

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. 30-043-21526
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)



Additional Operator Remarks

Location of Well

0. SHL: NWNE / 901 FNL / 1492 FEL / TWSP: 23N / RANGE: 6W / SECTION: 26 / LAT: 36.200931 / LONG: -107.43393 (TVD: 0 feet, MD: 0 feet)
PPP: NWNE / 621 FNL / 2406 FEL / TWSP: 23N / RANGE: 6W / SECTION: 26 / LAT: 36.20171 / LONG: -107.437028 (TVD: 5302 feet, MD: 5639 feet)
PPP: NESE / 2256 FSL / 1 FEL / TWSP: 23N / RANGE: 6W / SECTION: 22 / LAT: 36.20964 / LONG: -107.446744 (TVD: 5350 feet, MD: 13434 feet)
PPP: SESW / 1 FSL / 2230 FWL / TWSP: 23N / RANGE: 6W / SECTION: 23 / LAT: 36.203421 / LONG: -107.439124 (TVD: 5350 feet, MD: 13434 feet)
BHL: NWNE / 345 FNL / 2567 FEL / TWSP: 23N / RANGE: 6W / SECTION: 22 / LAT: 36.216804 / LONG: -107.455522 (TVD: 5350 feet, MD: 13434 feet)

BLM Point of Contact

Name: JEFFREY J TAFOYA
Title: Assistant Field Manager
Phone: (505) 564-7672
Email: JTAFOYA@BLM.GOV

CONFIDENTIAL

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024	
		Submittal Type:	☒ Initial Submittal ☐ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number 30-043-21526	Pool Code 13379	Pool Name COUNSELORS GALLUP - DAKOTA POOL
Property Code 325207	Property Name GALLO CANYON UNIT	Well Number 316H
OGRID No. 371838	Operator Name DJR OPERATING, LLC	Ground Level Elevation 6930'
Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal		Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Surface Location (SHL)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
B	26	23N	6W		901' NORTH	1492' EAST	36.200931° N	107.433930° W	SANDOVAL

Bottom Hole Location (BHL)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
B	22	23N	6W		345' NORTH	2567' EAST	36.216804° N	107.455522° W	SANDOVAL

Dedicated Acres SEC 26: NW/NE & NE/NW (80 AC.); SEC 23: SW/SE, SW/4 & SW/NW (240 AC.); SEC 22: NE/SE, NE/4, & NE/NW (240 AC.) = 560 ACRES	PENETRATED SPACING UNIT:	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
				N	
Order Numbers:		Well Setbacks are under Common Ownership: ☐ Yes ☐ No			

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
B	26	23N	6W		621' NORTH	2406' EAST	36.201710° N	107.437028° W	SANDOVAL

Fist Take Point (FTP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
B	26	23N	6W		621' NORTH	2406' EAST	36.201710° N	107.437028° W	SANDOVAL

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
B	22	23N	6W		345' NORTH	2567' EAST	36.216804° N	107.455522° W	SANDOVAL

Unitized Area or Area of Uniform Interest GALLO CANYON	Spacing Unit Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation
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OPERATOR CERTIFICATIONS

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, **and, if the well is a vertical or directional well, 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.**

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Signature

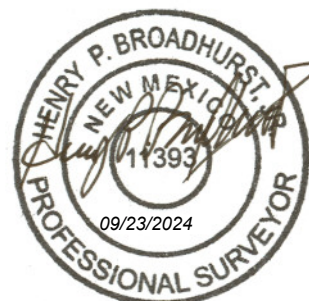
Date

Printed Name

E-mail Address

SURVEYOR CERTIFICATIONS

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.



Signature and Seal of Professional Surveyor:

Certificate Number

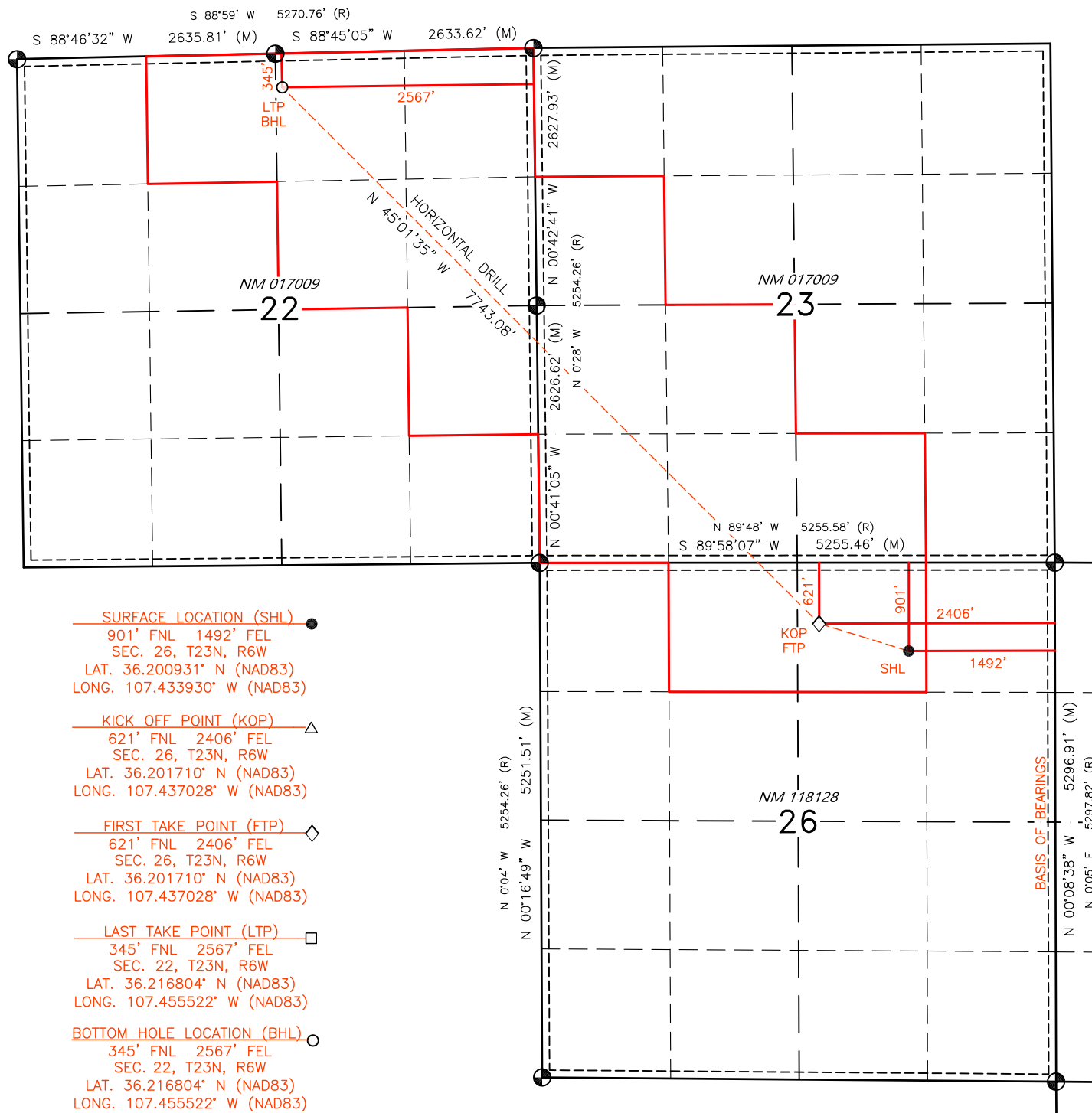
11393

Date of Survey

JULY 6, 2021

Note: 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.

FND 3 7/4 BC
BLM 1964



SURFACE LOCATION (SHL) ●
901' FNL 1492' FEL
SEC. 26, T23N, R6W
LAT. 36.200931° N (NAD83)
LONG. 107.433930° W (NAD83)

KICK OFF POINT (KOP) ▲
621' FNL 2406' FEL
SEC. 26, T23N, R6W
LAT. 36.201710° N (NAD83)
LONG. 107.437028° W (NAD83)

FIRST TAKE POINT (FTP) ◇
621' FNL 2406' FEL
SEC. 26, T23N, R6W
LAT. 36.201710° N (NAD83)
LONG. 107.437028° W (NAD83)

LAST TAKE POINT (LTP) □
345' FNL 2567' FEL
SEC. 22, T23N, R6W
LAT. 36.216804° N (NAD83)
LONG. 107.455522° W (NAD83)

BOTTOM HOLE LOCATION (BHL) ○
345' FNL 2567' FEL
SEC. 22, T23N, R6W
LAT. 36.216804° N (NAD83)
LONG. 107.455522° W (NAD83)

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 / 25 / 2025_

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
Gallo Canyon Unit 310H	TBD	B-26-23N-6W	914 FNL x 1454 FEL	313	947	125
Gallo Canyon Unit 311H	TBD	B-26-23N-6W	921 FNL x 1435 FEL	349	1056	139
Gallo Canyon Unit 315H	TBD	B-26-23N-6W	908 FNL x 1473 FEL	255	773	102
Gallo Canyon Unit 316H	TBD	B-26-23N-6W	901 FNL x 1492 FEL	234	708	94
Gallo Canyon Unit 401H	TBD	B-26-23N-6W	934 FNL x 1397 FEL	302	915	121
Gallo Canyon Unit 402H	TBD	B-26-23N-6W	927 FNL x 1416 FEL	272	824	109
				3-year Decline	3-year Decline	3-year Decline
Gallo Canyon Unit 310H	TBD	B-26-23N-6W	914 FNL x 1454 FEL	72	429	29
Gallo Canyon Unit 311H	TBD	B-26-23N-6W	921 FNL x 1435 FEL	80	478	32
Gallo Canyon Unit 315H	TBD	B-26-23N-6W	908 FNL x 1473 FEL	59	350	24
Gallo Canyon Unit 316H	TBD	B-26-23N-6W	901 FNL x 1492 FEL	54	321	22
Gallo Canyon Unit 401H	TBD	B-26-23N-6W	934 FNL x 1397 FEL	70	414	28
Gallo Canyon Unit 402H	TBD	B-26-23N-6W	927 FNL x 1416 FEL	63	373	25

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
Gallo Canyon Unit 310H	TBD	7/5/2025	8/15/2025	9/1/2025	9/15/2025	9/17/2025
Gallo Canyon Unit 311H	TBD	7/6/2025	8/16/2025	9/1/2025	9/15/2025	9/17/2025
Gallo Canyon Unit 315H	TBD	7/7/2025	8/17/2025	9/1/2025	9/15/2025	9/17/2025
Gallo Canyon Unit 316H	TBD	7/8/2025	8/18/2025	9/1/2025	9/20/2025	9/22/2025
Gallo Canyon Unit 401H	TBD	7/9/2025	8/19/2025	9/1/2025	9/20/2025	9/22/2025
Gallo Canyon Unit 402H	TBD	7/10/2025	8/20/2025	9/1/2025	9/20/2025	9/22/2025

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@enduringresources.com
Date: 4/25/2025
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
Gallo Canyon Unit B26-2306 Pad
Nos. 310H, 311H, 315H, 316H, 401H and 402H Oil and Natural Gas Wells Project
NWNE B-26-23N-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.



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NWNE B-26-23N-06W

VENTING and FLARING

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

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

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

DJR will only flare gas during the following times:

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



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OPERATIONAL PRACTICES

19.15.27.8 A. Venting and Flaring of Natural Gas

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

19.15.27.8 B. Venting and flaring during drilling operations

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

19.15.27.8 E. Venting and flaring during completion or recompletion operations

During Completion Operations, DJR utilizes the following:

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



19.15.27.8 D. Venting and flaring during production operations

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

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

19.15.27.8 E. Performance standards

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



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

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

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



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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

Gallo Canyon Unit 316H

Sandoval County, New Mexico

Surface Location

1492-ft FEL & 901-ft FNL
 Sec 26 T23N R06W
 Graded Elevation 6930' MSL
 RKB Elevation 6944' (14' KB)

SHL Geographical Coordinates (NAD-83)

Latitude 36.2009310° N
 Longitude 107.4339300° W

Kick Off Point for Horizontal Build Curve

4727-ft MD
 4704-ft TVD

Local Coordinates (from SHL)

125-ft South
 428-ft West

Heel Location (Pay zone entry)

2406-ft FEL & 621-ft FNL
 Sec 26 T23N R06W

Heel Geographical Coordinates (NAD-83)

Latitude 36.20170997° N
 Longitude 107.43702798° W

Bottom Hole Location (TD)

2567-ft FEL & 345-ft FNL
 Sec 22 T23N R06W

BHL Geographical Coordinates (NAD-83)

Latitude 36.2168036° N
 Longitude 107.4555218° W

Well objectives

This well is planned as a 7740-ft lateral in the Gallup B sand.

