022
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
BISTI 100H
NWSW L-01-25N-12W

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.
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NATURAL GAS MANAGEMENT PLAN
BISTI 100H
NWSW L-01-25N-12W

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:

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



DJR OPERATING, LLC.
OGRID NO: 371838
NATURAL GAS MANAGEMENT PLAN
BISTI 100H
NWSW L-01-25N-12W

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
BISTI 100H
NWSW L-01-25N-12W

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 2



DRILLING PLAN

Bisti 100H

San Juan County, New Mexico

Surface Location

387-ft FWL & 2098-ft FSL
 Sec 1 T25N R12W
 Graded Elevation 6328' MSL
 RKB Elevation 6342' (14' KB)

SHL Geographical Coordinates (NAD-83)

Latitude 36.4286980° N
 Longitude 108.0706710° W

Kick Off Point for Horizontal Build Curve

4526-ft MD
 4453-ft TVD

Local Coordinates (from SHL)

547-ft South
 525-ft West

Heel Location (First Take Point)

768-ft FEL & 1666-ft FSL
 Sec 2 T25N R12W

FTP Geographical Coordinates (NAD-83)

Latitude 36.4275157° N
 Longitude 108.07459630° W

Bottom Hole Location (Last Take Point)

60-ft FEL & 1880-ft FNL
 Sec 3 T25N R12W

LTP Geographical Coordinates (NAD-83)

Latitude 36.4320567° N
 Longitude 108.0901210° W

Well objectives

This well is planned as a 4850-ft lateral in the Gallup C sand.

Bottom Hole temperature and pressure

The temperature in the Gallup C horizontal objective is 138°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	205	205	Sd	W	8.3	8.4 – 8.8
Kirtland	292	292	Sh	-	8.3	8.4 – 8.8
Fruitland	1027	1021	C	G	8.3	9.0 - 9.5
Pictured Cliffs	1245	1235	Sd	W	8.3	9.0 - 9.5
Lewis	1367	1355	Sh	-		9.0 - 9.5
Chacra	2030	2005	Sd	-	8.3	9.0 - 9.5
Menefee	2775	2736	Sd, C	G	8.3	9.0 - 9.5
Point Lookout	3838	3778	Sd	-	8.3	9.0 - 9.5
Mancos	4018	3955	Sh	-		9.0 - 9.5
Mancos Silt	4350	4281	Slt	O/G	6.6	9.0 - 9.5
Gallup A	4910	4799	Slt	O/G	6.6	9.0 - 9.5
Gallup B	4998	4862	Sd	O/G	6.6	8.8 - 9.0
Gallup C	5172	4960	Sd	O/G	6.6	8.8 - 9.0
Target	5473	5030	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	5419	surf	5028	surface
4-1/2"	6-1/8"	11.6	P-110	BTC	5136	10330	4943	5051	5136

Note: all casing will be new

Rev 2



Casing Design Load Cases

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

Note

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

Casing Design Factors

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

Cement Design

9-5/8" Surface Casing

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

7" Intermediate Casing

	Lead	Tail
	BJ Services	BJ Services
Type	III	Poz/G
Planned top	Surface	4026-ft
Density (ppg)	12.30	13.50
Yield (cf/sx)	2.34	1.50
Mix water (gal/sx)	13.26	7.20
Volume (sx)	391	223
Volume (bbls)	163	59
Volume (cu.ft.)	915	334
Excess %	55	55



Rev 2

4-1/2" Production Liner

	BJ Services
Type	Poz/G
Planned top	5136-ft
Density (ppg)	13.3
Yield (cf/sx)	1.56
Mix water (gal/sx)	7.71
Volume (sx)	436
Volume (bbls)	121
Volume (cu.ft)	681
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 – 5419	9.0 – 9.5	38 – 45	8 – 14	<20
Production	Low solids, non-dispersed	5419 – 10330	8.8 – 9.2	34 – 38	6 – 8	6 – 8

Cores, tests and logs

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

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

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

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

Cuttings and drilling fluids management

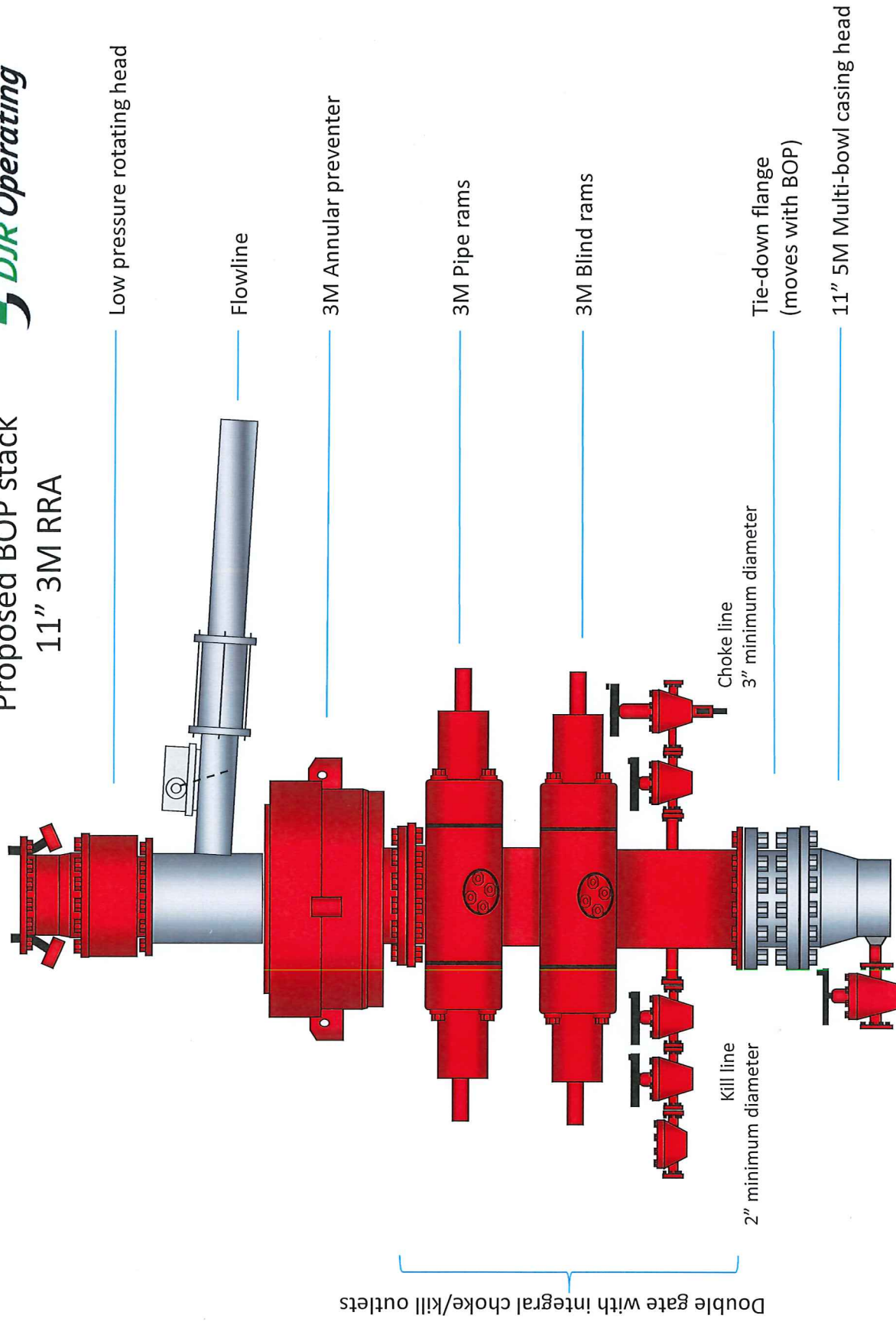
A closed loop, steel tank-based circulating system will be used. In addition to the rig solids control equipment, a dewatering centrifuge and chemical flocculation system will be operational to strip solids from the whole mud. All solids will be collected in 3-sided bins and will then be put into transports with a bucket loader. Drying agents will be used if necessary. The solids will be taken to a licensed commercial disposal facility. Whole mud will be dewatered back to drill water and used as make up for subsequent wells or hauled off for disposal. A diagram of the closed loop system is included.

