

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. 30-043-21527	
3a. Address		3b. Phone No. (include area code)	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		10. Field and Pool, or Exploratory 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)	
Title		Date	
Approved by (Signature)		Name (Printed/Typed)	
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: NWNW / 934 FNL / 1397 FEL / TWSP: 23N / RANGE: 6W / SECTION: 26 / LAT: 36.200839 / LONG: -107.433611 (TVD: 0 feet, MD: 0 feet)
PPP: SWNE / 2293 FNL / 1464 FEL / TWSP: 23N / RANGE: 6W / SECTION: 26 / LAT: 36.197107 / LONG: -107.433844 (TVD: 5087 feet, MD: 5518 feet)
PPP: NENW / 1 FNL / 1543 FWL / TWSP: 23N / RANGE: 6W / SECTION: 36 / LAT: 36.18879 / LONG: -107.423672 (TVD: 5090 feet, MD: 14642 feet)
PPP: NWSW / 1535 FSL / 1 FWL / TWSP: 23N / RANGE: 6W / SECTION: 25 / LAT: 36.193057 / LONG: -107.428891 (TVD: 5090 feet, MD: 14642 feet)
BHL: NESE / 1970 FSL / 330 FEL / TWSP: 23N / RANGE: 6W / SECTION: 36 / LAT: 36.179424 / LONG: -107.41222 (TVD: 5090 feet, MD: 14642 feet)

BLM Point of Contact

Name: CHRISTOPHER P WENMAN
Title: Natural Resource Specialist
Phone: (505) 564-7727
Email: cwenman@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 30-043-21527	Pool Code 13379	Pool Name COUNSELORS GALLUP - DAKOTA POOL
Property Code 325207	Property Name GALLO CANYON UNIT	Well Number 401H
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		934' NORTH	1397' EAST	36.200839° N	107.433611° W	SANDOVAL

Bottom Hole Location (BHL)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
I	36	23N	6W		1970' SOUTH	330' EAST	36.179424° N	107.412220° W	SANDOVAL

Dedicated Acres SEC 26: SW/NE, SE/NE, NW/SE, NE/SE & SE/SE (200 AC.); SEC 25: NW/SW, SW/SW & SE/SW (120 AC.); SEC 36: NW/NW, NE/NW, SE/NW, NW/NE, SW/NE, SE/NE, NW/SE & NE/SE (320 AC.) = 640 ACRES	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
G	26	23N	6W		2293' NORTH	1464' EAST	36.197107° N	107.433844° W	SANDOVAL

Fist Take Point (FTP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
G	26	23N	6W		2293' NORTH	1464' EAST	36.197107° N	107.433844° W	SANDOVAL

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
I	36	23N	6W		1970' SOUTH	330' EAST	36.179424° N	107.412220° 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