Bottom Hole temperature and pressure

The temperature in the Gallup B horizontal objective is 142°F. Bottom hole pressure in the Gallup B 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	1451	1446	Sd	W	8.3	8.4 – 8.8
Kirtland	1560	1555	Sh	-	8.3	8.4 – 8.8
Fruitland	1755	1749	C	G	8.3	9.0 - 9.5
Pictured Cliffs	1963	1955	Sd	W	8.3	9.0 - 9.5
Lewis	2079	2071	Sh	-		9.0 - 9.5
Chacra	2819	2806	Sd	-	8.3	9.0 - 9.5
Menefee	3530	3513	Sd, C	G	8.3	9.0 - 9.5
Point Lookout	4209	4188	Sd	-	8.3	9.0 - 9.5
Mancos	4402	4380	Sh	-		9.0 - 9.5
Mancos Silt	4800	4775	Slt	O/G	6.6	9.0 - 9.5
Gallup A	5465	5264	Slt	O/G	6.6	9.0 - 9.5
Gallup B	5578	5294	Sd	O/G	6.6	8.8 - 9.0
Gallup C	NP	NP	Sd	O/G	6.6	8.8 - 9.0
Target	5691	5304	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	5639	surf	5302	surface
4-1/2"	6-1/8"	11.6	P-110	BTC	5360	13434	5219	5350	5360

Note: all casing will be new

Rev 0



Casing Design Load Cases

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

Note

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

Casing Design Factors

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

Cement 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	4227-ft
Density (ppg)	12.30	13.50
Yield (cf/sx)	2.34	1.50
Mix water (gal/sx)	13.26	7.20
Volume (sx)	411	226
Volume (bbls)	171	60
Volume (cu.ft.)	962	338
Excess %	55	55



Rev 0

4-1/2" Production Liner

	BJ Services
Type	Poz/G
Planned top	5360-ft
Density (ppg)	13.3
Yield (cf/sx)	1.56
Mix water (gal/sx)	7.71
Volume (sx)	679
Volume (bbls)	189
Volume (cu.ft)	1061
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 – 5639	9.0 – 9.5	38 – 45	8 – 14	<20
Production	Low solids, non-dispersed	5639 – 13434	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.

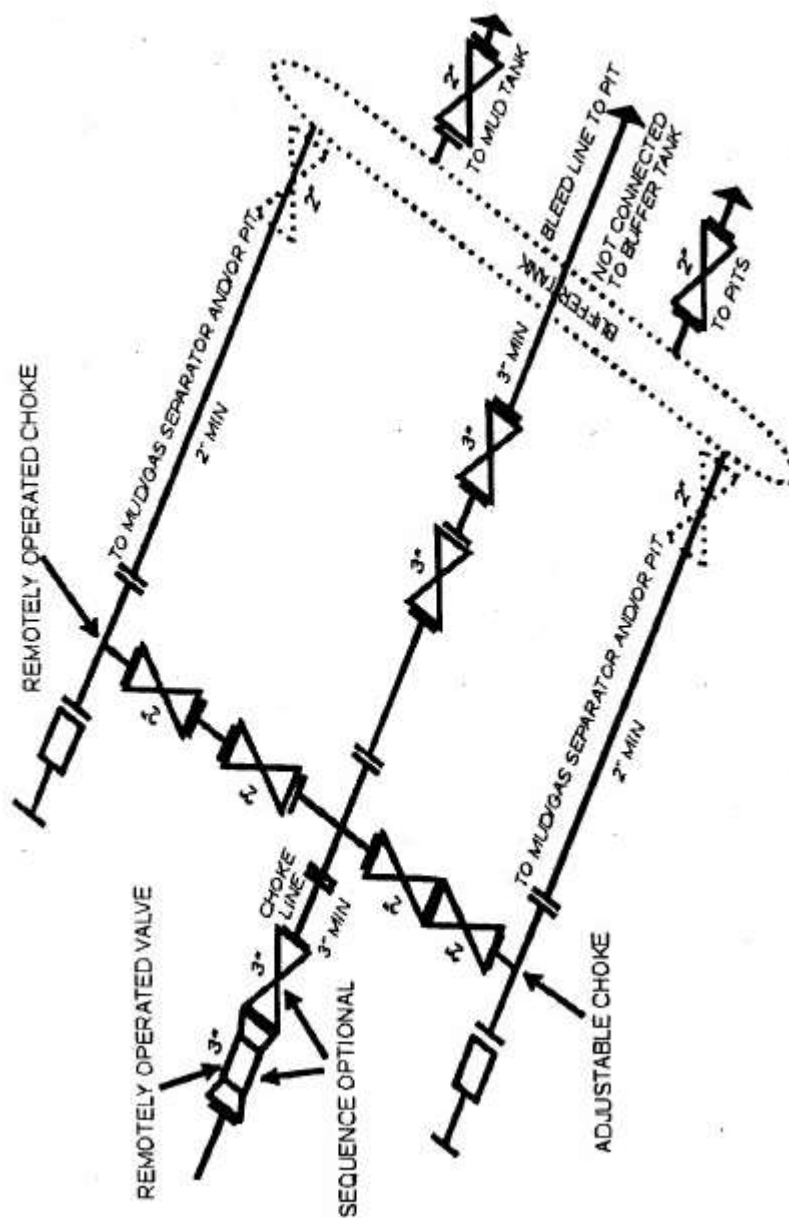
Completion

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.



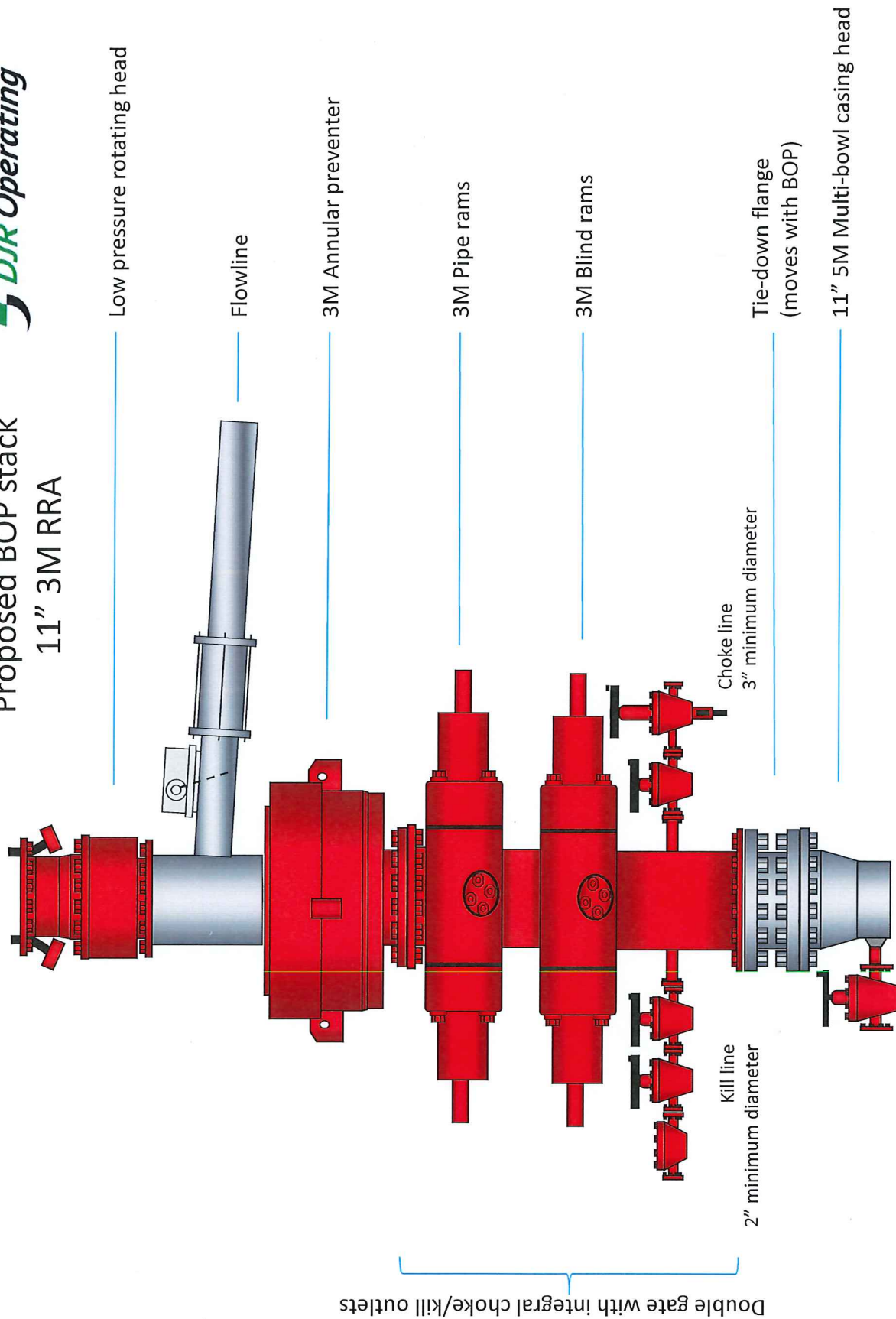
Choke Manifold

Actual system to conform with Onshore Order 2





Proposed BOP stack 11" 3M RRA





Company: DJR Operating
Project: Gallo Canyon Unit
Site: B26 2306 Pad
Well: # 316H
Wellbore: Original Drilling
Design: APD

WELL DETAILS: # 316H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0	0	1892678.93	2840930.01	36.20093100	-107.43393000

GL 6930' & RKB 14' @ 6944ft
Plan: APD (# 316H/Original Drilling)
Created By: Janie Collins Date: 11:52, July 23 2021

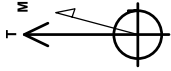
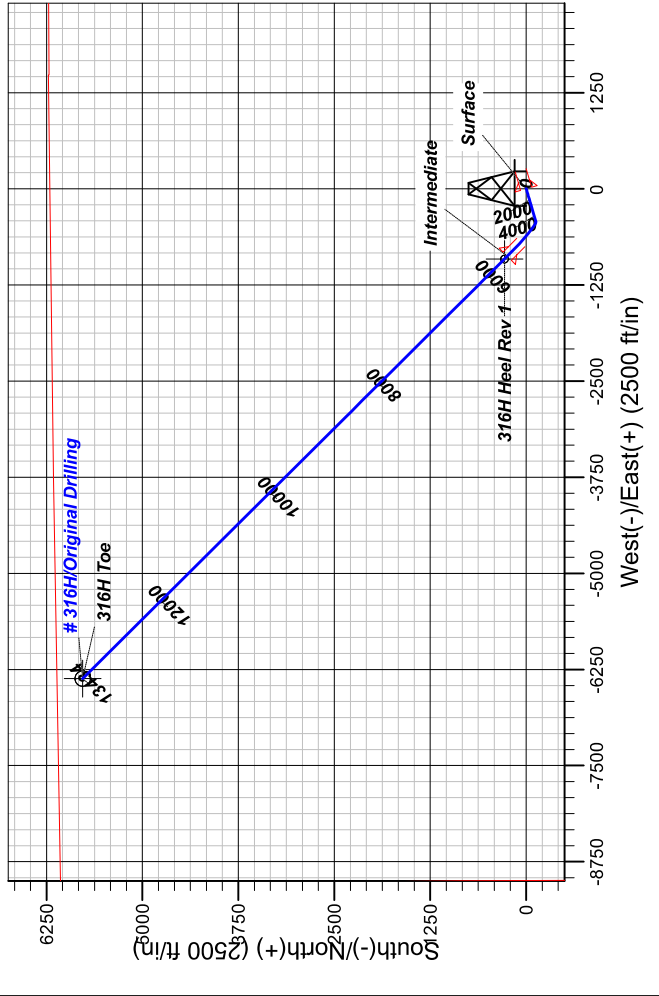
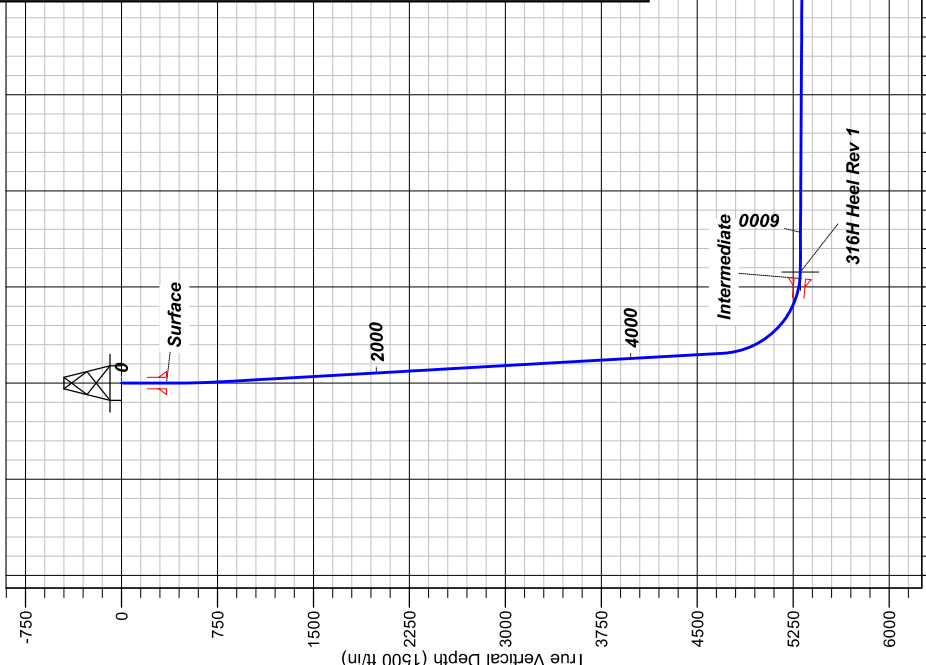
PROJECT DETAILS: Gallo Canyon Unit
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Western Zone
System Datum: Mean Sea Level
Local North: True