Completion

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



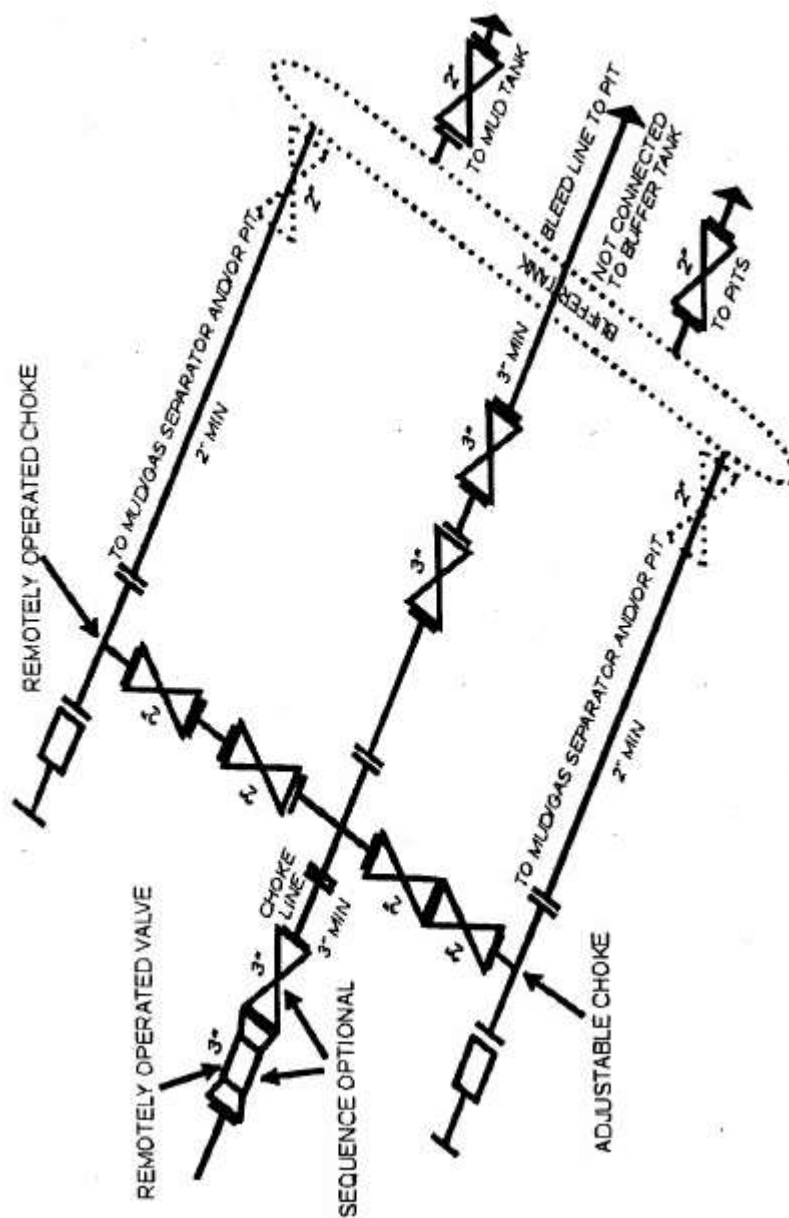
Proposed BOP stack 11" 3M RRA

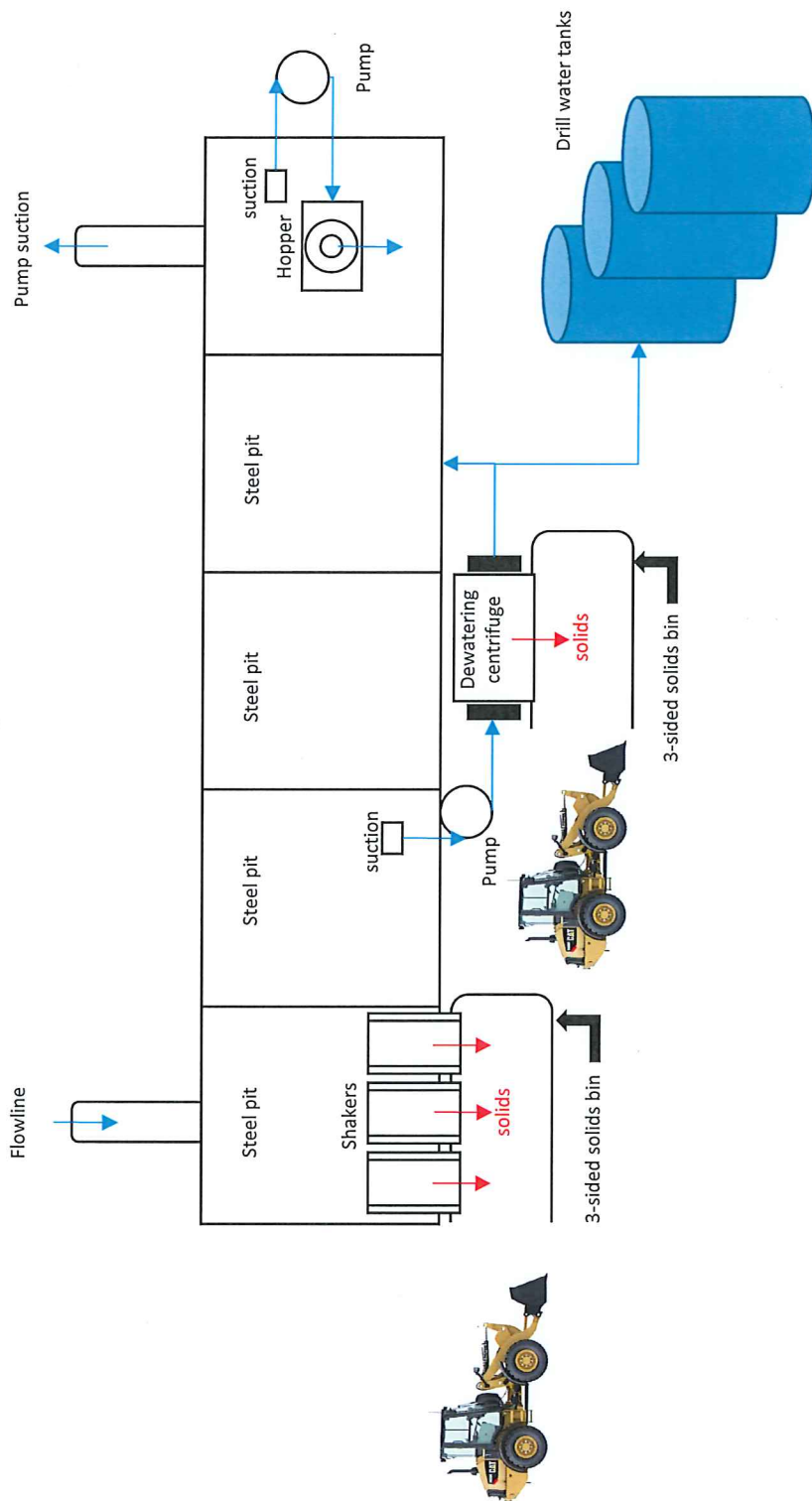




Choke Manifold

Actual system to conform with Onshore Order 2





Closed Loop Mud System



Company: DJR Operating
Project: Non-unit
Site: L01 2512
Well: Bisti L01 2512 100H
Wellbore: Original Drilling
Design: APD Rev 2

WELL DETAILS: Bisti L01 2512 100H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0	0	1975435.52	2653272.04	36.42869800	-108.07067100

Plan: APD Rev 2 (Bisti L01 2512 100H/Original Drilling)
Created By: Janie Collins Date: 12:39, May 19 2021

PROJECT DETAILS: Non-unit

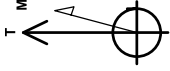
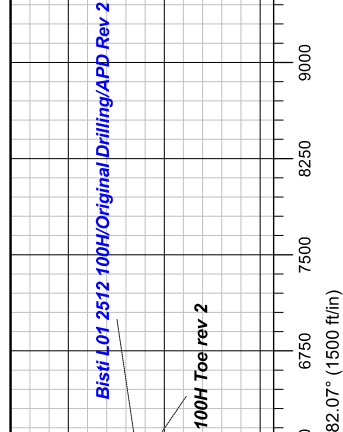
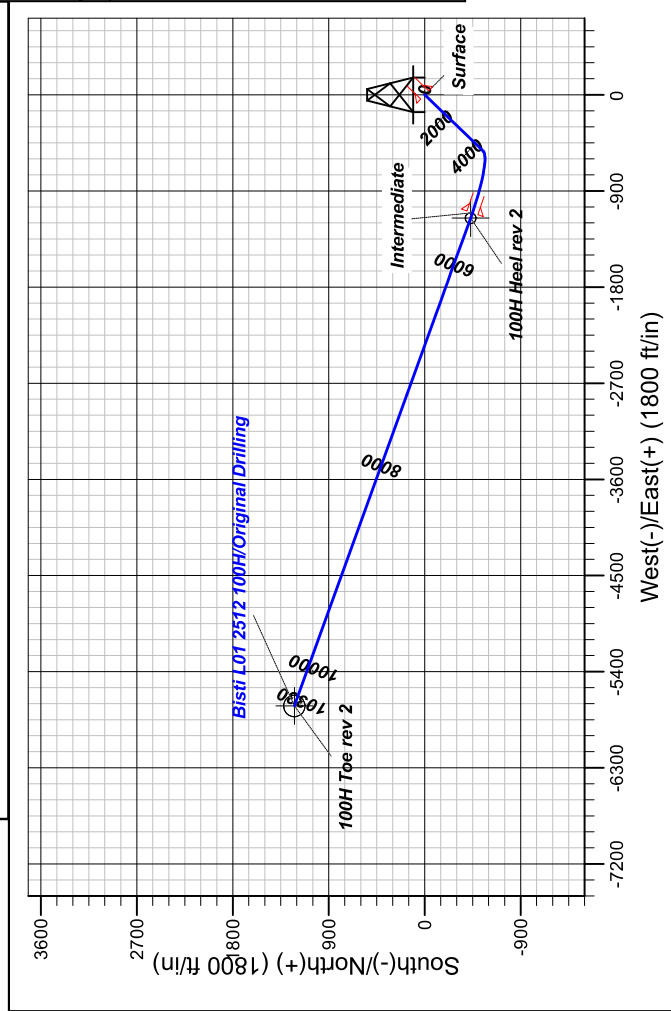
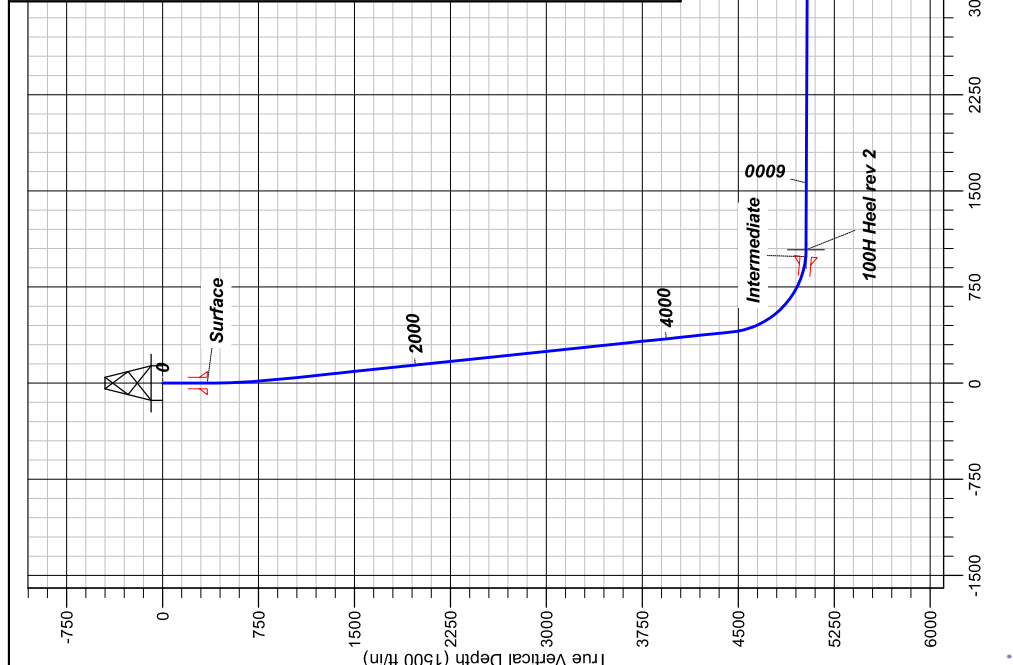
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Western Zone
System Datum: Mean Sea Level
Local North: True