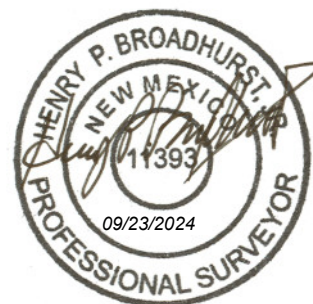
Date

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

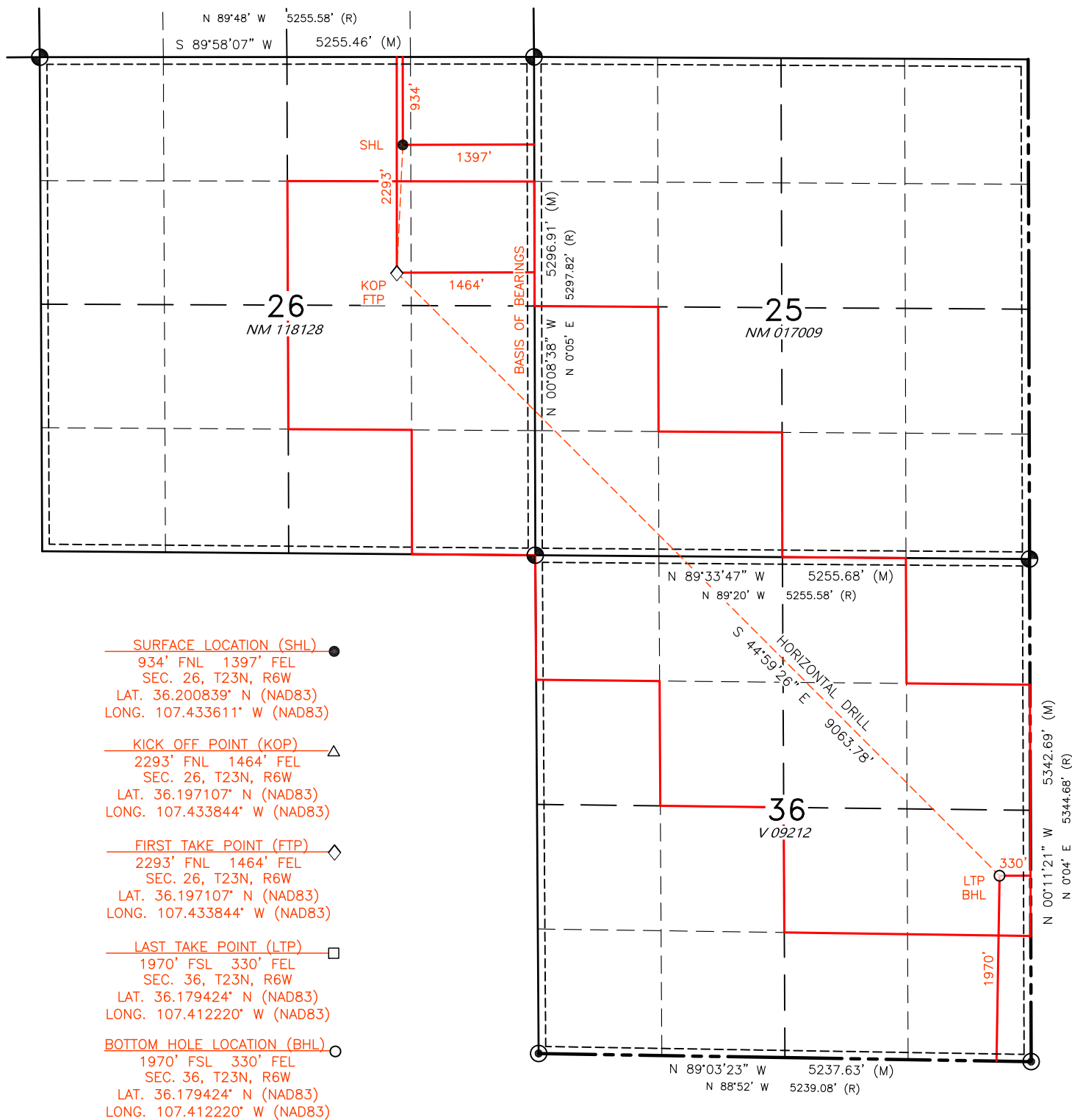
Note: No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

FND 3.02" BC

BLM 1964

FND 2.5" BC

GLO 1948



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:

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



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NWNE B-26-23N-06W

OPERATIONAL PRACTICES

19.15.27.8 A. Venting and Flaring of Natural Gas

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

19.15.27.8 B. Venting and flaring during drilling operations

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

19.15.27.8 E. Venting and flaring during completion or recompletion operations

During Completion Operations, DJR utilizes the following:

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



19.15.27.8 D. Venting and flaring during production operations

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

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

19.15.27.8 E. Performance standards

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



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

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

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



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NWNE B-26-23N-06W

BEST MANAGEMENT PRACTICES

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

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

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

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

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

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

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

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

Rev 0



DRILLING PLAN

Gallo Canyon Unit 401H

Sandoval County, New Mexico

Surface Location

1397-ft FEL & 934-ft FNL
 Sec 26 T23N R06W
 Graded Elevation 6930' MSL
 RKB Elevation 6944' (14' KB)