DESIGN TARGET DETAILS

Well	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
316H Heel Rev 1	5305	284	-914	1892958.74	2840014.83	36.20170997	-107.43702798
316H Toe	5350	5779	-6369	1898431.40	2834537.12	36.21680360	-107.45552180

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
0	0.00	0.00	0	0	0	0.00	0.00	0
450	0.00	0.00	450	0	0	0.00	0.00	0
761	6.21	253.76	760	-5	-16	2.00	253.76	9
471	40.8	253.76	470	-15	-42	0.00	0.00	283
5305	89.66	315.21	5305	-284	-914	0.00	6.02	883
5350	89.66	315.21	5350	5779	-6369	0.00	0.00	8600



Azimuths to True North
Magnetic North: 10.2°
Magnetic Field
Strength: 51255.5 A/m
Dip Angle: 63.1°
Date: 12/31/2004
Model: IGRF2000

CASING DETAILS

TVD	MD	Name
350	350	Surface
5302	5639	Intermediate

FORMATION DETAILS

TVDPath	MDPath	Formation
1446	1451	Ojo Alamo
1555	1560	Kirtland
1749	1755	Fruitland
1953	1963	Pictured Cliffs
2071	2079	Lewis
2806	2819	Chacra
3513	3530	Menefee
4188	4209	Point Lookout
4380	4402	Mancos
4775	4800	Mancos Silt
5264	5465	Gallup A
5294	5578	Gallup B



DJR Operating

Gallo Canyon Unit

B26 2306 Pad

316H - Slot 6

Original Drilling

Plan: APD

Standard Planning Report

23 July, 2021





Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 316H - Slot 6
Company:	DJR Operating	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Project:	Gallo Canyon Unit	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site:	B26 2306 Pad	North Reference:	True
Well:	# 316H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Project	Gallo Canyon Unit, Sandoval County, NM		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site	B26 2306 Pad				
Site Position:		Northing:	1,892,645.83 usft	Latitude:	36.2008390
From:	Lat/Long	Easting:	2,841,024.27 usft	Longitude:	-107.4336110
Position Uncertainty:	0 ft	Slot Radius:	13.20 in	Grid Convergence:	0.24

Well	# 316H - Slot 6					
Well Position	+N/-S	33 ft	Northing:	1,892,678.93 usft	Latitude:	36.2009310
	+E/-W	-94 ft	Easting:	2,840,930.01 usft	Longitude:	-107.4339300
Position Uncertainty		0 ft	Wellhead Elevation:		Ground Level:	6930

Wellbore	Original Drilling				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2000	12/31/2004	10.72	63.27	51,255.12768258

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	312.22

Plan Survey Tool Program	Date	7/15/2021		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0	13,434 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	
450	0.00	0.00	450	0	0	0.00	0.00	0.00	0.00	
761	6.21	253.76	760	-5	-16	2.00	2.00	0.00	253.76	
4727	6.21	253.76	4704	-125	-428	0.00	0.00	0.00	0.00	
5691	89.66	315.21	5305	284	-914	9.00	8.66	6.38	61.62	316H Heel Rev 1
13,434	89.66	315.21	5350	5779	-6369	0.00	0.00	0.00	0.00	316H Toe



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 316H - Slot 6
Company:	DJR Operating	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Project:	Gallo Canyon Unit	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site:	B26 2306 Pad	North Reference:	True
Well:	# 316H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0	0.00	0.00	0	0	0	0	0.00	0.00	0.00
100	0.00	0.00	100	0	0	0	0.00	0.00	0.00
200	0.00	0.00	200	0	0	0	0.00	0.00	0.00
300	0.00	0.00	300	0	0	0	0.00	0.00	0.00
400	0.00	0.00	400	0	0	0	0.00	0.00	0.00
450	0.00	0.00	450	0	0	0	0.00	0.00	0.00
500	1.00	253.76	500	0	0	0	2.00	2.00	0.00
600	3.00	253.76	600	-1	-4	2	2.00	2.00	0.00
700	5.00	253.76	700	-3	-10	6	2.00	2.00	0.00
761	6.21	253.76	760	-5	-16	9	2.00	2.00	0.00
800	6.21	253.76	799	-6	-20	11	0.00	0.00	0.00
900	6.21	253.76	899	-9	-31	17	0.00	0.00	0.00
1000	6.21	253.76	998	-12	-41	22	0.00	0.00	0.00
1100	6.21	253.76	1097	-15	-51	28	0.00	0.00	0.00
1200	6.21	253.76	1197	-18	-62	34	0.00	0.00	0.00
1300	6.21	253.76	1296	-21	-72	39	0.00	0.00	0.00
1400	6.21	253.76	1396	-24	-83	45	0.00	0.00	0.00
1500	6.21	253.76	1495	-27	-93	51	0.00	0.00	0.00
1600	6.21	253.76	1594	-30	-103	56	0.00	0.00	0.00
1700	6.21	253.76	1694	-33	-114	62	0.00	0.00	0.00
1800	6.21	253.76	1793	-36	-124	68	0.00	0.00	0.00
1900	6.21	253.76	1893	-39	-135	73	0.00	0.00	0.00
2000	6.21	253.76	1992	-42	-145	79	0.00	0.00	0.00
2100	6.21	253.76	2092	-45	-155	85	0.00	0.00	0.00
2200	6.21	253.76	2191	-48	-166	90	0.00	0.00	0.00
2300	6.21	253.76	2290	-51	-176	96	0.00	0.00	0.00
2400	6.21	253.76	2390	-54	-186	102	0.00	0.00	0.00
2500	6.21	253.76	2489	-57	-197	107	0.00	0.00	0.00
2600	6.21	253.76	2589	-60	-207	113	0.00	0.00	0.00
2700	6.21	253.76	2688	-63	-218	119	0.00	0.00	0.00
2800	6.21	253.76	2787	-66	-228	124	0.00	0.00	0.00
2900	6.21	253.76	2887	-69	-238	130	0.00	0.00	0.00
3000	6.21	253.76	2986	-72	-249	136	0.00	0.00	0.00
3100	6.21	253.76	3086	-75	-259	141	0.00	0.00	0.00
3200	6.21	253.76	3185	-79	-270	147	0.00	0.00	0.00
3300	6.21	253.76	3284	-82	-280	153	0.00	0.00	0.00
3400	6.21	253.76	3384	-85	-290	158	0.00	0.00	0.00
3500	6.21	253.76	3483	-88	-301	164	0.00	0.00	0.00
3600	6.21	253.76	3583	-91	-311	169	0.00	0.00	0.00
3700	6.21	253.76	3682	-94	-321	175	0.00	0.00	0.00
3800	6.21	253.76	3782	-97	-332	181	0.00	0.00	0.00
3900	6.21	253.76	3881	-100	-342	186	0.00	0.00	0.00
4000	6.21	253.76	3980	-103	-353	192	0.00	0.00	0.00
4100	6.21	253.76	4080	-106	-363	198	0.00	0.00	0.00
4200	6.21	253.76	4179	-109	-373	203	0.00	0.00	0.00
4300	6.21	253.76	4279	-112	-384	209	0.00	0.00	0.00
4400	6.21	253.76	4378	-115	-394	215	0.00	0.00	0.00
4500	6.21	253.76	4477	-118	-405	220	0.00	0.00	0.00
4600	6.21	253.76	4577	-121	-415	226	0.00	0.00	0.00
4700	6.21	253.76	4676	-124	-425	232	0.00	0.00	0.00
4727	6.21	253.76	4704	-125	-428	233	0.00	0.00	0.00
4800	10.93	285.57	4775	-124	-439	242	9.00	6.51	43.88
4900	19.25	299.35	4872	-113	-462	266	9.00	8.32	13.78
5000	27.98	304.87	4963	-92	-496	306	9.00	8.73	5.52



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 316H - Slot 6
Company:	DJR Operating	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Project:	Gallo Canyon Unit	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site:	B26 2306 Pad	North Reference:	True
Well:	# 316H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5100	36.84	307.91	5048	-60	-539	359	9.00	8.85	3.03
5200	45.74	309.90	5123	-18	-590	425	9.00	8.90	1.99
5300	54.67	311.36	5187	32	-648	501	9.00	8.93	1.46
5400	63.62	312.52	5238	89	-712	587	9.00	8.94	1.17
5500	72.57	313.52	5275	152	-780	680	9.00	8.95	1.00
5600	81.53	314.43	5298	220	-850	777	9.00	8.96	0.90
5691	89.66	315.21	5305	284	-914	867	9.00	8.96	0.86
5700	89.66	315.21	5305	290	-920	877	0.00	0.00	0.00
5800	89.66	315.21	5305	361	-991	976	0.00	0.00	0.00
5900	89.66	315.21	5306	432	-1061	1076	0.00	0.00	0.00
6000	89.66	315.21	5306	503	-1132	1176	0.00	0.00	0.00
6100	89.66	315.21	5307	574	-1202	1276	0.00	0.00	0.00
6200	89.66	315.21	5308	645	-1273	1376	0.00	0.00	0.00
6300	89.66	315.21	5308	716	-1343	1476	0.00	0.00	0.00
6400	89.66	315.21	5309	787	-1414	1576	0.00	0.00	0.00
6500	89.66	315.21	5309	858	-1484	1676	0.00	0.00	0.00
6600	89.66	315.21	5310	929	-1555	1775	0.00	0.00	0.00
6700	89.66	315.21	5310	1000	-1625	1875	0.00	0.00	0.00
6800	89.66	315.21	5311	1071	-1695	1975	0.00	0.00	0.00
6900	89.66	315.21	5312	1142	-1766	2075	0.00	0.00	0.00
7000	89.66	315.21	5312	1213	-1836	2175	0.00	0.00	0.00
7100	89.66	315.21	5313	1284	-1907	2275	0.00	0.00	0.00
7200	89.66	315.21	5313	1355	-1977	2375	0.00	0.00	0.00
7300	89.66	315.21	5314	1426	-2048	2474	0.00	0.00	0.00
7400	89.66	315.21	5315	1497	-2118	2574	0.00	0.00	0.00
7500	89.66	315.21	5315	1567	-2189	2674	0.00	0.00	0.00
7600	89.66	315.21	5316	1638	-2259	2774	0.00	0.00	0.00
7700	89.66	315.21	5316	1709	-2329	2874	0.00	0.00	0.00
7800	89.66	315.21	5317	1780	-2400	2974	0.00	0.00	0.00
7900	89.66	315.21	5318	1851	-2470	3074	0.00	0.00	0.00
8000	89.66	315.21	5318	1922	-2541	3173	0.00	0.00	0.00
8100	89.66	315.21	5319	1993	-2611	3273	0.00	0.00	0.00
8200	89.66	315.21	5319	2064	-2682	3373	0.00	0.00	0.00
8300	89.66	315.21	5320	2135	-2752	3473	0.00	0.00	0.00
8400	89.66	315.21	5320	2206	-2823	3573	0.00	0.00	0.00
8500	89.66	315.21	5321	2277	-2893	3673	0.00	0.00	0.00
8600	89.66	315.21	5322	2348	-2964	3773	0.00	0.00	0.00
8700	89.66	315.21	5322	2419	-3034	3872	0.00	0.00	0.00
8800	89.66	315.21	5323	2490	-3104	3972	0.00	0.00	0.00
8900	89.66	315.21	5323	2561	-3175	4072	0.00	0.00	0.00
9000	89.66	315.21	5324	2632	-3245	4172	0.00	0.00	0.00
9100	89.66	315.21	5325	2703	-3316	4272	0.00	0.00	0.00
9200	89.66	315.21	5325	2774	-3386	4372	0.00	0.00	0.00
9300	89.66	315.21	5326	2845	-3457	4472	0.00	0.00	0.00
9400	89.66	315.21	5326	2916	-3527	4572	0.00	0.00	0.00
9500	89.66	315.21	5327	2987	-3598	4671	0.00	0.00	0.00
9600	89.66	315.21	5328	3058	-3668	4771	0.00	0.00	0.00
9700	89.66	315.21	5328	3129	-3738	4871	0.00	0.00	0.00
9800	89.66	315.21	5329	3200	-3809	4971	0.00	0.00	0.00
9900	89.66	315.21	5329	3271	-3879	5071	0.00	0.00	0.00
10,000	89.66	315.21	5330	3342	-3950	5171	0.00	0.00	0.00
10,100	89.66	315.21	5330	3413	-4020	5271	0.00	0.00	0.00
10,200	89.66	315.21	5331	3484	-4091	5370	0.00	0.00	0.00
10,300	89.66	315.21	5332	3555	-4161	5470	0.00	0.00	0.00