DESIGN TARGET DETAILS

Time	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
100H Heel rev 2	5030	-430	-1155	1975007.98	2652116.22	36.42751570	-108.07459630
100H Toe rev 2	5051	1223	-5722	1976672.85	2647553.51	36.43205670	-108.09012100

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
0	0.00	0.00	0	0	0	0.00	0.00	0	
350	0.00	0.00	350	0	0	0.00	0.00	0	
911	11.23	223.80	908	-40	-38	2.00	223.80	29	
926	13.25	223.80	453	-54	-55	9.00	66.55	1039	100H Heel rev 2
5473	89.75	289.91	5031	-47	-1155	9.00	66.55	1039	100H Toe rev 2
10330	89.75	289.91	5051	1223	-5722	0.00	0.00	5851	



Azimuths to True North
Magnetic North: 8.28°
Magnetic Field
Strength: 49580.33
Dip Angle: 62.83°
Date: 1/9/2020
Model: HDGM_FLT

CASING DETAILS

TVD	MD	Na
350	350	Surface
5028	5419	Intermediate

FORMATION DETAILS

TVDPath	MDPath	Formation
205	205	Ojo Alamo
292	292	Kirtland
1021	1021	Fruitland
1235	1235	Pictured Cliffs
1355	1355	Lewis
2005	2030	Chacra
2736	2775	Menefee
3778	3838	Point Lookout
3955	4018	Mancos
4281	4350	Mancos Silt
4799	4910	Gallup A
4862	4998	Gallup B
4960	5172	Gallup C



DJR Operating

Non-unit

L01 2512

Bisti L01 2512 100H

Original Drilling

Plan: APD Rev 2

Standard Planning Report

19 May, 2021





Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well Bisti L01 2512 100H
Company:	DJR Operating	TVD Reference:	GL 6328' & RKB 14' @ 6342ft
Project:	Non-unit	MD Reference:	GL 6328' & RKB 14' @ 6342ft
Site:	L01 2512	North Reference:	True
Well:	Bisti L01 2512 100H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD Rev 2		

Project	Non-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	L01 2512				
Site Position:		Northing:	1,975,435.52 usft	Latitude:	36.42869800
From:	Lat/Long	Easting:	2,653,272.03 usft	Longitude:	-108.07067100
Position Uncertainty:	0 ft	Slot Radius:	13.20 in	Grid Convergence:	-0.14

Well	Bisti L01 2512 100H					
Well Position	+N/-S	0 ft	Northing:	1,975,435.52 usft	Latitude:	36.4286980
	+E/-W	0 ft	Easting:	2,653,272.03 usft	Longitude:	-108.0706710
Position Uncertainty		0 ft	Wellhead Elevation:		Ground Level:	6328

Wellbore	Original Drilling				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM FILE	1/9/2020	8.85	62.90	49,580.50000000

Design	APD Rev 2			
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	282.07

Plan Survey Tool Program			Date	5/19/2021	
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks	
1	0	10,330	APD Rev 2 (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	
350	0.00	0.00	350	0	0	0.00	0.00	0.00	0.00	
911	11.23	223.80	908	-40	-38	2.00	2.00	0.00	223.80	
4526	11.23	223.80	4453	-547	-525	0.00	0.00	0.00	0.00	
5473	89.75	289.91	5030	-430	-1155	9.00	8.29	6.98	66.55	100H Heel rev 2
10,330	89.75	289.91	5051	1223	-5722	0.00	0.00	0.00	0.00	100H Toe rev 2



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well Bisti L01 2512 100H
Company:	DJR Operating	TVD Reference:	GL 6328' & RKB 14' @ 6342ft
Project:	Non-unit	MD Reference:	GL 6328' & RKB 14' @ 6342ft
Site:	L01 2512	North Reference:	True
Well:	Bisti L01 2512 100H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD Rev 2		

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
350	0.00	0.00	350	0	0	0	0.00	0.00	0.00
400	1.00	223.80	400	0	0	0	2.00	2.00	0.00
500	3.00	223.80	500	-3	-3	2	2.00	2.00	0.00
600	5.00	223.80	600	-8	-8	6	2.00	2.00	0.00
700	7.00	223.80	699	-15	-15	11	2.00	2.00	0.00
800	9.00	223.80	798	-25	-24	19	2.00	2.00	0.00
900	11.00	223.80	897	-38	-36	28	2.00	2.00	0.00
911	11.23	223.80	908	-40	-38	29	2.00	2.00	0.00
1000	11.23	223.80	995	-52	-50	38	0.00	0.00	0.00
1100	11.23	223.80	1093	-66	-63	48	0.00	0.00	0.00
1200	11.23	223.80	1191	-80	-77	58	0.00	0.00	0.00
1300	11.23	223.80	1289	-94	-90	69	0.00	0.00	0.00
1400	11.23	223.80	1387	-108	-104	79	0.00	0.00	0.00
1500	11.23	223.80	1485	-122	-117	89	0.00	0.00	0.00
1600	11.23	223.80	1583	-136	-131	99	0.00	0.00	0.00
1700	11.23	223.80	1681	-150	-144	110	0.00	0.00	0.00
1800	11.23	223.80	1779	-164	-158	120	0.00	0.00	0.00
1900	11.23	223.80	1877	-178	-171	130	0.00	0.00	0.00
2000	11.23	223.80	1976	-193	-185	140	0.00	0.00	0.00
2100	11.23	223.80	2074	-207	-198	151	0.00	0.00	0.00
2200	11.23	223.80	2172	-221	-212	161	0.00	0.00	0.00
2300	11.23	223.80	2270	-235	-225	171	0.00	0.00	0.00
2400	11.23	223.80	2368	-249	-239	181	0.00	0.00	0.00
2500	11.23	223.80	2466	-263	-252	192	0.00	0.00	0.00
2600	11.23	223.80	2564	-277	-266	202	0.00	0.00	0.00
2700	11.23	223.80	2662	-291	-279	212	0.00	0.00	0.00
2800	11.23	223.80	2760	-305	-292	222	0.00	0.00	0.00
2900	11.23	223.80	2858	-319	-306	233	0.00	0.00	0.00
3000	11.23	223.80	2956	-333	-319	243	0.00	0.00	0.00
3100	11.23	223.80	3055	-347	-333	253	0.00	0.00	0.00
3200	11.23	223.80	3153	-361	-346	263	0.00	0.00	0.00
3300	11.23	223.80	3251	-375	-360	273	0.00	0.00	0.00
3400	11.23	223.80	3349	-389	-373	284	0.00	0.00	0.00
3500	11.23	223.80	3447	-403	-387	294	0.00	0.00	0.00
3600	11.23	223.80	3545	-417	-400	304	0.00	0.00	0.00
3700	11.23	223.80	3643	-431	-414	314	0.00	0.00	0.00
3800	11.23	223.80	3741	-446	-427	325	0.00	0.00	0.00
3900	11.23	223.80	3839	-460	-441	335	0.00	0.00	0.00
4000	11.23	223.80	3937	-474	-454	345	0.00	0.00	0.00
4100	11.23	223.80	4035	-488	-468	355	0.00	0.00	0.00
4200	11.23	223.80	4133	-502	-481	366	0.00	0.00	0.00
4300	11.23	223.80	4232	-516	-495	376	0.00	0.00	0.00
4400	11.23	223.80	4330	-530	-508	386	0.00	0.00	0.00
4500	11.23	223.80	4428	-544	-522	396	0.00	0.00	0.00
4526	11.23	223.80	4453	-547	-525	399	0.00	0.00	0.00
4600	15.17	247.90	4525	-556	-539	411	9.00	5.30	32.43
4700	22.57	264.06	4620	-563	-570	440	9.00	7.41	16.15
4800	30.81	272.23	4709	-564	-615	484	9.00	8.24	8.17
4900	39.36	277.16	4791	-559	-672	541	9.00	8.55	4.94
5000	48.05	280.56	4863	-549	-741	609	9.00	8.69	3.40