SHL Geographical Coordinates (NAD-83)

Latitude 36.2008390° N
 Longitude 107.4336110° W

Kick Off Point for Horizontal Build Curve

4622-ft MD
 4515-ft TVD

Local Coordinates (from SHL)

811-ft South
 422-ft West

Heel Location (Pay zone entry)

1464-ft FEL & 2293-ft FNL
 Sec 26 T23N R06W

Heel Geographical Coordinates (NAD-83)

Latitude 36.19710684° N
 Longitude 107.43384364° W

Bottom Hole Location (TD)

330-ft FEL & 1970-ft FSL
 Sec 36 T23N R06W

BHL Geographical Coordinates (NAD-83)

Latitude 36.179424° N
 Longitude 107.4122200° W

Well objectives

This well is planned as a 9060-ft lateral in the Mancos Silt sand.

Bottom Hole temperature and pressure

The temperature in the Mancos Silt horizontal objective is 138°F. Bottom hole pressure in the Mancos Silt is forecast to be 1985 psi.

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

Name	MD (ft)	TVD (ft)	Lithology	Pore fluid	Expected Pore Pressure (ppg)	Planned Mud Weight (ppg)
Ojo Alamo	1439	1424	Sd	W	8.3	8.4 – 8.8
Kirtland	1552	1533	Sh	-	8.3	8.4 – 8.8
Fruitland	1751	1727	C	G	8.3	9.0 - 9.5
Pictured Cliffs	1963	1933	Sd	W	8.3	9.0 - 9.5
Lewis	2083	2049	Sh	-		9.0 - 9.5
Chacra	2840	2784	Sd	-	8.3	9.0 - 9.5
Menefee	3568	3491	Sd, C	G	8.3	9.0 - 9.5
Point Lookout	4263	4166	Sd	-	8.3	9.0 - 9.5
Mancos	4461	4358	Sh	-		9.0 - 9.5
Mancos Silt	4878	4753	Slt	O/G	6.6	9.0 - 9.5
Gallup A	NP	5242	Slt	O/G	6.6	9.0 - 9.5
Gallup B	NP	NP	Sd	O/G	6.6	8.8 -9.0
Gallup C	NP	NP	Sd	O/G	6.6	8.8 -9.0
Target	5578	5090	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	5518	surf	5087	surface
4-1/2"	6-1/8"	11.6	P-110	BTC	5232	14642	5001	5052	5232

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	4122-ft
Density (ppg)	12.30	13.50
Yield (cf/sx)	2.34	1.50
Mix water (gal/sx)	13.26	7.20
Volume (sx)	401	224
Volume (bbls)	167	60
Volume (cu.ft.)	937	334
Excess %	55	55



Rev 0

4-1/2" Production Liner

	BJ Services
Type	Poz/G
Planned top	5232-ft
Density (ppg)	13.3
Yield (cf/sx)	1.56
Mix water (gal/sx)	7.71
Volume (sx)	791
Volume (bbls)	220
Volume (cu.ft)	1237
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 – 5518	9.0 – 9.5	38 – 45	8 – 14	<20
Production	Low solids, non-dispersed	5518 – 14642	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.