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 316H - Slot 6
Company:	DJR Operating	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Project:	Gallo Canyon Unit	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site:	B26 2306 Pad	North Reference:	True
Well:	# 316H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,400	89.66	315.21	5332	3626	-4232	5570	0.00	0.00	0.00	
10,500	89.66	315.21	5333	3697	-4302	5670	0.00	0.00	0.00	
10,600	89.66	315.21	5333	3767	-4373	5770	0.00	0.00	0.00	
10,700	89.66	315.21	5334	3838	-4443	5870	0.00	0.00	0.00	
10,800	89.66	315.21	5335	3909	-4513	5970	0.00	0.00	0.00	
10,900	89.66	315.21	5335	3980	-4584	6069	0.00	0.00	0.00	
11,000	89.66	315.21	5336	4051	-4654	6169	0.00	0.00	0.00	
11,100	89.66	315.21	5336	4122	-4725	6269	0.00	0.00	0.00	
11,200	89.66	315.21	5337	4193	-4795	6369	0.00	0.00	0.00	
11,300	89.66	315.21	5337	4264	-4866	6469	0.00	0.00	0.00	
11,400	89.66	315.21	5338	4335	-4936	6569	0.00	0.00	0.00	
11,500	89.66	315.21	5339	4406	-5007	6669	0.00	0.00	0.00	
11,600	89.66	315.21	5339	4477	-5077	6768	0.00	0.00	0.00	
11,700	89.66	315.21	5340	4548	-5148	6868	0.00	0.00	0.00	
11,800	89.66	315.21	5340	4619	-5218	6968	0.00	0.00	0.00	
11,900	89.66	315.21	5341	4690	-5288	7068	0.00	0.00	0.00	
12,000	89.66	315.21	5342	4761	-5359	7168	0.00	0.00	0.00	
12,100	89.66	315.21	5342	4832	-5429	7268	0.00	0.00	0.00	
12,200	89.66	315.21	5343	4903	-5500	7368	0.00	0.00	0.00	
12,300	89.66	315.21	5343	4974	-5570	7468	0.00	0.00	0.00	
12,400	89.66	315.21	5344	5045	-5641	7567	0.00	0.00	0.00	
12,500	89.66	315.21	5345	5116	-5711	7667	0.00	0.00	0.00	
12,600	89.66	315.21	5345	5187	-5782	7767	0.00	0.00	0.00	
12,700	89.66	315.21	5346	5258	-5852	7867	0.00	0.00	0.00	
12,800	89.66	315.21	5346	5329	-5922	7967	0.00	0.00	0.00	
12,900	89.66	315.21	5347	5400	-5993	8067	0.00	0.00	0.00	
13,000	89.66	315.21	5347	5471	-6063	8167	0.00	0.00	0.00	
13,100	89.66	315.21	5348	5542	-6134	8266	0.00	0.00	0.00	
13,200	89.66	315.21	5349	5613	-6204	8366	0.00	0.00	0.00	
13,300	89.66	315.21	5349	5684	-6275	8466	0.00	0.00	0.00	
13,400	89.66	315.21	5350	5755	-6345	8566	0.00	0.00	0.00	
13,434	89.66	315.21	5350	5779	-6369	8600	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	
316H Heel Rev 1	0.00	0.00	5305	284	-914	1,892,958.74	2,840,014.84	36.20170997	-107.43702798	
- hit/miss target										
- Shape										
- plan hits target center										
- Circle (radius 50)										
316H Toe	0.00	0.00	5350	5779	-6369	1,898,431.40	2,834,537.12	36.21680360	-107.45552180	
- hit/miss target										
- Shape										
- plan hits target center										
- Circle (radius 100)										



Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 316H - Slot 6
Company:	DJR Operating	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Project:	Gallo Canyon Unit	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site:	B26 2306 Pad	North Reference:	True
Well:	# 316H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
350	350	Surface	9.63	12.25	
5639	5302	Intermediate	7.00	8.75	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1451	1446	Ojo Alamo		0.00	0.00	
1560	1555	Kirtland		0.00	0.00	
1755	1749	Fruitland		0.00	0.00	
1963	1955	Pictured Cliffs		0.00	0.00	
2079	2071	Lewis		0.00	0.00	
2819	2806	Chacra		0.00	0.00	
3530	3513	Menefee		0.00	0.00	
4209	4188	Point Lookout		0.00	0.00	
4402	4380	Mancos		0.00	0.00	
4800	4775	Mancos Silt		0.00	0.00	
5465	5264	Gallup A		0.00	0.00	
5578	5294	Gallup B		0.00	0.00	



DJR Operating

Gallo Canyon Unit

B26 2306 Pad

316H

Original Drilling

APD

Anticollision Report

23 July, 2021





Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 316H - Slot 6
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 316H	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:	MD Interval 100ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 2000ft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program			Date	7/15/2021	
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0	13,434	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						
B26 2306 Pad						
# 310H - Original Drilling - APD	400	400	40	37	16.192	CC
# 310H - Original Drilling - APD	500	500	40	37	12.613	ES
# 310H - Original Drilling - APD	13,434	13,822	841	429	2.040	SF
# 311H - Original Drilling - APD	400	400	60	57	24.319	CC
# 311H - Original Drilling - APD	500	500	60	57	18.947	ES
# 311H - Original Drilling - APD	1200	1202	84	76	9.791	SF
# 315H - Original Drilling - APD	666	667	16	12	3.662	CC
# 315H - Original Drilling - APD	700	701	16	11	3.489	ES
# 315H - Original Drilling - APD	4600	4600	77	40	2.107	SF
# 401H - Original Drilling - APD	400	400	100	97	40.624	CC
# 401H - Original Drilling - APD	500	500	100	97	31.677	ES
# 401H - Original Drilling - APD	1500	1491	191	180	17.109	SF
# 402H - Original Drilling - APD	400	400	80	77	32.447	CC
# 402H - Original Drilling - APD	500	500	80	77	25.297	ES
# 402H - Original Drilling - APD	13,434	13,752	617	209	1.514	SF