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well Bisti L01 2512 100H
Company:	DJR Operating	TVD Reference:	GL 6328' & RKB 14' @ 6342ft
Project:	Non-unit	MD Reference:	GL 6328' & RKB 14' @ 6342ft
Site:	L01 2512	North Reference:	True
Well:	Bisti L01 2512 100H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD Rev 2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5100	56.82	283.13	4924	-532	-818	689	9.00	8.77	2.57
5200	65.63	285.23	4972	-511	-903	776	9.00	8.81	2.10
5300	74.46	287.06	5006	-485	-993	870	9.00	8.84	1.82
5400	83.31	288.73	5026	-454	-1086	967	9.00	8.85	1.67
5473	89.75	289.91	5030	-430	-1155	1039	9.00	8.86	1.62
5500	89.75	289.91	5030	-421	-1180	1066	0.00	0.00	0.00
5600	89.75	289.91	5031	-387	-1274	1165	0.00	0.00	0.00
5700	89.75	289.91	5031	-353	-1368	1264	0.00	0.00	0.00
5800	89.75	289.91	5031	-319	-1462	1363	0.00	0.00	0.00
5900	89.75	289.91	5032	-285	-1557	1463	0.00	0.00	0.00
6000	89.75	289.91	5032	-251	-1651	1562	0.00	0.00	0.00
6100	89.75	289.91	5033	-217	-1745	1661	0.00	0.00	0.00
6200	89.75	289.91	5033	-183	-1839	1760	0.00	0.00	0.00
6300	89.75	289.91	5034	-149	-1933	1859	0.00	0.00	0.00
6400	89.75	289.91	5034	-115	-2027	1958	0.00	0.00	0.00
6500	89.75	289.91	5034	-81	-2121	2057	0.00	0.00	0.00
6600	89.75	289.91	5035	-47	-2215	2156	0.00	0.00	0.00
6700	89.75	289.91	5035	-13	-2309	2255	0.00	0.00	0.00
6800	89.75	289.91	5036	22	-2403	2354	0.00	0.00	0.00
6900	89.75	289.91	5036	56	-2497	2453	0.00	0.00	0.00
7000	89.75	289.91	5037	90	-2591	2552	0.00	0.00	0.00
7100	89.75	289.91	5037	124	-2685	2651	0.00	0.00	0.00
7200	89.75	289.91	5037	158	-2779	2750	0.00	0.00	0.00
7300	89.75	289.91	5038	192	-2873	2849	0.00	0.00	0.00
7400	89.75	289.91	5038	226	-2967	2949	0.00	0.00	0.00
7500	89.75	289.91	5039	260	-3061	3048	0.00	0.00	0.00
7600	89.75	289.91	5039	294	-3155	3147	0.00	0.00	0.00
7700	89.75	289.91	5040	328	-3249	3246	0.00	0.00	0.00
7800	89.75	289.91	5040	362	-3343	3345	0.00	0.00	0.00
7900	89.75	289.91	5040	396	-3437	3444	0.00	0.00	0.00
8000	89.75	289.91	5041	430	-3531	3543	0.00	0.00	0.00
8100	89.75	289.91	5041	464	-3625	3642	0.00	0.00	0.00
8200	89.75	289.91	5042	498	-3719	3741	0.00	0.00	0.00
8300	89.75	289.91	5042	532	-3813	3840	0.00	0.00	0.00
8400	89.75	289.91	5043	566	-3907	3939	0.00	0.00	0.00
8500	89.75	289.91	5043	600	-4001	4038	0.00	0.00	0.00
8600	89.75	289.91	5044	634	-4095	4137	0.00	0.00	0.00
8700	89.75	289.91	5044	668	-4189	4236	0.00	0.00	0.00
8800	89.75	289.91	5044	702	-4283	4335	0.00	0.00	0.00
8900	89.75	289.91	5045	736	-4377	4435	0.00	0.00	0.00
9000	89.75	289.91	5045	771	-4471	4534	0.00	0.00	0.00
9100	89.75	289.91	5046	805	-4565	4633	0.00	0.00	0.00
9200	89.75	289.91	5046	839	-4659	4732	0.00	0.00	0.00
9300	89.75	289.91	5047	873	-4753	4831	0.00	0.00	0.00
9400	89.75	289.91	5047	907	-4847	4930	0.00	0.00	0.00
9500	89.75	289.91	5047	941	-4941	5029	0.00	0.00	0.00
9600	89.75	289.91	5048	975	-5035	5128	0.00	0.00	0.00
9700	89.75	289.91	5048	1009	-5129	5227	0.00	0.00	0.00
9800	89.75	289.91	5049	1043	-5223	5326	0.00	0.00	0.00
9900	89.75	289.91	5049	1077	-5318	5425	0.00	0.00	0.00
10,000	89.75	289.91	5050	1111	-5412	5524	0.00	0.00	0.00
10,100	89.75	289.91	5050	1145	-5506	5623	0.00	0.00	0.00
10,200	89.75	289.91	5050	1179	-5600	5722	0.00	0.00	0.00
10,300	89.75	289.91	5051	1213	-5694	5821	0.00	0.00	0.00



Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well Bisti L01 2512 100H
Company:	DJR Operating	TVD Reference:	GL 6328' & RKB 14' @ 6342ft
Project:	Non-unit	MD Reference:	GL 6328' & RKB 14' @ 6342ft
Site:	L01 2512	North Reference:	True
Well:	Bisti L01 2512 100H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD Rev 2		

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)
10,330	89.75	289.91	5051	1223	-5722	5851	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
100H Heel rev 2 - plan hits target center - Circle (radius 50)	0.00	0.00	5030	-430	-1155	1,975,007.99	2,652,116.22	36.42751570	-108.07459630
100H Toe rev 2 - plan hits target center - Circle (radius 100)	0.00	0.00	5051	1223	-5722	1,976,672.86	2,647,553.51	36.43205670	-108.09012100

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
350	350	Surface	9.62	12.25	
5419	5028	Intermediate	7.00	8.75	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
205	205	Ojo Alamo		0.00	0.00
292	292	Kirtland		0.00	0.00
1027	1021	Fruitland		0.00	0.00
1245	1235	Pictured Cliffs		0.00	0.00
1367	1355	Lewis		0.00	0.00
2030	2005	Chacra		0.00	0.00
2775	2736	Menefee		0.00	0.00
3838	3778	Point Lookout		0.00	0.00
4018	3955	Mancos		0.00	0.00
4350	4281	Mancos Silt		0.00	0.00
4910	4799	Gallup A		0.00	0.00
4998	4862	Gallup B		0.00	0.00
5172	4960	Gallup C		0.00	0.00



DJR Operating

Non-unit

L01 2512

Bisti L01 2512 100H

Original Drilling

APD Rev 2

Anticollision Report

19 May, 2021





Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Bisti L01 2512 100H
Project:	Non-unit	TVD Reference:	GL 6328' & RKB 14' @ 6342ft
Reference Site:	L01 2512	MD Reference:	GL 6328' & RKB 14' @ 6342ft
Site Error:	0 ft	North Reference:	True
Reference Well:	Bisti L01 2512 100H	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 Rev 2	Offset TVD Reference:	Offset Datum

Reference	APD Rev 2		
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	5/19/2021		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0	10,330	APD Rev 2 (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						
L01 2512						
Pre-Ongard #002 - OH - OH	1508	1323	1087	1051	30.085	CC, ES, SF
Pre-Ongard #004 - OH - OH	1616	1400	1351	1312	34.265	CC, ES, SF