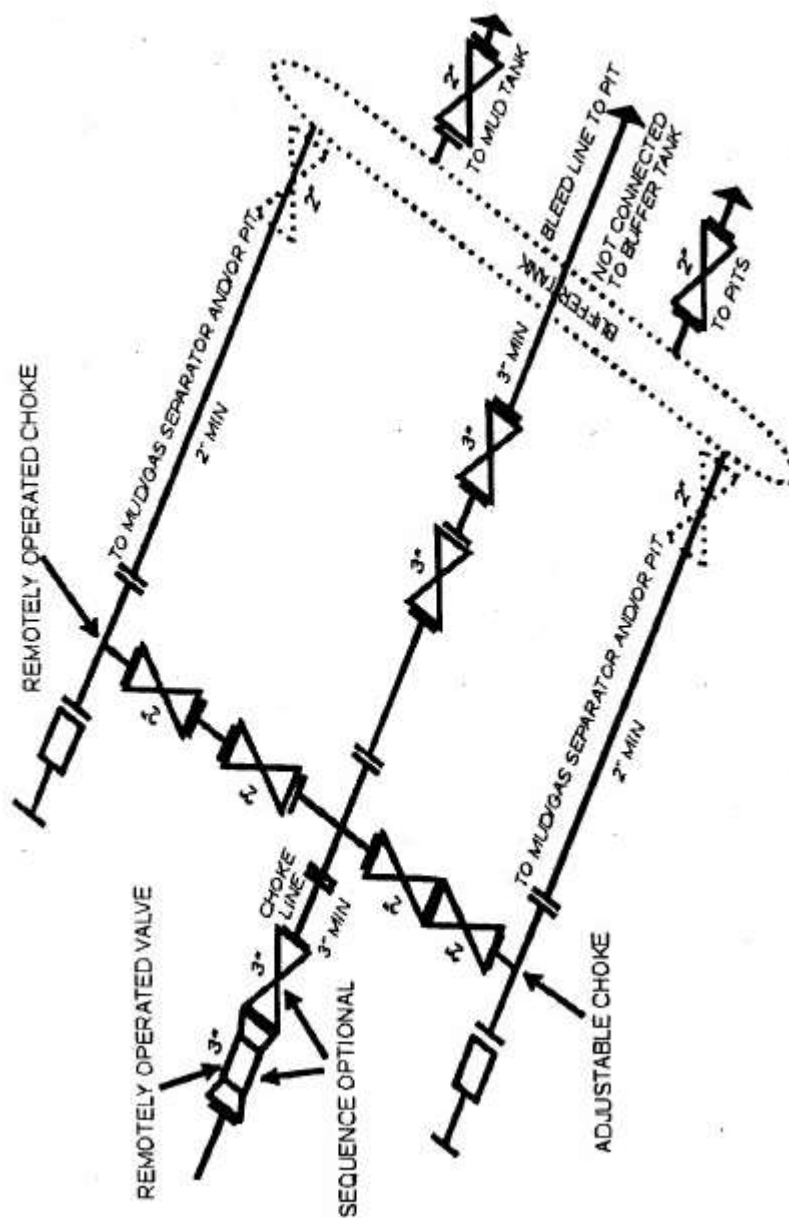
Completion

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.