Offset Design: B26 2306 Pad - # 310H - Original Drilling - APD													Offset Site Error: 0 ft		
Survey Program: 0-MWD+IGRF		Offset		Semi Major Axis		Offset Wellbore Centre				Rule Assigned: Distance				Offset Well Error: 0 ft	
Measured Reference	Vertical	Measured	Vertical	Reference	Offset	Highside				Between	Between	Minimum	Separation	Warning	
Depth	Depth	Depth	Depth			Toolface	+N/-S	+E/-W		Centres	Ellipses	Separation	Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)		(ft)	(ft)	(ft)			
0	0	0	0	0	0	109.77	-13	37		40					
100	100	100	100	0	0	109.77	-13	37		40	40	0.31	129.158		
200	200	200	200	1	1	109.77	-13	37		40	39	1.03	38.838		
300	300	300	300	1	1	109.77	-13	37		40	38	1.74	22.855		
400	400	400	400	1	1	109.77	-13	37		40	37	2.46	16.192 CC		
400	400	400	400	1	1	109.77	-13	37		40	37	2.46	16.191		
500	500	500	500	2	2	-143.84	-14	37		40	37	3.16	12.613 ES		
600	600	601	601	2	2	-142.65	-16	34		41	37	3.85	10.588		
700	700	702	702	2	2	-140.42	-20	28		42	38	4.55	9.323		
800	799	803	802	3	3	-137.18	-26	20		45	40	5.28	8.494		
900	899	903	901	3	3	-130.94	-34	8		46	40	6.05	7.673		
1000	998	1003	1000	3	3	-121.14	-44	-6		48	41	6.87	6.927		
1100	1097	1103	1097	4	4	-108.17	-56	-23		50	42	7.75	6.456		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 316H - Slot 6
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 316H	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: B26 2306 Pad - # 310H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference	Offset	Rule Assigned:												
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre	Distance	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
							+N/-S (ft)	+E/-W (ft)						
1200	1197	1202	1193	4	4	-93.57	-70	-43	56	47	8.62	6.445		
1300	1296	1300	1288	5	5	-80.41	-85	-64	65	56	9.44	6.900		
1400	1396	1399	1383	5	6	-70.87	-100	-85	77	67	10.20	7.568		
1500	1495	1497	1478	5	6	-64.03	-115	-107	91	80	10.95	8.296		
1600	1594	1596	1573	6	7	-59.01	-130	-128	105	94	11.69	9.016		
1700	1694	1694	1668	6	7	-55.22	-145	-149	121	108	12.43	9.696		
1800	1793	1793	1763	7	8	-52.28	-160	-171	136	123	13.18	10.326		
1900	1893	1891	1858	7	8	-49.95	-176	-192	152	138	13.94	10.906		
2000	1992	1990	1953	7	9	-48.06	-191	-213	168	153	14.69	11.437		
2100	2092	2089	2048	8	10	-46.51	-206	-235	184	169	15.45	11.924		
2200	2191	2187	2143	8	10	-45.20	-221	-256	201	184	16.21	12.370		
2300	2290	2286	2238	9	11	-44.09	-236	-277	217	200	16.98	12.779		
2400	2390	2384	2333	9	11	-43.13	-251	-299	233	216	17.74	13.155		
2500	2489	2483	2428	10	12	-42.31	-266	-320	250	231	18.51	13.502		
2600	2589	2581	2523	10	13	-41.58	-281	-341	267	247	19.28	13.822		
2700	2688	2680	2618	10	13	-40.94	-296	-363	283	263	20.05	14.119		
2800	2787	2779	2713	11	14	-40.37	-311	-384	300	279	20.82	14.394		
2900	2887	2877	2808	11	14	-39.86	-326	-406	316	295	21.60	14.651		
3000	2986	2976	2904	12	15	-39.40	-341	-427	333	311	22.37	14.890		
3100	3086	3074	2999	12	16	-38.99	-357	-448	350	327	23.14	15.113		
3200	3185	3173	3094	12	16	-38.61	-372	-470	366	343	23.92	15.323		
3300	3284	3271	3189	13	17	-38.27	-387	-491	383	359	24.69	15.519		
3400	3384	3370	3284	13	18	-37.95	-402	-512	400	374	25.47	15.703		
3500	3483	3468	3379	14	18	-37.66	-417	-534	417	390	26.25	15.877		
3600	3583	3567	3474	14	19	-37.39	-432	-555	433	406	27.02	16.041		
3700	3682	3666	3569	14	19	-37.15	-447	-576	450	422	27.80	16.196		
3800	3782	3764	3664	15	20	-36.92	-462	-598	467	438	28.58	16.342		
3900	3881	3863	3759	15	21	-36.70	-477	-619	484	454	29.36	16.481		
4000	3980	3961	3854	16	21	-36.50	-492	-640	501	470	30.13	16.612		
4100	4080	4060	3949	16	22	-36.32	-507	-662	517	486	30.91	16.737		
4200	4179	4158	4044	17	22	-36.14	-522	-683	534	503	31.69	16.856		
4300	4279	4257	4139	17	23	-35.98	-538	-704	551	519	32.47	16.969		
4400	4378	4356	4234	17	24	-35.82	-553	-726	568	535	33.25	17.077		
4500	4477	4454	4329	18	24	-35.68	-568	-747	585	551	34.03	17.180		
4600	4577	4553	4424	18	25	-35.54	-583	-769	601	567	34.81	17.278		
4700	4676	4651	4519	19	25	-35.41	-598	-790	618	583	35.59	17.372		
4800	4775	4750	4614	19	26	-66.01	-613	-811	636	599	36.43	17.446		
4900	4872	4846	4707	20	27	-79.15	-628	-832	655	617	37.50	17.460		
5000	4963	4938	4796	20	27	-84.86	-642	-852	676	638	38.82	17.423		
5100	5048	5024	4879	21	28	-88.45	-655	-871	702	662	40.44	17.359		
5200	5123	5133	4983	21	29	-92.15	-668	-898	732	689	42.59	17.188		
5300	5187	5279	5118	22	29	-96.10	-664	-953	763	718	44.97	16.962		
5400	5238	5459	5266	23	31	-99.83	-627	-1047	791	744	47.02	16.816		
5500	5275	5683	5406	24	32	-102.74	-534	-1193	812	763	48.42	16.760		
5600	5298	5939	5487	26	35	-103.61	-379	-1378	820	771	49.65	16.522		
5694	5305	6082	5492	27	36	-103.19	-279	-1480	819	767	52.25	15.678		
5700	5305	6088	5492	27	36	-103.24	-274	-1484	819	767	52.43	15.630		
5800	5305	6188	5493	29	38	-103.23	-204	-1555	820	764	55.80	14.689		
5900	5306	6288	5493	31	39	-103.23	-133	-1625	820	761	59.26	13.837		
6000	5306	6388	5494	32	40	-103.23	-62	-1696	820	757	63.05	13.009		
6100	5307	6488	5495	34	42	-103.22	9	-1767	821	754	66.95	12.257		
6200	5308	6588	5495	36	44	-103.22	80	-1837	821	750	70.95	11.569		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 316H - Slot 6
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 316H	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: B26 2306 Pad - # 310H - 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)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
6300	5308	6688	5496	38	45	-103.22	150	-1908	821	746	75.05	10.941	
6400	5309	6788	5496	41	47	-103.21	221	-1979	821	742	79.23	10.367	
6500	5309	6888	5497	43	49	-103.21	292	-2049	822	738	83.49	9.842	
6600	5310	6988	5498	45	51	-103.21	363	-2120	822	734	87.81	9.361	
6700	5310	7088	5498	47	53	-103.21	433	-2191	822	730	92.18	8.920	
6800	5311	7188	5499	49	55	-103.20	504	-2261	822	726	96.59	8.515	
6900	5312	7288	5500	52	57	-103.20	575	-2332	823	722	101.05	8.142	
7000	5312	7388	5500	54	59	-103.20	646	-2403	823	718	105.54	7.798	
7100	5313	7488	5501	56	62	-103.19	716	-2473	823	713	110.06	7.481	
7200	5313	7588	5501	59	64	-103.19	787	-2544	824	709	114.61	7.186	
7300	5314	7688	5502	61	66	-103.19	858	-2615	824	705	119.18	6.913	
7400	5315	7788	5503	63	68	-103.18	929	-2685	824	700	123.77	6.659	
7500	5315	7888	5503	66	70	-103.18	1000	-2756	824	696	128.38	6.422	
7600	5316	7988	5504	68	73	-103.18	1070	-2827	825	692	133.01	6.200	
7700	5316	8088	5504	70	75	-103.18	1141	-2897	825	687	137.66	5.993	
7800	5317	8188	5505	73	77	-103.17	1212	-2968	825	683	142.31	5.799	
7900	5318	8288	5506	75	79	-103.17	1283	-3038	826	679	146.98	5.616	
8000	5318	8388	5506	77	82	-103.17	1353	-3109	826	674	151.67	5.445	
8100	5319	8488	5507	80	84	-103.16	1424	-3180	826	670	156.36	5.283	
8200	5319	8588	5507	82	86	-103.16	1495	-3250	826	665	161.06	5.131	
8300	5320	8688	5508	85	89	-103.16	1566	-3321	827	661	165.77	4.987	
8400	5320	8788	5509	87	91	-103.15	1637	-3392	827	656	170.49	4.850	
8500	5321	8888	5509	89	93	-103.15	1707	-3462	827	652	175.21	4.721	
8600	5322	8988	5510	92	96	-103.15	1778	-3533	827	648	179.94	4.598	
8700	5322	9088	5510	94	98	-103.15	1849	-3604	828	643	184.68	4.482	
8800	5323	9188	5511	97	100	-103.14	1920	-3674	828	639	189.43	4.371	
8900	5323	9288	5512	99	103	-103.14	1990	-3745	828	634	194.18	4.266	
9000	5324	9388	5512	102	105	-103.14	2061	-3816	829	630	198.93	4.165	
9100	5325	9488	5513	104	108	-103.13	2132	-3886	829	625	203.69	4.069	
9200	5325	9588	5513	106	110	-103.13	2203	-3957	829	621	208.45	3.977	
9300	5326	9688	5514	109	112	-103.13	2273	-4028	829	616	213.22	3.890	
9400	5326	9788	5515	111	115	-103.12	2344	-4098	830	612	217.99	3.806	
9500	5327	9888	5515	114	117	-103.12	2415	-4169	830	607	222.77	3.726	
9600	5328	9988	5516	116	120	-103.12	2486	-4239	830	603	227.54	3.649	
9700	5328	10,088	5517	119	122	-103.12	2557	-4310	831	598	232.33	3.575	
9800	5329	10,188	5517	121	124	-103.11	2627	-4381	831	594	237.11	3.504	
9900	5329	10,288	5518	123	127	-103.11	2698	-4451	831	589	241.90	3.436	
10,000	5330	10,388	5518	126	129	-103.11	2769	-4522	831	585	246.69	3.370	
10,100	5330	10,488	5519	128	132	-103.10	2840	-4593	832	580	251.48	3.307	
10,200	5331	10,588	5520	131	134	-103.10	2910	-4663	832	576	256.27	3.246	
10,300	5332	10,688	5520	133	137	-103.10	2981	-4734	832	571	261.07	3.187	
10,400	5332	10,788	5521	136	139	-103.09	3052	-4805	832	567	265.87	3.131	
10,500	5333	10,888	5521	138	141	-103.09	3123	-4875	833	562	270.67	3.076	
10,600	5333	10,988	5522	141	144	-103.09	3193	-4946	833	558	275.47	3.024	
10,700	5334	11,088	5523	143	146	-103.09	3264	-5017	833	553	280.28	2.973	
10,800	5335	11,188	5523	146	149	-103.08	3335	-5087	834	548	285.08	2.924	
10,900	5335	11,288	5524	148	151	-103.08	3406	-5158	834	544	289.89	2.876	
11,000	5336	11,388	5524	150	154	-103.08	3477	-5229	834	539	294.70	2.830	
11,100	5336	11,488	5525	153	156	-103.07	3547	-5299	834	535	299.51	2.786	
11,200	5337	11,588	5526	155	158	-103.07	3618	-5370	835	530	304.32	2.743	
11,300	5337	11,688	5526	158	161	-103.07	3689	-5440	835	526	309.14	2.701	
11,400	5338	11,788	5527	160	163	-103.07	3760	-5511	835	521	313.95	2.660	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 316H - Slot 6
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 316H	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: B26 2306 Pad - # 310H - 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		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)			
11,500	5339	11,888	5527	163	166	-103.06	3830	-5582	835	517	318.77	2.621	
11,600	5339	11,988	5528	165	168	-103.06	3901	-5652	836	512	323.59	2.583	
11,700	5340	12,088	5529	168	171	-103.06	3972	-5723	836	508	328.41	2.546	
11,800	5340	12,188	5529	170	173	-103.05	4043	-5794	836	503	333.23	2.510	
11,900	5341	12,288	5530	173	176	-103.05	4113	-5864	837	499	338.05	2.475	
12,000	5342	12,388	5530	175	178	-103.05	4184	-5935	837	494	342.87	2.441	
12,100	5342	12,488	5531	178	180	-103.04	4255	-6006	837	489	347.69	2.408	
12,200	5343	12,588	5532	180	183	-103.04	4326	-6076	837	485	352.51	2.376	
12,300	5343	12,688	5532	182	185	-103.04	4397	-6147	838	480	357.34	2.344	
12,400	5344	12,788	5533	185	188	-103.04	4467	-6218	838	476	362.16	2.314	
12,500	5345	12,888	5534	187	190	-103.03	4538	-6288	838	471	366.99	2.284	
12,600	5345	12,988	5534	190	193	-103.03	4609	-6359	839	467	371.82	2.255	
12,700	5346	13,088	5535	192	195	-103.03	4680	-6430	839	462	376.65	2.227	
12,800	5346	13,188	5535	195	198	-103.02	4750	-6500	839	458	381.48	2.200	
12,900	5347	13,288	5536	197	200	-103.02	4821	-6571	839	453	386.31	2.173	
13,000	5347	13,388	5537	200	203	-103.02	4892	-6641	840	448	391.14	2.147	
13,100	5348	13,488	5537	202	205	-103.02	4963	-6712	840	444	395.97	2.121	
13,200	5349	13,588	5538	205	207	-103.01	5033	-6783	840	439	400.80	2.096	
13,300	5349	13,688	5538	207	210	-103.01	5104	-6853	840	435	405.63	2.072	
13,400	5350	13,788	5539	210	212	-103.01	5175	-6924	841	430	410.46	2.048	
13,434	5350	13,822	5539	210	213	-103.01	5199	-6948	841	429	412.11	2.040 SF	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 316H - Slot 6
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 316H	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: B26 2306 Pad - # 311H - 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)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)			
0	0	0	0	0	0	109.56	-20	56	60					
100	100	100	100	0	0	109.56	-20	56	60	59	0.31	193.988		
200	200	200	200	1	1	109.56	-20	56	60	59	1.03	58.332		
300	300	300	300	1	1	109.56	-20	56	60	58	1.74	34.327		
400	400	400	400	1	1	109.56	-20	56	60	57	2.46	24.319 CC		
400	400	400	400	1	1	109.56	-20	56	60	57	2.46	24.319		
500	500	500	500	2	2	-144.06	-20	56	60	57	3.16	18.947 ES		
600	600	601	601	2	2	-143.01	-23	53	61	57	3.85	15.918		
700	700	702	702	2	2	-141.02	-28	48	64	59	4.55	14.025		
800	799	803	802	3	3	-138.20	-35	41	68	62	5.28	12.799		
900	899	904	902	3	3	-133.37	-45	30	71	65	6.05	11.727		
1000	998	1004	1000	3	3	-126.37	-57	18	74	67	6.87	10.793		
1100	1097	1103	1097	4	4	-117.54	-71	3	78	70	7.73	10.111		
1200	1197	1202	1193	4	4	-107.53	-88	-14	84	76	8.62	9.791 SF		
1300	1296	1300	1288	5	5	-97.91	-106	-33	94	84	9.51	9.847		
1400	1396	1398	1383	5	6	-90.14	-124	-52	105	95	10.36	10.134		
1500	1495	1497	1478	5	6	-83.95	-142	-71	118	107	11.19	10.540		
1600	1594	1595	1573	6	7	-79.02	-159	-89	132	120	12.00	10.996		
1700	1694	1694	1668	6	7	-75.04	-177	-108	147	134	12.79	11.465		
1800	1793	1792	1763	7	8	-71.80	-195	-127	162	148	13.59	11.926		
1900	1893	1891	1858	7	8	-69.12	-213	-145	178	163	14.38	12.368		
2000	1992	1989	1953	7	9	-66.89	-231	-164	194	179	15.17	12.787		
2100	2092	2087	2048	8	10	-64.99	-249	-183	210	194	15.95	13.180		
2200	2191	2186	2143	8	10	-63.37	-267	-202	227	210	16.74	13.547		
2300	2290	2284	2238	9	11	-61.97	-285	-220	244	226	17.53	13.890		
2400	2390	2383	2333	9	11	-60.75	-303	-239	260	242	18.32	14.210		
2500	2489	2481	2428	10	12	-59.68	-321	-258	277	258	19.11	14.508		
2600	2589	2580	2522	10	13	-58.73	-339	-276	294	274	19.90	14.786		
2700	2688	2678	2617	10	13	-57.88	-357	-295	311	291	20.69	15.047		
2800	2787	2777	2712	11	14	-57.13	-374	-314	328	307	21.48	15.290		
2900	2887	2875	2807	11	14	-56.44	-392	-332	346	323	22.27	15.518		
3000	2986	2973	2902	12	15	-55.83	-410	-351	363	340	23.06	15.731		
3100	3086	3072	2997	12	16	-55.26	-428	-370	380	356	23.86	15.932		
3200	3185	3170	3092	12	16	-54.75	-446	-389	397	373	24.65	16.121		
3300	3284	3269	3187	13	17	-54.28	-464	-407	415	389	25.44	16.299		
3400	3384	3367	3282	13	17	-53.85	-482	-426	432	406	26.24	16.467		
3500	3483	3466	3377	14	18	-53.45	-500	-445	449	422	27.03	16.625		
3600	3583	3564	3472	14	19	-53.08	-518	-463	467	439	27.83	16.775		
3700	3682	3662	3567	14	19	-52.74	-536	-482	484	456	28.62	16.917		
3800	3782	3761	3662	15	20	-52.42	-554	-501	502	472	29.42	17.052		
3900	3881	3859	3757	15	20	-52.12	-572	-520	519	489	30.21	17.180		
4000	3980	3958	3852	16	21	-51.84	-589	-538	536	505	31.01	17.302		
4100	4080	4056	3947	16	22	-51.58	-607	-557	554	522	31.80	17.417		
4200	4179	4155	4042	17	22	-51.33	-625	-576	571	539	32.60	17.528		
4300	4279	4253	4137	17	23	-51.10	-643	-594	589	555	33.40	17.633		
4400	4378	4351	4232	17	23	-50.89	-661	-613	606	572	34.19	17.733		
4500	4477	4450	4327	18	24	-50.68	-679	-632	624	589	34.99	17.829		
4600	4577	4548	4422	18	25	-50.49	-697	-651	641	606	35.79	17.921		
4700	4676	4647	4517	19	25	-50.30	-715	-669	659	622	36.59	18.009		
4800	4775	4745	4611	19	26	-50.75	-733	-688	678	640	37.45	18.101		
4900	4872	4840	4704	20	26	-93.27	-750	-706	702	664	38.55	18.218		
5000	4963	4931	4791	20	27	-97.93	-767	-723	733	693	39.88	18.368		



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 316H - Slot 6
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 316H	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: B26 2306 Pad - # 311H - 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		Rule Assigned:	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor
5100	5048	5009	4866	21	28	-99.84	-781	-738	770	728	41.39	18.596
5200	5123	5050	4906	21	28	-98.78	-789	-745	816	773	42.76	19.071
5300	5187	5088	4943	22	28	-96.13	-799	-750	871	827	44.29	19.675
5400	5238	5100	4954	23	28	-90.02	-802	-751	936	890	45.57	20.538
5500	5275	5119	4972	24	28	-82.84	-808	-752	1007	960	47.00	21.419
5600	5298	5122	4975	26	28	-73.04	-808	-752	1082	1034	48.20	22.446
5700	5305	5118	4971	27	28	-63.29	-807	-752	1159	1110	49.28	23.522
5800	5305	5100	4954	29	28	-61.96	-802	-751	1238	1188	50.05	24.741
5900	5306	5100	4954	31	28	-61.96	-802	-751	1320	1269	50.93	25.919
6000	5306	5100	4954	32	28	-61.96	-802	-751	1404	1353	51.69	27.170
6100	5307	5100	4954	34	28	-61.96	-802	-751	1490	1438	52.33	28.481
6200	5308	5100	4954	36	28	-61.96	-802	-751	1578	1525	52.89	29.842
6300	5308	5100	4954	38	28	-61.96	-802	-751	1667	1614	53.37	31.244
6400	5309	5100	4954	41	28	-61.96	-802	-751	1758	1704	53.78	32.681
6500	5309	5100	4954	43	28	-61.96	-802	-751	1849	1795	54.15	34.147
6600	5310	5080	4935	45	28	-60.47	-797	-749	1941	1887	54.23	35.789