Offset Design:	L01 2512 - Pre-Ongard #002 - OH - OH												Offset Site Error:	0 ft
Survey Program:	611-INCLINOMETER												Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre	Distance	Rule Assigned:								
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0	0	0	0	0	0	-101.93	-250	-1185	1211					
100	100	95	95	0	1	-101.93	-250	-1185	1211	1210	1.60	758.649		
200	200	195	195	1	3	-101.93	-250	-1185	1211	1208	3.47	348.744		
300	300	295	295	1	4	-101.93	-250	-1185	1211	1206	5.35	226.411		
350	350	345	345	1	5	-101.93	-250	-1185	1211	1205	6.29	192.626		
400	400	395	395	1	6	34.28	-250	-1185	1211	1204	7.22	167.735		
500	500	495	495	2	8	34.41	-250	-1185	1208	1199	9.08	133.109		
600	600	595	595	2	9	34.66	-250	-1185	1202	1191	10.94	109.881		
700	699	694	694	2	12	35.04	-250	-1185	1194	1180	14.08	84.801		
800	798	793	793	3	15	35.56	-250	-1185	1182	1165	17.46	67.722		
900	897	892	892	3	18	36.22	-250	-1185	1168	1147	20.84	56.058		
911	908	903	903	3	18	36.31	-250	-1185	1167	1145	21.23	54.948		
1000	995	990	990	4	21	36.81	-250	-1185	1153	1128	24.22	47.584		
1100	1093	1088	1088	4	24	37.40	-250	-1185	1137	1109	27.61	41.180		
1200	1191	1186	1186	5	27	38.00	-250	-1185	1121	1090	31.00	36.170		
1300	1289	1284	1284	5	30	38.61	-250	-1185	1106	1072	34.41	32.146		
1400	1387	1323	1323	6	31	38.86	-250	-1185	1092	1056	35.98	30.358		
1500	1485	1323	1323	6	31	38.86	-250	-1185	1087	1051	36.13	30.086		
1508	1493	1323	1323	6	31	38.86	-250	-1185	1087	1051	36.13	30.085	CC, ES, SF	
1600	1583	1323	1323	7	31	38.86	-250	-1185	1091	1055	36.00	30.305		
1700	1681	1323	1323	7	31	38.86	-250	-1185	1104	1068	35.59	31.017		
1800	1779	1323	1323	8	31	38.86	-250	-1185	1126	1091	34.94	32.219		
1900	1877	1323	1323	8	31	38.86	-250	-1185	1156	1122	34.08	33.909		
2000	1976	1323	1323	9	31	38.86	-250	-1185	1193	1160	33.07	36.081		
2100	2074	1323	1323	9	31	38.86	-250	-1185	1238	1206	31.96	38.729		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Bisti L01 2512 100H
Project:	Non-unit	TVD Reference:	GL 6328' & RKB 14' @ 6342ft
Reference Site:	L01 2512	MD Reference:	GL 6328' & RKB 14' @ 6342ft
Site Error:	0 ft	North Reference:	True
Reference Well:	Bisti L01 2512 100H	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 Rev 2	Offset TVD Reference:	Offset Datum

Offset Design: L01 2512 - Pre-Ongard #002 - OH - OH												Offset Site Error:	0 ft
Survey Program: 611-INCLINOMETER												Offset Well Error:	0 ft
Reference	Offset	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	
2200	2172	1323	1323	10	31	38.86	-250	-1185	1289	1258	30.80	41.843	
2300	2270	1323	1323	10	31	38.86	-250	-1185	1345	1315	29.62	45.414	
2400	2368	1323	1323	11	31	38.86	-250	-1185	1406	1378	28.45	49.429	
2500	2466	1323	1323	11	31	38.86	-250	-1185	1472	1444	27.32	53.874	
2600	2564	1323	1323	12	31	38.86	-250	-1185	1541	1515	26.24	58.733	
2700	2662	1323	1323	12	31	38.86	-250	-1185	1613	1588	25.21	63.988	
2800	2760	1323	1323	13	31	38.86	-250	-1185	1689	1664	24.26	69.618	
2900	2858	1323	1323	13	31	38.86	-250	-1185	1766	1743	23.36	75.604	
3000	2956	1323	1323	14	31	38.86	-250	-1185	1846	1824	22.54	81.921	
3100	3055	1323	1323	14	31	38.86	-250	-1185	1928	1906	21.77	88.545	
3200	3153	1323	1323	15	31	38.86	-250	-1185	2011	1990	21.07	95.450	
3300	3251	1323	1323	15	31	38.86	-250	-1185	2096	2076	20.43	102.608	
3400	3349	1323	1323	16	31	38.86	-250	-1185	2182	2162	19.84	109.991	
3500	3447	1323	1323	16	31	38.86	-250	-1185	2270	2250	19.30	117.569	
3600	3545	1323	1323	17	31	38.86	-250	-1185	2358	2339	18.82	125.313	
3700	3643	1323	1323	17	31	38.86	-250	-1185	2447	2429	18.37	133.191	
3800	3741	1323	1323	18	31	38.86	-250	-1185	2537	2519	17.97	141.174	
3900	3839	1323	1323	18	31	38.86	-250	-1185	2628	2610	17.61	149.231	
4000	3937	1323	1323	19	31	38.86	-250	-1185	2719	2702	17.28	157.333	
4100	4035	1323	1323	19	31	38.86	-250	-1185	2811	2794	16.99	165.448	
4200	4133	1323	1323	20	31	38.86	-250	-1185	2903	2887	16.73	173.550	
4300	4232	1323	1323	20	31	38.86	-250	-1185	2996	2980	16.50	181.610	
4400	4330	1323	1323	21	31	38.86	-250	-1185	3090	3073	16.30	189.602	
4500	4428	1323	1323	22	31	38.86	-250	-1185	3184	3167	16.12	197.503	
4526	4453	1323	1323	22	31	38.86	-250	-1185	3208	3192	16.08	199.516	
4550	4477	1323	1323	22	31	32.15	-250	-1185	3230	3214	16.03	201.502	
4600	4525	1323	1323	22	31	22.00	-250	-1185	3276	3260	15.91	205.917	
4650	4573	1323	1323	22	31	15.71	-250	-1185	3321	3305	15.76	210.763	
4700	4620	1323	1323	23	31	11.77	-250	-1185	3363	3348	15.57	215.986	
4750	4665	1323	1323	23	31	9.20	-250	-1185	3404	3389	15.36	221.571	
4800	4709	1323	1323	23	31	7.44	-250	-1185	3443	3428	15.14	227.500	
4850	4751	1323	1323	24	31	6.20	-250	-1185	3480	3465	14.89	233.747	
4900	4791	1323	1323	24	31	5.29	-250	-1185	3514	3500	14.63	240.279	
4950	4828	1323	1323	24	31	4.61	-250	-1185	3546	3532	14.35	247.053	
5000	4863	1323	1323	25	31	4.09	-250	-1185	3576	3562	14.08	254.005	
5050	4895	1323	1323	25	31	3.69	-250	-1185	3602	3588	13.80	261.054	
5100	4924	1323	1323	26	31	3.37	-250	-1185	3626	3612	13.52	268.093	
5150	4950	1323	1323	26	31	3.12	-250	-1185	3647	3633	13.26	274.985	
5200	4972	1323	1323	27	31	2.93	-250	-1185	3664	3651	13.01	281.559	
5250	4991	1323	1323	28	31	2.77	-250	-1185	3679	3666	12.79	287.608	
5300	5006	1323	1323	28	31	2.65	-250	-1185	3691	3678	12.60	292.891	
5350	5018	1323	1323	29	31	2.57	-250	-1185	3699	3687	12.45	297.141	
5400	5026	1323	1323	30	31	2.50	-250	-1185	3705	3692	12.35	300.078	
5450	5029	1323	1323	31	31	2.47	-250	-1185	3707	3694	12.30	301.444	
5473	5030	1323	1323	31	31	2.46	-250	-1185	3707	3694	12.29	301.488	
5500	5030	1323	1323	31	31	2.46	-250	-1185	3706	3694	12.31	301.072	
5547	5030	1323	1323	32	31	2.46	-250	-1185	3706	3693	12.39	299.048	
5600	5031	1323	1323	33	31	2.46	-250	-1185	3706	3694	12.55	295.222	
5700	5031	1323	1323	35	31	2.46	-250	-1185	3709	3696	13.09	283.436	
5800	5031	1323	1323	37	31	2.46	-250	-1185	3714	3701	13.86	267.981	
5900	5032	1323	1323	39	31	2.46	-250	-1185	3723	3708	14.82	251.216	
6000	5032	1323	1323	41	31	2.46	-250	-1185	3733	3718	15.90	234.746	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Bisti L01 2512 100H
Project:	Non-unit	TVD Reference:	GL 6328' & RKB 14' @ 6342ft
Reference Site:	L01 2512	MD Reference:	GL 6328' & RKB 14' @ 6342ft
Site Error:	0 ft	North Reference:	True
Reference Well:	Bisti L01 2512 100H	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 Rev 2	Offset TVD Reference:	Offset Datum