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 316H - Slot 6
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 316H	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: B26 2306 Pad - # 315H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference	Offset	Rule Assigned:											Warning	
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		
0	0	0	0	0	0	110.41	-7	19	20					
100	100	100	100	0	0	110.41	-7	19	20	20	0.31	64.332		
200	200	200	200	1	1	110.41	-7	19	20	19	1.03	19.345		
300	300	300	300	1	1	110.41	-7	19	20	18	1.74	11.384		
400	400	400	400	1	1	111.32	-7	18	20	17	2.45	7.956		
500	500	501	501	2	2	-135.07	-9	15	18	14	3.15	5.577		
600	600	601	601	2	2	-123.83	-11	9	16	12	3.85	4.197		
666	666	667	667	2	2	-115.08	-14	3	16	12	4.33	3.662 CC		
700	700	701	700	2	2	-111.19	-16	-1	16	11	4.58	3.489 ES		
800	799	801	799	3	3	-106.94	-20	-11	17	12	5.34	3.228		
900	899	901	899	3	3	-105.19	-25	-21	19	13	6.12	3.062		
1000	998	1001	998	3	3	-103.70	-29	-31	20	13	6.91	2.930		
1100	1097	1101	1098	4	4	-102.42	-34	-41	22	14	7.71	2.824		
1200	1197	1201	1197	4	4	-101.31	-39	-51	23	15	8.52	2.737		
1300	1296	1301	1296	5	5	-100.34	-43	-61	25	16	9.33	2.665		
1400	1396	1401	1396	5	5	-99.48	-48	-71	26	16	10.14	2.604		
1500	1495	1501	1495	5	6	-98.71	-52	-81	28	17	10.96	2.551		
1600	1594	1601	1594	6	6	-98.03	-57	-91	30	18	11.78	2.507		
1700	1694	1701	1694	6	6	-97.41	-62	-101	31	18	12.60	2.467		
1800	1793	1801	1793	7	7	-96.86	-66	-111	33	19	13.42	2.433		
1900	1893	1901	1893	7	7	-96.35	-71	-121	34	20	14.24	2.403		
2000	1992	2001	1992	7	8	-95.89	-75	-131	36	21	15.06	2.376		
2100	2092	2101	2091	8	8	-95.47	-80	-141	37	21	15.88	2.352		
2200	2191	2201	2191	8	8	-95.08	-85	-151	39	22	16.71	2.330		
2300	2290	2301	2290	9	9	-94.72	-89	-162	41	23	17.53	2.310		
2400	2390	2401	2389	9	9	-94.39	-94	-172	42	24	18.36	2.293		
2500	2489	2501	2489	10	10	-94.08	-98	-182	44	24	19.18	2.276		
2600	2589	2601	2588	10	10	-93.80	-103	-192	45	25	20.01	2.261		
2700	2688	2701	2688	10	10	-93.53	-107	-202	47	26	20.83	2.248		
2800	2787	2801	2787	11	11	-93.28	-112	-212	48	27	21.66	2.235		
2900	2887	2901	2886	11	11	-93.05	-117	-222	50	28	22.48	2.223		
3000	2986	3001	2986	12	12	-92.83	-121	-232	52	28	23.31	2.213		
3100	3086	3101	3085	12	12	-92.62	-126	-242	53	29	24.13	2.203		
3200	3185	3201	3184	12	13	-92.43	-130	-252	55	30	24.96	2.193		
3300	3284	3301	3284	13	13	-92.25	-135	-262	56	31	25.79	2.184		
3400	3384	3401	3383	13	13	-92.07	-140	-272	58	31	26.61	2.176		
3500	3483	3501	3483	14	14	-91.91	-144	-282	60	32	27.44	2.168		
3600	3583	3601	3582	14	14	-91.75	-149	-292	61	33	28.27	2.161		
3700	3682	3701	3681	14	15	-91.61	-153	-302	63	34	29.09	2.154		
3800	3782	3801	3781	15	15	-91.47	-158	-312	64	34	29.92	2.148		
3900	3881	3901	3880	15	15	-91.33	-162	-322	66	35	30.74	2.142		
4000	3980	4001	3979	16	16	-91.21	-167	-332	67	36	31.57	2.136		
4100	4080	4100	4079	16	16	-91.09	-172	-342	69	37	32.40	2.131		
4200	4179	4200	4178	17	17	-90.97	-176	-352	71	37	33.22	2.125		
4300	4279	4300	4278	17	17	-90.86	-181	-362	72	38	34.05	2.121		
4400	4378	4400	4377	17	18	-90.75	-185	-372	74	39	34.88	2.116		
4500	4477	4500	4476	18	18	-90.65	-190	-383	75	40	35.70	2.111		
4600	4577	4600	4576	18	18	-90.55	-195	-393	77	40	36.53	2.107 SF		
4700	4676	4697	4671	19	19	-90.77	-200	-402	79	42	37.29	2.130		
4800	4775	4784	4758	19	19	-125.75	-211	-403	96	58	37.56	2.547		
4900	4872	4861	4833	20	19	-144.07	-228	-397	138	100	37.23	3.694		
5000	4963	4920	4889	20	20	-152.01	-245	-388	202	165	36.59	5.516		



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 316H - Slot 6
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 316H	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: B26 2306 Pad - # 315H - 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)			
5100	5048	4962	4927	21	20	-154.87	-260	-379	283	247	35.98	7.853	
5200	5123	4988	4950	21	20	-153.18	-269	-373	374	338	35.55	10.515	
5300	5187	5000	4961	22	20	-139.62	-274	-370	471	436	35.29	13.346	
5400	5238	5000	4961	23	20	-52.93	-274	-370	571	535	35.19	16.214	
5500	5275	5000	4961	24	20	-12.20	-274	-370	670	634	35.51	18.857	
5600	5298	5000	4961	26	20	-4.08	-274	-370	767	730	36.08	21.247	
5700	5305	4970	4934	27	20	-0.59	-262	-377	859	823	36.07	23.803	
5800	5305	4950	4916	29	20	-0.29	-255	-382	950	913	36.38	26.106	
5900	5306	4950	4916	31	20	-0.29	-255	-382	1042	1005	36.98	28.180	
6000	5306	4924	4892	32	20	0.07	-246	-387	1135	1098	37.02	30.655	
6100	5307	4900	4870	34	19	0.37	-239	-391	1229	1191	37.06	33.149	
6200	5308	4900	4870	36	19	0.37	-239	-391	1323	1285	37.43	35.333	
6300	5308	4900	4870	38	19	0.37	-239	-391	1418	1380	37.74	37.560	
6400	5309	4882	4852	41	19	0.58	-234	-394	1513	1475	37.78	40.044	
6500	5309	4873	4845	43	19	0.67	-231	-395	1609	1571	37.92	42.421	
6600	5310	4850	4822	45	19	0.92	-225	-398	1705	1667	37.87	45.016	
6700	5310	4850	4822	47	19	0.92	-225	-398	1801	1763	38.07	47.310	
6800	5311	4850	4822	49	19	0.92	-225	-398	1898	1859	38.24	49.622	
6900	5312	4850	4822	52	19	0.92	-225	-398	1995	1956	38.40	51.948	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 316H - Slot 6
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 316H	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: B26 2306 Pad - # 401H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference	Offset	Rule Assigned:												
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
							+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0	0	0	0	0	0	109.59	-33	94	100					
100	100	100	100	0	0	109.59	-33	94	100	100	0.31	324.047		
200	200	200	200	1	1	109.59	-33	94	100	99	1.03	97.441		
300	300	300	300	1	1	109.59	-33	94	100	98	1.74	57.342		
400	400	400	400	1	1	109.59	-33	94	100	97	2.46	40.624 CC		
400	400	400	400	1	1	109.59	-33	94	100	97	2.46	40.616		
500	500	500	500	2	2	-144.06	-34	94	100	97	3.16	31.677 ES		
600	600	601	601	2	2	-143.24	-37	92	103	99	3.84	26.702		
700	700	701	701	2	2	-141.69	-43	89	107	103	4.54	23.629		
800	799	801	800	3	3	-139.56	-53	84	114	109	5.27	21.698		
900	899	900	899	3	3	-136.31	-65	78	122	116	6.03	20.226		
1000	998	1000	996	3	3	-131.95	-80	70	130	123	6.83	19.059		
1100	1097	1098	1092	4	4	-126.77	-98	60	140	132	7.67	18.204		
1200	1197	1196	1188	4	4	-121.23	-119	50	151	142	8.53	17.660		
1300	1296	1294	1283	5	5	-116.35	-139	39	163	154	9.40	17.339		
1400	1396	1392	1378	5	5	-112.18	-160	28	176	166	10.27	17.172		
1500	1495	1491	1474	5	6	-108.60	-181	17	191	180	11.14	17.109 SF		
1600	1594	1589	1569	6	6	-105.52	-202	7	206	194	12.01	17.115		
1700	1694	1687	1665	6	7	-102.86	-223	-4	221	208	12.87	17.166		
1800	1793	1786	1760	7	8	-100.55	-244	-15	237	223	13.72	17.245		
1900	1893	1884	1856	7	8	-98.53	-264	-26	253	238	14.57	17.342		
2000	1992	1982	1951	7	9	-96.75	-285	-37	269	254	15.42	17.450		
2100	2092	2081	2047	8	9	-95.17	-306	-48	286	269	16.27	17.563		
2200	2191	2179	2142	8	10	-93.77	-327	-58	303	285	17.11	17.679		
2300	2290	2277	2238	9	10	-92.51	-348	-69	319	302	17.95	17.794		
2400	2390	2376	2333	9	11	-91.39	-369	-80	337	318	18.79	17.908		
2500	2489	2474	2429	10	11	-90.37	-389	-91	354	334	19.63	18.019		
2600	2589	2572	2524	10	12	-89.44	-410	-102	371	351	20.47	18.127		
2700	2688	2671	2620	10	13	-88.60	-431	-113	388	367	21.31	18.231		
2800	2787	2769	2715	11	13	-87.83	-452	-123	406	384	22.14	18.331		
2900	2887	2867	2811	11	14	-87.12	-473	-134	423	400	22.98	18.427		
3000	2986	2966	2906	12	14	-86.47	-494	-145	441	417	23.81	18.520		
3100	3086	3064	3002	12	15	-85.87	-514	-156	459	434	24.64	18.609		
3200	3185	3162	3097	12	15	-85.31	-535	-167	476	451	25.48	18.694		
3300	3284	3261	3193	13	16	-84.79	-556	-178	494	468	26.31	18.775		
3400	3384	3359	3288	13	17	-84.31	-577	-188	512	485	27.14	18.853		
3500	3483	3457	3384	14	17	-83.86	-598	-199	530	502	27.98	18.928		
3600	3583	3556	3479	14	18	-83.44	-618	-210	547	519	28.81	18.999		
3700	3682	3654	3575	14	18	-83.05	-639	-221	565	536	29.64	19.068		
3800	3782	3752	3670	15	19	-82.68	-660	-232	583	553	30.47	19.133		
3900	3881	3851	3766	15	19	-82.33	-681	-242	601	570	31.30	19.196		
4000	3980	3949	3861	16	20	-82.00	-702	-253	619	587	32.14	19.257		
4100	4080	4047	3956	16	21	-81.70	-723	-264	637	604	32.97	19.315		
4200	4179	4145	4052	17	21	-81.40	-743	-275	655	621	33.80	19.371		
4300	4279	4244	4147	17	22	-81.13	-764	-286	673	638	34.63	19.424		
4400	4378	4342	4243	17	22	-80.86	-785	-297	691	655	35.46	19.476		
4500	4477	4440	4338	18	23	-80.62	-806	-307	709	672	36.29	19.525		
4600	4577	4539	4434	18	23	-80.38	-827	-318	727	689	37.12	19.573		
4700	4676	4630	4522	19	24	-80.17	-846	-328	745	707	37.89	19.656		
4800	4775	4680	4571	19	24	-110.64	-858	-332	770	732	38.25	20.126		
4900	4872	4725	4614	20	24	-121.92	-872	-333	812	773	38.63	21.011		
5000	4963	4750	4637	20	25	-123.31	-880	-332	869	830	38.81	22.386		



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 316H - Slot 6
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 316H	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: B26 2306 Pad - # 401H - 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		Rule Assigned:		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)	Minimum Separation (ft)	Separation Factor		
5100	5048	4800	4684	21	25	-121.49	-899	-329	938	899	39.54	23.730		
5200	5123	4800	4684	21	25	-113.34	-899	-329	1018	978	39.59	25.708		
5300	5187	4825	4706	22	25	-102.21	-909	-327	1104	1064	40.24	27.438		
5400	5238	4830	4711	23	25	-84.55	-911	-326	1195	1154	40.71	29.344		
5500	5275	4829	4710	24	25	-64.24	-911	-326	1287	1245	41.21	31.216		
5600	5298	4824	4705	26	25	-46.67	-908	-327	1378	1336	41.74	33.002		
5700	5305	4800	4684	27	25	-34.25	-899	-329	1466	1424	42.07	34.840		
5800	5305	4800	4684	29	25	-34.25	-899	-329	1553	1510	42.77	36.312		
5900	5306	4800	4684	31	25	-34.25	-899	-329	1641	1598	43.37	37.846		
6000	5306	4800	4684	32	25	-34.25	-899	-329	1731	1687	43.90	39.433		
6100	5307	4775	4661	34	25	-32.94	-889	-331	1821	1777	44.05	41.346		
6200	5308	4750	4637	36	25	-31.66	-880	-332	1913	1869	44.17	43.312		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 316H - Slot 6
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 316H	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: B26 2306 Pad - # 402H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference	Offset	Rule Assigned:											Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0	0	0	0	0	0	109.45	-27	75	80					
100	100	100	100	0	0	109.45	-27	75	80	79	0.31	258.820		
200	200	200	200	1	1	109.45	-27	75	80	79	1.03	77.827		
300	300	300	300	1	1	109.45	-27	75	80	78	1.74	45.800		
400	400	400	400	1	1	109.45	-27	75	80	77	2.46	32.447 CC		
400	400	400	400	1	1	109.45	-27	75	80	77	2.46	32.439		
500	500	500	500	2	2	-144.18	-27	75	80	77	3.16	25.297 ES		
600	600	601	601	2	2	-143.21	-30	73	82	78	3.84	21.326		
700	700	702	701	2	2	-141.39	-36	69	86	81	4.55	18.890		
800	799	802	801	3	3	-138.88	-44	63	92	86	5.28	17.369		
900	899	902	900	3	3	-134.94	-56	55	98	92	6.04	16.161		
1000	998	1002	998	3	3	-129.57	-70	45	104	97	6.85	15.176		
1100	1097	1100	1095	4	4	-123.13	-87	33	111	104	7.70	14.464		
1200	1197	1199	1191	4	4	-116.66	-105	21	120	112	8.57	14.047		
1300	1296	1298	1287	5	5	-111.14	-124	8	131	121	9.44	13.843		
1400	1396	1397	1383	5	5	-106.45	-142	-5	142	132	10.31	13.779		
1500	1495	1495	1479	5	6	-102.48	-161	-18	154	143	11.17	13.806		
1600	1594	1594	1576	6	6	-99.09	-179	-30	167	155	12.03	13.888		
1700	1694	1693	1672	6	7	-96.19	-198	-43	180	167	12.88	14.005		
1800	1793	1791	1768	7	8	-93.69	-216	-56	194	180	13.72	14.141		
1900	1893	1890	1864	7	8	-91.53	-234	-69	208	194	14.57	14.287		
2000	1992	1989	1960	7	9	-89.63	-253	-81	222	207	15.40	14.437		
2100	2092	2088	2056	8	9	-87.97	-271	-94	237	221	16.24	14.587		
2200	2191	2186	2152	8	10	-86.50	-290	-107	252	234	17.07	14.735		
2300	2290	2285	2249	9	10	-85.19	-308	-120	266	248	17.90	14.878		
2400	2390	2384	2345	9	11	-84.02	-327	-132	281	263	18.73	15.016		
2500	2489	2483	2441	10	11	-82.96	-345	-145	296	277	19.56	15.149		
2600	2589	2581	2537	10	12	-82.01	-363	-158	311	291	20.39	15.276		
2700	2688	2680	2633	10	12	-81.15	-382	-171	327	305	21.21	15.398		
2800	2787	2779	2729	11	13	-80.36	-400	-183	342	320	22.04	15.514		
2900	2887	2877	2825	11	14	-79.64	-419	-196	357	334	22.86	15.624		
3000	2986	2976	2922	12	14	-78.98	-437	-209	373	349	23.69	15.729		
3100	3086	3075	3018	12	15	-78.37	-456	-222	388	363	24.51	15.829		
3200	3185	3174	3114	12	15	-77.81	-474	-234	403	378	25.33	15.925		
3300	3284	3272	3210	13	16	-77.29	-493	-247	419	393	26.16	16.015		
3400	3384	3371	3306	13	16	-76.81	-511	-260	434	407	26.98	16.102		
3500	3483	3470	3402	14	17	-76.36	-529	-273	450	422	27.80	16.185		
3600	3583	3569	3498	14	17	-75.94	-548	-285	466	437	28.63	16.263		
3700	3682	3667	3595	14	18	-75.55	-566	-298	481	452	29.45	16.339		
3800	3782	3766	3691	15	18	-75.18	-585	-311	497	467	30.27	16.411		
3900	3881	3865	3787	15	19	-74.83	-603	-324	512	481	31.10	16.479		
4000	3980	3963	3883	16	20	-74.51	-622	-336	528	496	31.92	16.545		
4100	4080	4062	3979	16	20	-74.20	-640	-349	544	511	32.74	16.608		
4200	4179	4161	4075	17	21	-73.91	-658	-362	559	526	33.56	16.668		
4300	4279	4260	4172	17	21	-73.64	-677	-375	575	541	34.39	16.726		
4400	4378	4358	4268	17	22	-73.38	-695	-387	591	556	35.21	16.782		
4500	4477	4457	4364	18	22	-73.14	-714	-400	607	571	36.03	16.835		
4600	4577	4572	4475	18	23	-72.84	-735	-415	622	585	36.99	16.822		
4700	4676	4839	4729	19	24	-67.87	-737	-495	620	582	37.71	16.432		
4800	4775	5086	4924	19	25	-89.49	-671	-626	597	560	36.63	16.289		
4900	4872	5246	5018	20	26	-95.02	-595	-733	571	534	36.97	15.457		
5000	4963	5371	5067	20	26	-93.21	-523	-821	550	511	38.54	14.268		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 316H - Slot 6
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 316H	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: B26 2306 Pad - # 402H - Original Drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF												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	
5100	5048	5474	5090	21	27	-89.41	-456	-896	535	495	40.72	13.146	
5200	5123	5564	5098	21	28	-84.75	-394	-961	529	486	42.97	12.303	
5230	5143	5587	5098	22	28	-83.44	-378	-977	528	485	43.67	12.098	
5300	5187	5642	5098	22	29	-80.20	-340	-1016	530	485	45.17	11.736	
5400	5238	5728	5099	23	30	-75.52	-279	-1077	537	490	47.39	11.329	
5500	5275	5821	5099	24	31	-71.62	-214	-1143	545	496	49.43	11.027	
5600	5298	5918	5100	26	32	-69.14	-145	-1213	551	499	52.11	10.580	
5700	5305	6018	5101	27	34	-68.38	-75	-1284	554	499	55.25	10.026	
5800	5305	6118	5101	29	36	-68.41	-5	-1355	555	496	58.70	9.449	
5900	5306	6218	5102	31	37	-68.45	66	-1426	555	493	62.31	8.914	
6000	5306	6318	5102	32	39	-68.48	136	-1497	556	490	66.06	8.420	
6100	5307	6418	5103	34	41	-68.52	206	-1568	557	487	69.92	7.967	
6200	5308	6518	5104	36	43	-68.55	277	-1639	558	484	73.88	7.551	
6300	5308	6618	5104	38	45	-68.59	347	-1710	559	481	77.92	7.170	
6400	5309	6718	5105	41	48	-68.62	417	-1781	559	477	82.03	6.821	
6500	5309	6818	5105	43	50	-68.66	488	-1852	560	474	86.20	6.500	
6600	5310	6918	5106	45	52	-68.69	558	-1923	561	471	90.41	6.206	
6700	5310	7018	5107	47	54	-68.73	628	-1994	562	467	94.68	5.935	
6800	5311	7118	5107	49	56	-68.76	699	-2065	563	464	98.98	5.685	
6900	5312	7218	5108	52	59	-68.80	769	-2136	564	460	103.32	5.454	
7000	5312	7318	5108	54	61	-68.83	840	-2207	564	457	107.69	5.240	
7100	5313	7418	5109	56	63	-68.86	910	-2278	565	453	112.08	5.042	
7200	5313	7518	5110	59	66	-68.90	980	-2350	566	449	116.50	4.858	
7300	5314	7618	5110	61	68	-68.93	1051	-2421	567	446	120.94	4.686	
7400	5315	7718	5111	63	70	-68.97	1121	-2492	568	442	125.40	4.526	
7500	5315	7818	5111	66	73	-69.00	1191	-2563	568	438	129.88	4.376	
7600	5316	7918	5112	68	75	-69.03	1262	-2634	569	435	134.38	4.236	
7700	5316	8018	5113	70	77	-69.07	1332	-2705	570	431	138.89	4.104	
7800	5317	8118	5113	73	80	-69.10	1402	-2776	571	427	143.41	3.980	
7900	5318	8218	5114	75	82	-69.13	1473	-2847	572	424	147.95	3.864	
8000	5318	8318	5115	77	84	-69.17	1543	-2918	572	420	152.49	3.754	
8100	5319	8418	5115	80	87	-69.20	1613	-2989	573	416	157.05	3.650	
8200	5319	8518	5116	82	89	-69.23	1684	-3060	574	412	161.62	3.552	
8300	5320	8618	5116	85	92	-69.26	1754	-3131	575	409	166.20	3.459	
8400	5320	8718	5117	87	94	-69.30	1824	-3202	576	405	170.78	3.371	
8500	5321	8818	5118	89	96	-69.33	1895	-3273	576	401	175.37	3.287	
8600	5322	8918	5118	92	99	-69.36	1965	-3344	577	397	179.98	3.207	
8700	5322	9018	5119	94	101	-69.40	2035	-3416	578	393	184.58	3.132	
8800	5323	9118	5119	97	104	-69.43	2106	-3487	579	390	189.20	3.060	
8900	5323	9218	5120	99	106	-69.46	2176	-3558	580	386	193.82	2.991	
9000	5324	9318	5121	102	109	-69.49	2246	-3629	580	382	198.45	2.925	
9100	5325	9418	5121	104	111	-69.52	2317	-3700	581	378	203.08	2.862	
9200	5325	9518	5122	106	113	-69.56	2387	-3771	582	374	207.72	2.802	
9300	5326	9618	5122	109	116	-69.59	2458	-3842	583	371	212.36	2.745	
9400	5326	9718	5123	111	118	-69.62	2528	-3913	584	367	217.01	2.690	
9500	5327	9818	5124	114	121	-69.65	2598	-3984	585	363	221.66	2.637	
9600	5328	9918	5124	116	123	-69.68	2669	-4055	585	359	226.32	2.586	
9700	5328	10,018	5125	119	126	-69.72	2739	-4126	586	355	230.98	2.538	
9800	5329	10,118	5125	121	128	-69.75	2809	-4197	587	351	235.64	2.491	
9900	5329	10,218	5126	123	130	-69.78	2880	-4268	588	347	240.31	2.446	
10,000	5330	10,318	5127	126	133	-69.81	2950	-4339	589	344	244.98	2.403	
10,100	5330	10,418	5127	128	135	-69.84	3020	-4410	589	340	249.66	2.361	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 316H - Slot 6
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 316H	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: B26 2306 Pad - # 402H - 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		
10,200	5331	10,518	5128	131	138	-69.87	3091	-4481	590	336	254.34	2.321		
10,300	5332	10,618	5129	133	140	-69.90	3161	-4553	591	332	259.03	2.282		
10,400	5332	10,718	5129	136	143	-69.93	3231	-4624	592	328	263.71	2.244		
10,500	5333	10,818	5130	138	145	-69.97	3302	-4695	593	324	268.40	2.208		
10,600	5333	10,918	5130	141	148	-70.00	3372	-4766	593	320	273.10	2.173		
10,700	5334	11,018	5131	143	150	-70.03	3442	-4837	594	317	277.79	2.139		
10,800	5335	11,118	5132	146	153	-70.06	3513	-4908	595	313	282.49	2.107		
10,900	5335	11,218	5132	148	155	-70.09	3583	-4979	596	309	287.19	2.075		
11,000	5336	11,318	5133	150	157	-70.12	3653	-5050	597	305	291.90	2.044		
11,100	5336	11,418	5133	153	160	-70.15	3724	-5121	598	301	296.61	2.015		
11,200	5337	11,518	5134	155	162	-70.18	3794	-5192	598	297	301.32	1.986		
11,300	5337	11,618	5135	158	165	-70.21	3864	-5263	599	293	306.03	1.958		
11,400	5338	11,718	5135	160	167	-70.24	3935	-5334	600	289	310.74	1.931		
11,500	5339	11,818	5136	163	170	-70.27	4005	-5405	601	285	315.46	1.905		
11,600	5339	11,918	5136	165	172	-70.30	4075	-5476	602	281	320.18	1.879		
11,700	5340	12,018	5137	168	175	-70.33	4146	-5547	602	278	324.90	1.854		
11,800	5340	12,118	5138	170	177	-70.36	4216	-5619	603	274	329.63	1.830		
11,900	5341	12,218	5138	173	180	-70.39	4287	-5690	604	270	334.36	1.807		
12,000	5342	12,318	5139	175	182	-70.42	4357	-5761	605	266	339.09	1.784		
12,100	5342	12,418	5139	178	185	-70.45	4427	-5832	606	262	343.82	1.762		
12,200	5343	12,518	5140	180	187	-70.48	4498	-5903	607	258	348.55	1.740		
12,300	5343	12,618	5141	182	189	-70.51	4568	-5974	607	254	353.29	1.719		
12,400	5344	12,718	5141	185	192	-70.54	4638	-6045	608	250	358.02	1.699		
12,500	5345	12,818	5142	187	194	-70.57	4709	-6116	609	246	362.76	1.679		
12,600	5345	12,918	5142	190	197	-70.60	4779	-6187	610	242	367.50	1.659		
12,700	5346	13,018	5143	192	199	-70.62	4849	-6258	611	238	372.25	1.640		
12,800	5346	13,118	5144	195	202	-70.65	4920	-6329	611	234	376.99	1.622		
12,900	5347	13,218	5144	197	204	-70.68	4990	-6400	612	230	381.74	1.604		
13,000	5347	13,318	5145	200	207	-70.71	5060	-6471	613	227	386.49	1.586		
13,100	5348	13,418	5146	202	209	-70.74	5131	-6542	614	223	391.24	1.569		
13,200	5349	13,518	5146	205	212	-70.77	5201	-6613	615	219	395.99	1.552		
13,300	5349	13,618	5147	207	214	-70.80	5271	-6684	615	215	400.75	1.536		
13,400	5350	13,718	5147	210	217	-70.83	5342	-6756	616	211	405.50	1.520		
13,434	5350	13,752	5148	210	217	-70.84	5366	-6780	617	209	407.12	1.514 SF		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 316H - Slot 6
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 316H	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 6930' & RKB 14' @ 6944ft