Offset Design: L01 2512 - Pre-Ongard #002 - OH - OH												Offset Site Error:	0 ft
Survey Program: 611-INCLINOMETER												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	
6100	5033	1323	1323	43	31	2.46	-250	-1185	3747	3730	17.08	219.405	
6200	5033	1323	1323	46	31	2.46	-250	-1185	3763	3745	18.31	205.518	
6300	5034	1323	1323	48	31	2.46	-250	-1185	3782	3762	19.58	193.142	
6400	5034	1323	1323	50	31	2.46	-250	-1185	3803	3782	20.87	182.201	
6500	5034	1323	1323	53	31	2.46	-250	-1185	3826	3804	22.17	172.568	
6600	5035	1323	1323	55	31	2.46	-250	-1185	3853	3829	23.48	164.101	
6700	5035	1323	1323	57	31	2.46	-250	-1185	3881	3856	24.77	156.662	
6800	5036	1323	1323	60	31	2.46	-250	-1185	3912	3886	26.06	150.124	
6900	5036	1323	1323	62	31	2.46	-250	-1185	3945	3918	27.33	144.375	
7000	5037	1323	1323	65	31	2.46	-250	-1185	3981	3952	28.57	139.317	
7100	5037	1323	1323	67	31	2.46	-250	-1185	4018	3988	29.79	134.864	
7200	5037	1323	1323	70	31	2.46	-250	-1185	4058	4027	30.99	130.943	
7300	5038	1323	1323	73	31	2.46	-250	-1185	4100	4067	32.16	127.491	
7400	5038	1323	1323	75	31	2.46	-250	-1185	4143	4110	33.29	124.454	
7500	5039	1323	1323	78	31	2.46	-250	-1185	4189	4155	34.40	121.783	
7600	5039	1323	1323	80	31	2.46	-250	-1185	4237	4201	35.47	119.440	
7700	5040	1323	1323	83	31	2.46	-250	-1185	4286	4249	36.51	117.388	
7800	5040	1323	1323	85	31	2.46	-250	-1185	4337	4300	37.52	115.597	
7900	5040	1323	1323	88	31	2.46	-250	-1185	4390	4351	38.49	114.040	
8000	5041	1323	1323	91	31	2.46	-250	-1185	4444	4405	39.44	112.694	
8100	5041	1323	1323	93	31	2.46	-250	-1185	4500	4460	40.35	111.539	
8200	5042	1323	1323	96	31	2.46	-250	-1185	4558	4517	41.23	110.557	
8300	5042	1323	1323	99	31	2.46	-250	-1185	4617	4575	42.07	109.731	
8400	5043	1323	1323	101	31	2.46	-250	-1185	4677	4634	42.89	109.047	
8500	5043	1323	1323	104	31	2.46	-250	-1185	4739	4695	43.68	108.494	
8600	5044	1323	1323	106	31	2.46	-250	-1185	4802	4757	44.44	108.059	
8700	5044	1323	1323	109	31	2.46	-250	-1185	4866	4821	45.17	107.734	
8800	5044	1323	1323	112	31	2.46	-250	-1185	4931	4885	45.87	107.508	
8900	5045	1323	1323	114	31	2.46	-250	-1185	4998	4951	46.55	107.374	
9000	5045	1323	1323	117	31	2.46	-250	-1185	5065	5018	47.20	107.326	
9100	5046	1323	1323	120	31	2.46	-250	-1185	5134	5086	47.82	107.355	
9200	5046	1323	1323	122	31	2.46	-250	-1185	5204	5155	48.43	107.457	
9300	5047	1323	1323	125	31	2.46	-250	-1185	5275	5226	49.01	107.625	
9400	5047	1323	1323	128	31	2.46	-250	-1185	5346	5297	49.57	107.856	
9500	5047	1323	1323	130	31	2.46	-250	-1185	5419	5369	50.11	108.145	
9600	5048	1323	1323	133	31	2.46	-250	-1185	5492	5441	50.62	108.487	
9700	5048	1323	1323	136	31	2.46	-250	-1185	5566	5515	51.12	108.880	
9800	5049	1323	1323	138	31	2.46	-250	-1185	5641	5590	51.60	109.319	
9900	5049	1323	1323	141	31	2.46	-250	-1185	5717	5665	52.07	109.802	
10,000	5050	1323	1323	144	31	2.46	-250	-1185	5794	5741	52.51	110.325	
10,100	5050	1323	1323	146	31	2.46	-250	-1185	5871	5818	52.94	110.887	
10,200	5050	1323	1323	149	31	2.46	-250	-1185	5949	5895	53.36	111.484	
10,300	5051	1323	1323	152	31	2.46	-250	-1185	6027	5973	53.76	112.115	
10,330	5051	1323	1323	152	31	2.46	-250	-1185	6051	5997	53.88	112.309	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Bisti L01 2512 100H
Project:	Non-unit	TVD Reference:	GL 6328' & RKB 14' @ 6342ft
Reference Site:	L01 2512	MD Reference:	GL 6328' & RKB 14' @ 6342ft
Site Error:	0 ft	North Reference:	True
Reference Well:	Bisti L01 2512 100H	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 Rev 2	Offset TVD Reference:	Offset Datum

Offset Design: L01 2512 - Pre-Ongard #004 - OH - OH													Offset Site Error:	0 ft	
Survey Program: 580-INCLINOMETER				Offset		Semi Major Axis		Offset Wellbore Centre			Rule Assigned:			Offset Well Error:	0 ft
Measured Depth (ft)	Reference Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning		
0	0	0	0	0	0	-99.70	-250	-1465	1486						
100	100	100	100	0	2	-99.70	-250	-1465	1486	1484	1.67	888.354			
200	200	200	200	1	3	-99.70	-250	-1465	1486	1482	3.55	418.634			
300	300	300	300	1	5	-99.70	-250	-1465	1486	1481	5.43	273.840			
350	350	350	350	1	5	-99.70	-250	-1465	1486	1480	6.36	233.465			
400	400	400	400	1	6	36.51	-250	-1465	1486	1478	7.30	203.623			
500	500	500	500	2	8	36.62	-250	-1465	1483	1474	9.15	162.014			
600	600	600	600	2	9	36.85	-250	-1465	1477	1466	11.32	130.519			
700	699	699	699	2	12	37.20	-250	-1465	1469	1454	14.70	99.913			
800	798	798	798	3	15	37.66	-250	-1465	1458	1440	18.09	80.607			
900	897	897	897	3	18	38.25	-250	-1465	1444	1423	21.47	67.264			
911	908	908	908	3	19	38.33	-250	-1465	1442	1420	21.86	65.988			
1000	995	995	995	4	21	38.75	-250	-1465	1429	1404	24.85	57.488			
1100	1093	1093	1093	4	24	39.24	-250	-1465	1413	1385	28.24	50.047			
1200	1191	1191	1191	5	27	39.74	-250	-1465	1398	1367	31.64	44.193			
1300	1289	1289	1289	5	30	40.26	-250	-1465	1383	1348	35.05	39.470			
1400	1387	1387	1387	6	33	40.78	-250	-1465	1368	1330	38.46	35.581			
1500	1485	1400	1400	6	34	40.85	-250	-1465	1356	1317	39.23	34.570			
1600	1583	1400	1400	7	34	40.85	-250	-1465	1351	1312	39.42	34.278			
1616	1599	1400	1400	7	34	40.85	-250	-1465	1351	1312	39.43	34.265	CC, ES, SF		
1700	1681	1400	1400	7	34	40.85	-250	-1465	1354	1314	39.41	34.349			
1800	1779	1400	1400	8	34	40.85	-250	-1465	1364	1324	39.21	34.783			
1900	1877	1400	1400	8	34	40.85	-250	-1465	1381	1342	38.81	35.576			
2000	1976	1400	1400	9	34	40.85	-250	-1465	1405	1366	38.25	36.725			
2100	2074	1400	1400	9	34	40.85	-250	-1465	1435	1398	37.55	38.227			
2200	2172	1400	1400	10	34	40.85	-250	-1465	1472	1435	36.73	40.076			
2300	2270	1400	1400	10	34	40.85	-250	-1465	1514	1479	35.83	42.267			
2400	2368	1400	1400	11	34	40.85	-250	-1465	1562	1527	34.87	44.794			
2500	2466	1400	1400	11	34	40.85	-250	-1465	1615	1581	33.89	47.648			
2600	2564	1400	1400	12	34	40.85	-250	-1465	1672	1639	32.89	50.823			
2700	2662	1400	1400	12	34	40.85	-250	-1465	1732	1700	31.90	54.308			
2800	2760	1400	1400	13	34	40.85	-250	-1465	1797	1766	30.92	58.095			
2900	2858	1400	1400	13	34	40.85	-250	-1465	1864	1834	29.98	62.172			
3000	2956	1400	1400	14	34	40.85	-250	-1465	1934	1905	29.07	66.529			
3100	3055	1400	1400	14	34	40.85	-250	-1465	2007	1979	28.21	71.152			
3200	3153	1400	1400	15	34	40.85	-250	-1465	2082	2055	27.38	76.029			
3300	3251	1400	1400	15	34	40.85	-250	-1465	2159	2132	26.61	81.146			
3400	3349	1400	1400	16	34	40.85	-250	-1465	2238	2212	25.88	86.488			
3500	3447	1400	1400	16	34	40.85	-250	-1465	2318	2293	25.19	92.041			
3600	3545	1400	1400	17	34	40.85	-250	-1465	2400	2376	24.55	97.787			
3700	3643	1400	1400	17	34	40.85	-250	-1465	2484	2460	23.95	103.712			
3800	3741	1400	1400	18	34	40.85	-250	-1465	2568	2545	23.39	109.796			
3900	3839	1400	1400	18	34	40.85	-250	-1465	2654	2631	22.87	116.024			
4000	3937	1400	1400	19	34	40.85	-250	-1465	2740	2718	22.39	122.378			
4100	4035	1400	1400	19	34	40.85	-250	-1465	2828	2806	21.95	128.838			
4200	4133	1400	1400	20	34	40.85	-250	-1465	2916	2894	21.54	135.387			
4300	4232	1400	1400	20	34	40.85	-250	-1465	3005	2984	21.16	142.008			
4400	4330	1400	1400	21	34	40.85	-250	-1465	3095	3074	20.81	148.680			
4500	4428	1400	1400	22	34	40.85	-250	-1465	3185	3164	20.50	155.388			
4526	4453	1400	1400	22	34	40.85	-250	-1465	3208	3188	20.42	157.115			
4550	4477	1400	1400	22	34	33.45	-250	-1465	3230	3210	20.34	158.806			
4600	4525	1400	1400	22	34	22.38	-250	-1465	3274	3254	20.15	162.506			



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Bisti L01 2512 100H
Project:	Non-unit	TVD Reference:	GL 6328' & RKB 14' @ 6342ft
Reference Site:	L01 2512	MD Reference:	GL 6328' & RKB 14' @ 6342ft
Site Error:	0 ft	North Reference:	True
Reference Well:	Bisti L01 2512 100H	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 Rev 2	Offset TVD Reference:	Offset Datum

Offset Design: L01 2512 - Pre-Ongard #004 - OH - OH											Offset Site Error:	0 ft
Survey Program: 580-INCLINOMETER											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
4650	4573	1400	1400	22	34	15.54	-250	-1465	3316	3296	19.92	166.497
4700	4620	1400	1400	23	34	11.26	-250	-1465	3356	3337	19.66	170.747
4750	4665	1400	1400	23	34	8.47	-250	-1465	3395	3375	19.37	175.252
4800	4709	1400	1400	23	34	6.58	-250	-1465	3431	3412	19.06	180.007
4850	4751	1400	1400	24	34	5.24	-250	-1465	3465	3446	18.73	185.006
4900	4791	1400	1400	24	34	4.26	-250	-1465	3496	3478	18.38	190.238
4950	4828	1400	1400	24	34	3.53	-250	-1465	3525	3507	18.01	195.691
5000	4863	1400	1400	25	34	2.97	-250	-1465	3551	3533	17.63	201.346
5050	4895	1400	1400	25	34	2.54	-250	-1465	3574	3557	17.25	207.177
5100	4924	1400	1400	26	34	2.19	-250	-1465	3594	3577	16.86	213.148
5150	4950	1400	1400	26	34	1.92	-250	-1465	3611	3595	16.47	219.217
5200	4972	1400	1400	27	34	1.69	-250	-1465	3626	3609	16.09	225.328
5250	4991	1400	1400	28	34	1.51	-250	-1465	3637	3621	15.71	231.413
5300	5006	1400	1400	28	34	1.35	-250	-1465	3645	3629	15.35	237.392
5350	5018	1400	1400	29	34	1.23	-250	-1465	3649	3634	15.01	243.168
5400	5026	1400	1400	30	34	1.12	-250	-1465	3651	3636	14.68	248.630
5450	5029	1400	1400	31	34	1.04	-250	-1465	3649	3635	14.39	253.651
5473	5030	1400	1400	31	34	1.00	-250	-1465	3648	3633	14.26	255.731
5500	5030	1400	1400	31	34	1.00	-250	-1465	3645	3631	14.12	258.115
5600	5031	1400	1400	33	34	1.00	-250	-1465	3638	3624	13.72	265.215
5700	5031	1400	1400	35	34	1.00	-250	-1465	3634	3620	13.54	268.349
5800	5031	1400	1400	37	34	1.00	-250	-1465	3632	3618	13.67	265.777
5810	5031	1400	1400	37	34	1.00	-250	-1465	3632	3618	13.70	265.159
5900	5032	1400	1400	39	34	1.00	-250	-1465	3633	3619	14.14	256.962
6000	5032	1400	1400	41	34	1.00	-250	-1465	3637	3622	14.93	243.562
6100	5033	1400	1400	43	34	1.00	-250	-1465	3644	3628	15.96	228.229
6200	5033	1400	1400	46	34	1.00	-250	-1465	3653	3636	17.15	212.947
6300	5034	1400	1400	48	34	1.00	-250	-1465	3665	3647	18.44	198.717
6400	5034	1400	1400	50	34	1.00	-250	-1465	3680	3660	19.79	185.898
6500	5034	1400	1400	53	34	1.00	-250	-1465	3697	3676	21.18	174.539
6600	5035	1400	1400	55	34	1.00	-250	-1465	3717	3694	22.59	164.549
6700	5035	1400	1400	57	34	1.00	-250	-1465	3740	3716	24.00	155.794
6800	5036	1400	1400	60	34	1.00	-250	-1465	3765	3739	25.41	148.129
6900	5036	1400	1400	62	34	1.00	-250	-1465	3792	3765	26.82	141.417
7000	5037	1400	1400	65	34	1.00	-250	-1465	3822	3794	28.20	135.535
7100	5037	1400	1400	67	34	1.00	-250	-1465	3854	3825	29.56	130.378
7200	5037	1400	1400	70	34	1.00	-250	-1465	3889	3858	30.90	125.852
7300	5038	1400	1400	73	34	1.00	-250	-1465	3926	3894	32.21	121.879
7400	5038	1400	1400	75	34	1.00	-250	-1465	3965	3931	33.49	118.390
7500	5039	1400	1400	78	34	1.00	-250	-1465	4006	3971	34.74	115.327
7600	5039	1400	1400	80	34	1.00	-250	-1465	4049	4013	35.95	112.640
7700	5040	1400	1400	83	34	1.00	-250	-1465	4095	4057	37.13	110.287
7800	5040	1400	1400	85	34	1.00	-250	-1465	4142	4103	38.27	108.230
7900	5040	1400	1400	88	34	1.00	-250	-1465	4191	4151	39.37	106.437
8000	5041	1400	1400	91	34	1.00	-250	-1465	4241	4201	40.44	104.881
8100	5041	1400	1400	93	34	1.00	-250	-1465	4294	4252	41.47	103.538
8200	5042	1400	1400	96	34	1.00	-250	-1465	4348	4306	42.47	102.386
8300	5042	1400	1400	99	34	1.00	-250	-1465	4404	4360	43.43	101.406
8400	5043	1400	1400	101	34	1.00	-250	-1465	4461	4417	44.35	100.583
8500	5043	1400	1400	104	34	1.00	-250	-1465	4520	4475	45.24	99.902
8600	5044	1400	1400	106	34	1.00	-250	-1465	4580	4534	46.10	99.351
8700	5044	1400	1400	109	34	1.00	-250	-1465	4642	4595	46.93	98.917



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Bisti L01 2512 100H
Project:	Non-unit	TVD Reference:	GL 6328' & RKB 14' @ 6342ft
Reference Site:	L01 2512	MD Reference:	GL 6328' & RKB 14' @ 6342ft
Site Error:	0 ft	North Reference:	True
Reference Well:	Bisti L01 2512 100H	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 Rev 2	Offset TVD Reference:	Offset Datum

Offset Design: L01 2512 - Pre-Ongard #004 - OH - OH												Offset Site Error:	0 ft
Survey Program: 580-INCLINOMETER												Offset Well Error:	0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		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)			
8800	5044	1400	1400	112	34	1.00	-250	-1465	4705	4657	47.72	98.591	
8900	5045	1400	1400	114	34	1.00	-250	-1465	4769	4720	48.48	98.364	
9000	5045	1400	1400	117	34	1.00	-250	-1465	4834	4785	49.21	98.227	
9100	5046	1400	1400	120	34	1.00	-250	-1465	4901	4851	49.92	98.174	
9200	5046	1400	1400	122	34	1.00	-250	-1465	4968	4918	50.60	98.198	
9300	5047	1400	1400	125	34	1.00	-250	-1465	5037	4986	51.25	98.294	
9400	5047	1400	1400	128	34	1.00	-250	-1465	5107	5055	51.87	98.455	
9500	5047	1400	1400	130	34	1.00	-250	-1465	5178	5125	52.47	98.676	
9600	5048	1400	1400	133	34	1.00	-250	-1465	5250	5197	53.05	98.955	
9700	5048	1400	1400	136	34	1.00	-250	-1465	5322	5269	53.61	99.286	
9800	5049	1400	1400	138	34	1.00	-250	-1465	5396	5342	54.14	99.666	
9900	5049	1400	1400	141	34	1.00	-250	-1465	5470	5415	54.65	100.091	
10,000	5050	1400	1400	144	34	1.00	-250	-1465	5545	5490	55.14	100.559	
10,100	5050	1400	1400	146	34	1.00	-250	-1465	5621	5566	55.62	101.066	
10,200	5050	1400	1400	149	34	1.00	-250	-1465	5698	5642	56.08	101.611	
10,300	5051	1400	1400	152	34	1.00	-250	-1465	5775	5719	56.52	102.190	
10,330	5051	1400	1400	152	34	1.00	-250	-1465	5798	5742	56.64	102.368	