Offset Depths are relative to Offset Datum

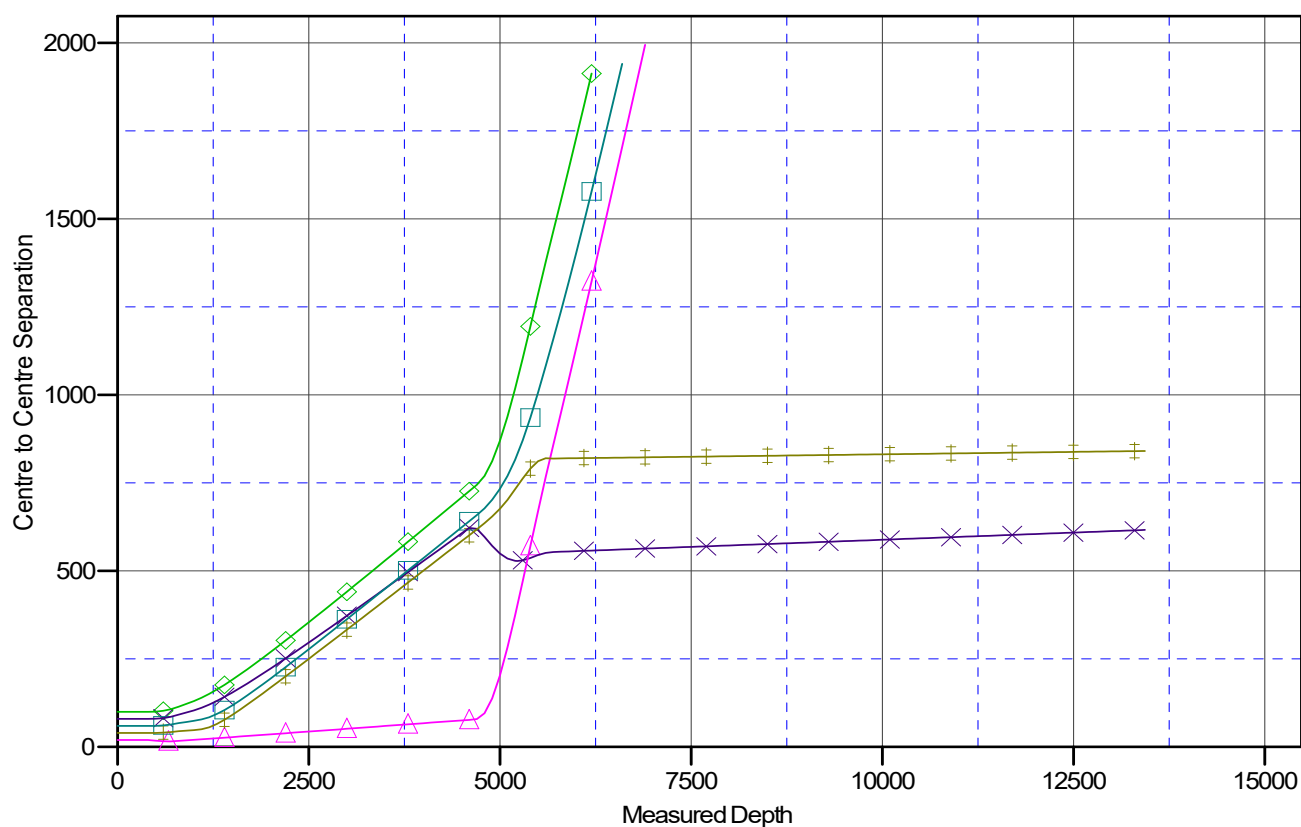
Central Meridian is -107.8333333

Coordinates are relative to: # 316H - Slot 6

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

Grid Convergence at Surface is: 0.24°

Ladder Plot



LEGEND

#401H Original Drilling, APDVO
 #402H Original Drilling, APDVO
 #315H Original Drilling, APDVO
 #310H Original Drilling, APDVO
 #311H Original Drilling, APDVO



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 316H - Slot 6
Project:	Gallo Canyon Unit	TVD Reference:	GL 6930' & RKB 14' @ 6944ft
Reference Site:	B26 2306 Pad	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 316H	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 6930' & RKB 14' @ 6944ft

Offset Depths are relative to Offset Datum

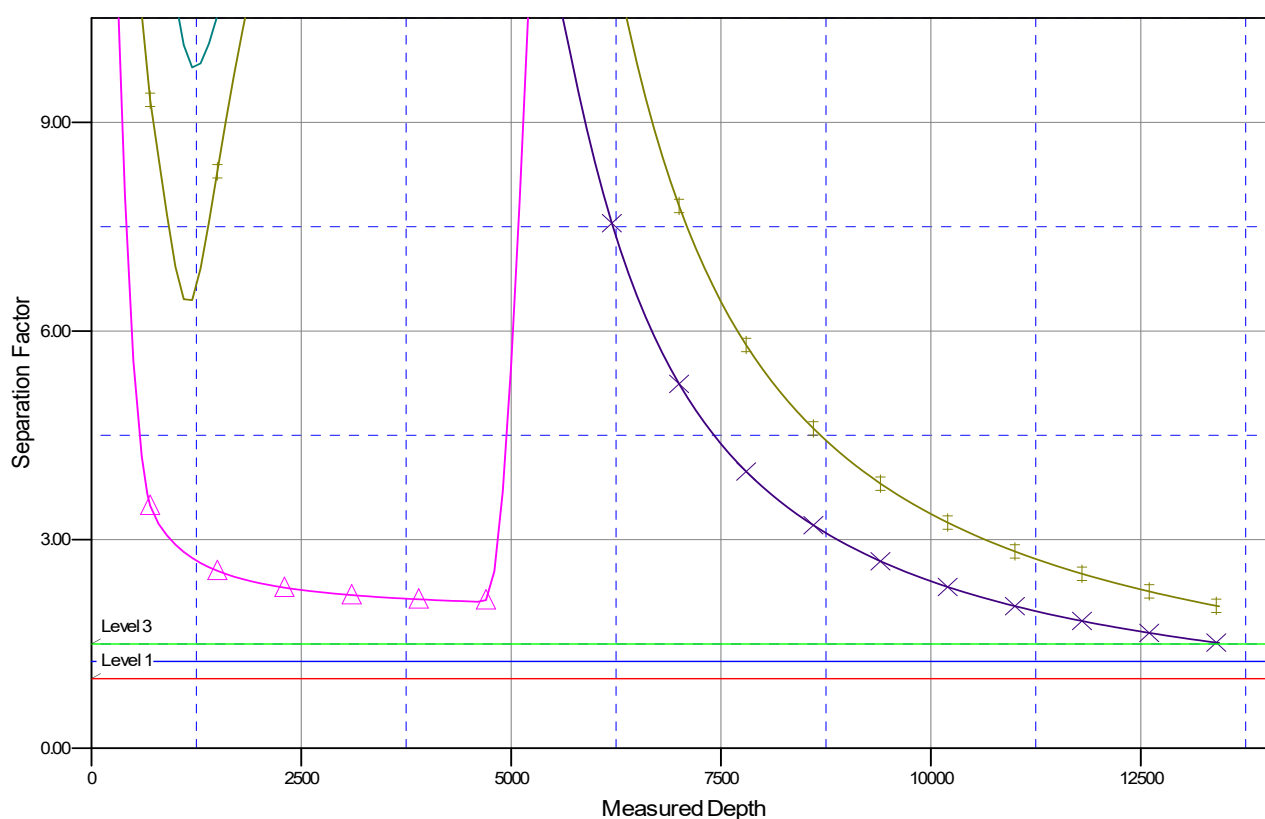
Central Meridian is -107.8333333

Coordinates are relative to: # 316H - Slot 6

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

Grid Convergence at Surface is: 0.24°

Separation Factor Plot



LEGEND

401H Original Drilling, APOVD
 # 315H Original Drilling, APOVD
 # 311H Original Drilling, APOVD
 # 402H Original Drilling, APOVD
 # 310H Original Drilling, APOVD



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

#316H GALLO CANYON UNIT

Lease: NMNM118128 Agreement: NMNM131017A

SH: NW¼NE¼ Section 26, T. 23 N., R. 6 W.

Sandoval County, New Mexico

BH: NW¼NE¼ Section 22, T.23 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 all casing strings below the conductor 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. If pressure declines more than 10 percent in 30 minutes, corrective action shall be taken.
- D. ☐ 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.
- E. ☐ 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.

INTERIOR REGION 7 • UPPER COLORADO BASIN

COLORADO, NEW MEXICO, UTAH, WYOMING

I. GENERAL

- A. Full compliance with all applicable laws and regulations, 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.
- D. For Wildcat wells only, a drilling operations progress report is to be submitted, to the BLM-Field Office, weekly from the spud date until the well is completed and the Well Completion Report is filed. The report should be on 8-1/2 x 11 inch paper, and each page should identify the well by; operator's name, well number, location and lease number.
- 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. BOP equipment (except the annular preventer) shall be tested utilizing a test plug to full working pressure for 10 minutes. No bleed-off of pressure is acceptable. (See 43 CFR 3172.6(b)(9)(ii)).
- G. The operator shall have sufficient weighting materials and lost circulation materials on location in the event of a pressure kick or in the event of lost circulation. (See 43 CFR 3172.8(a)).
- H. The flare line(s) discharge shall be located not less than 100 feet from the well head, having straight lines unless turns are targeted with running tees, and shall be positioned downwind of the prevailing wind direction and shall be anchored. The flare system shall have an effective method for ignition. Where noncombustible gas is likely or expected to be vented, the system shall be provided supplemental fuel for ignition and to maintain a continuous flare. (See 43 CFR 3172.8(b)(7)).
- I. 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 sundry within three business days. **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 Virgil Lucero at 505-793-1836.**
- J. **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.**
- K. Unless drilling operations are commenced within three years according to 43 CFR 3171.14, approval of the Application for Permit to Drill will expire. No extensions will be granted.

- L. 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 times, unless the well is secured with blowout preventers or cement plugs.
- M. 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.
- N. **Commingling:** No production (oil, gas, and water) from the subject well should start until Sundry Notices (if necessary) granting variances from applicable regulations as related to commingling and off-lease measurement are approved by this office. (See 43 CFR 3173.14)

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 online through AFMSS 2 within 30 days after the work is completed.
 - 1. Provide 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 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 way 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 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.
- C. Production Startup Notification is required no later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site or resumes production in the case of a well which has been off production for more than 90 days. The operator shall notify the Authorized Officer by letter or Sundry Notice, Form 3160-5, or orally to be followed by a letter or Sundry Notice, of the date on which such production has begun or resumed. CFR 43 3162.4-1(c).

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 * Days, 20 MMCF following its (completion)(recompletion), or flowback has been routed to the production separator, whichever first occurs, without the prior, written approval of the authorized officer in accordance with 43 CFR 3179.81. 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 beginning of flowback following completion or recompletion.

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 to mitigate unanticipated conditions encountered during drilling operations, will require approval as set forth in Section 1.I.
- 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.I. 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.

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

CONDITIONS

Action 456439

CONDITIONS

Operator: DJR OPERATING, LLC 200 Energy Court Farmington, NM 87401	OGRID: 371838
	Action Number: 456439
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
scrues76	Cement is required to circulate on both surface and intermediate1 strings of casing.	4/28/2025
scrues76	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	4/28/2025
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	6/12/2025
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	6/12/2025
ward.rikala	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.	6/12/2025
ward.rikala	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.	6/12/2025