Lonestar Consulting, LLC

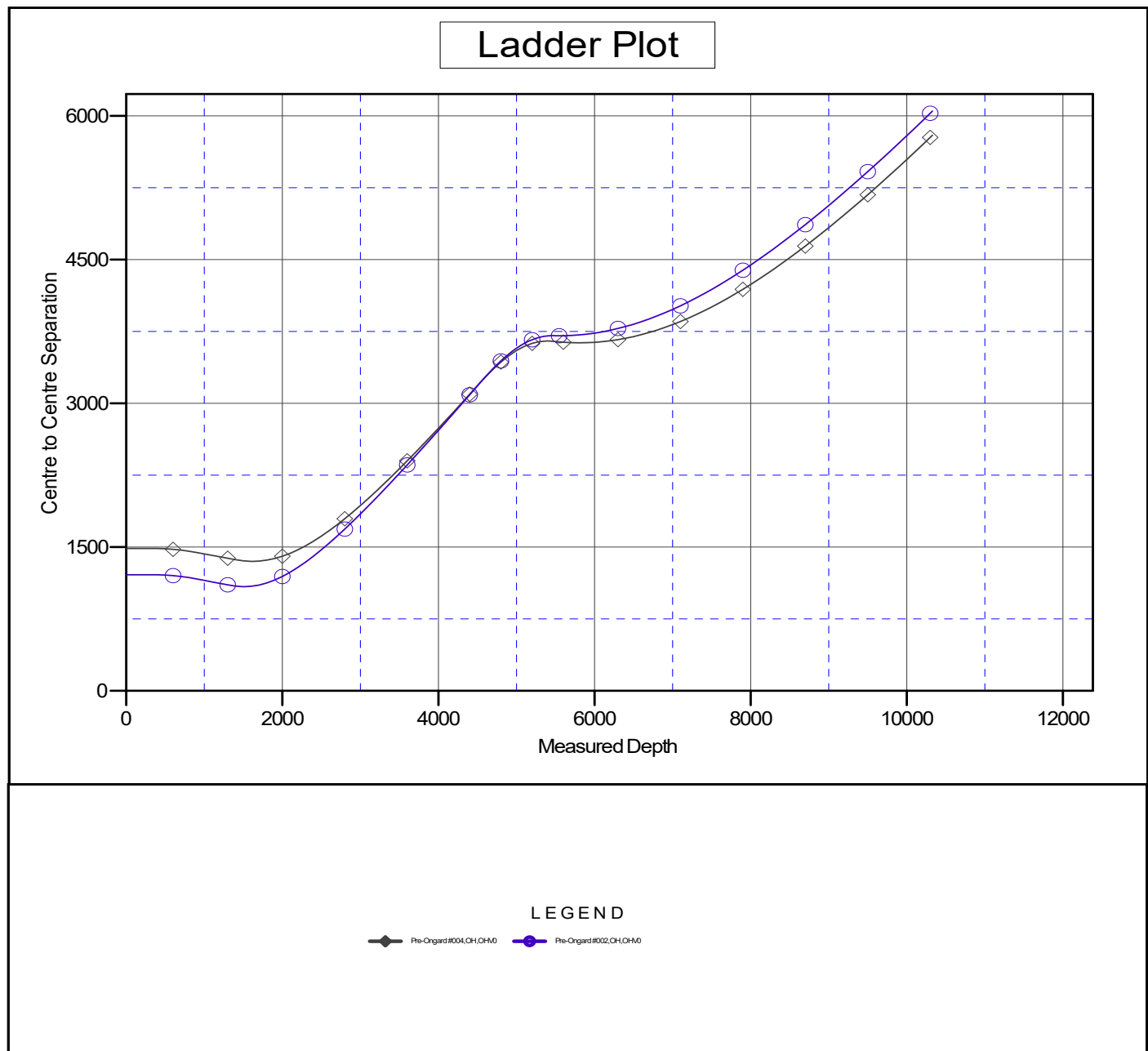
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Bisti L01 2512 100H
Project:	Non-unit	TVD Reference:	GL 6328' & RKB 14' @ 6342ft
Reference Site:	L01 2512	MD Reference:	GL 6328' & RKB 14' @ 6342ft
Site Error:	0 ft	North Reference:	True
Reference Well:	Bisti L01 2512 100H	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 Rev 2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to GL 6328' & RKB 14' @ 6342ft
 Offset Depths are relative to Offset Datum
 Central Meridian is -107.8333333

Coordinates are relative to: Bisti L01 2512 100H
 Coordinate System is US State Plane 1983, New Mexico Western Zone
 Grid Convergence at Surface is: -0.14°





Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well Bisti L01 2512 100H
Project:	Non-unit	TVD Reference:	GL 6328' & RKB 14' @ 6342ft
Reference Site:	L01 2512	MD Reference:	GL 6328' & RKB 14' @ 6342ft
Site Error:	0 ft	North Reference:	True
Reference Well:	Bisti L01 2512 100H	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 Rev 2	Offset TVD Reference:	Offset Datum

Reference Depths are relative to GL 6328' & RKB 14' @ 6342ft

Offset Depths are relative to Offset Datum

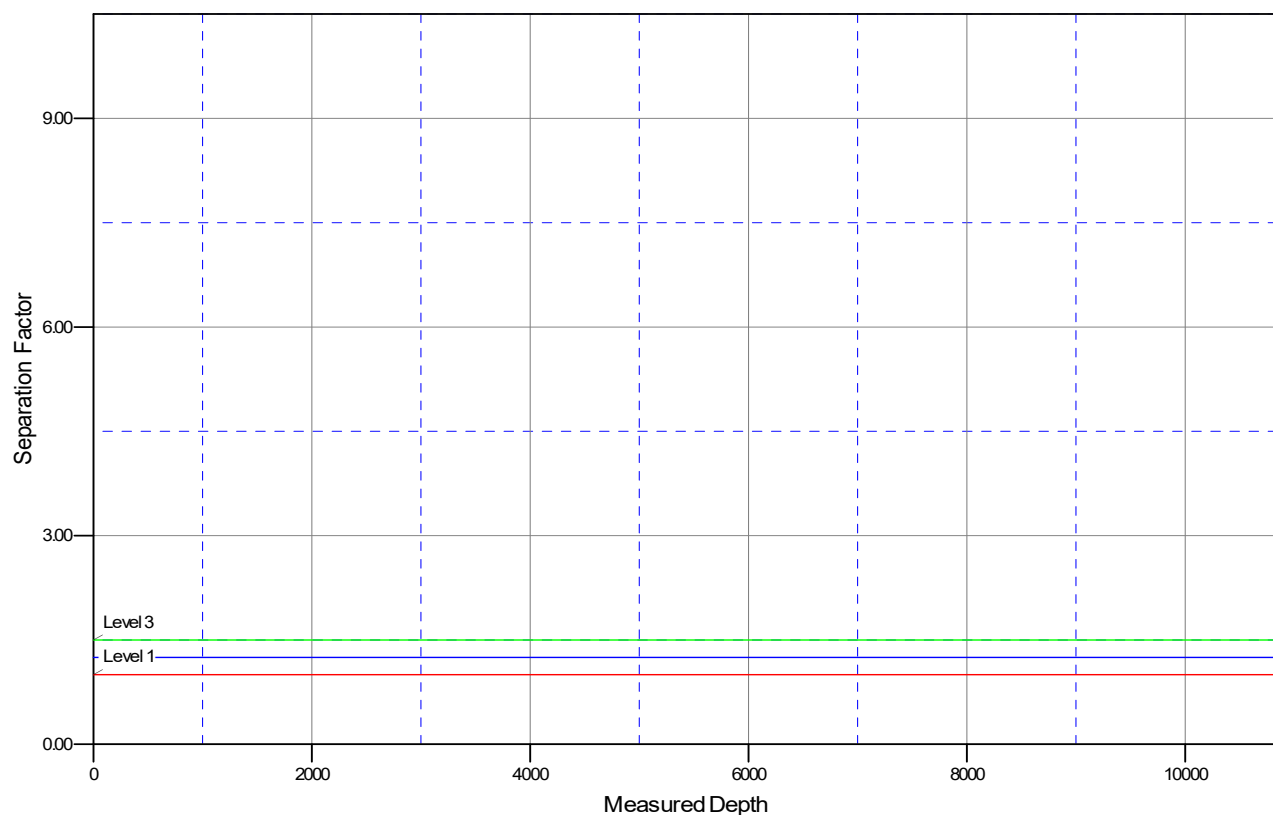
Central Meridian is -107.83333333

Coordinates are relative to: Bisti L01 2512 100H

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

Grid Convergence at Surface is: -0.14°

Separation Factor Plot



LEGEND

—●— Pre-Original#004.OH.OH-M —●— Pre-Original#002.OH.OH-M

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 97333

CONDITIONS

Operator: DJR OPERATING, LLC 1 Road 3263 Aztec, NM 87410	OGRID:
	371838
	Action Number:
	97333
Action Type:	
[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)	

CONDITIONS

Created By	Condition	Condition Date
kpickford	Will require administrative order for non-standard spacing unit	4/13/2022
kpickford	Notify OCD 24 hours prior to casing & cement	4/13/2022
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104	4/13/2022
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	4/13/2022
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing	4/13/2022
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	4/13/2022