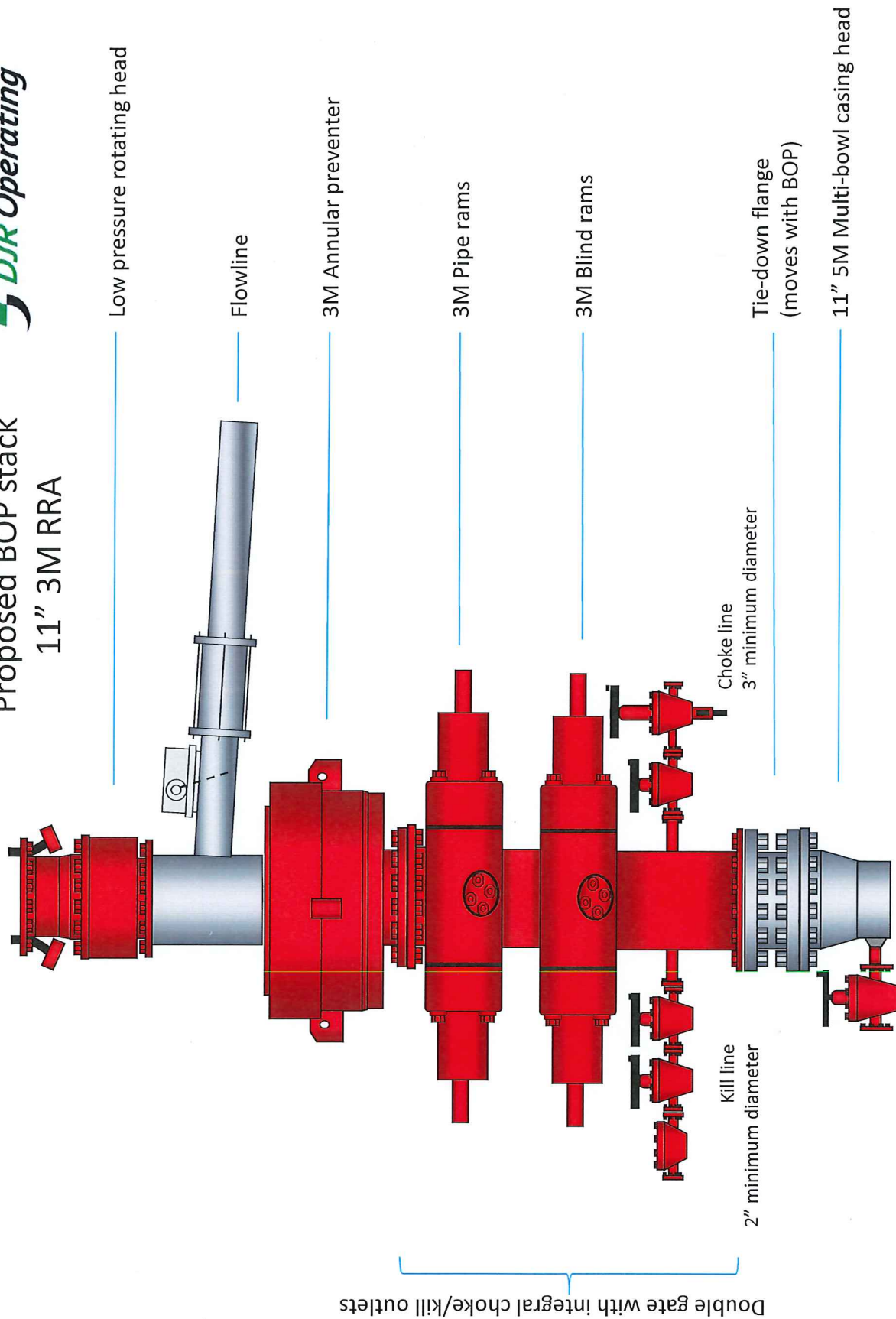
Choke Manifold

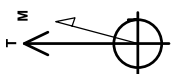
Actual system to conform with Onshore Order 2





Proposed BOP stack 11" 3M RRA





Azimuths to True North
Magnetic North: 10.7°

Magnetic Field Strength: 51255.
Dip Angle: 63.2
Date: 12/31/2009
Model: IGRF2000

CASING DETAILS

MD	TVD	Name
350	350	Surface
5518	5087	Intermediate

FORMATION DETAILS

MDPath	Formation
1439	Ojo Alamo
1424	Kirtland
1533	Fruitland
1727	Pictured Cliffs
1933	Lewis
2049	Chacra
2784	Menefee
3491	Point Lookout
4166	Mancos
4358	Mancos Silt
4461	
4871	
4753	

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

Plan: APD (# 401H/Original Drilling)

Created By: Janie Collins Date: 12:03, July 23 2021

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
1141	13.81	207.47	1134	-73	-38	2.00	207.47	33
4622	13.81	207.47	4515	-811	-422	0.00	0.00	365
5578	90.24	135.25	5089	-1359	-69	9.00	-72.65	1013
4542	90.24	135.25	5052	-7795	6313	0.00	0.00	10031

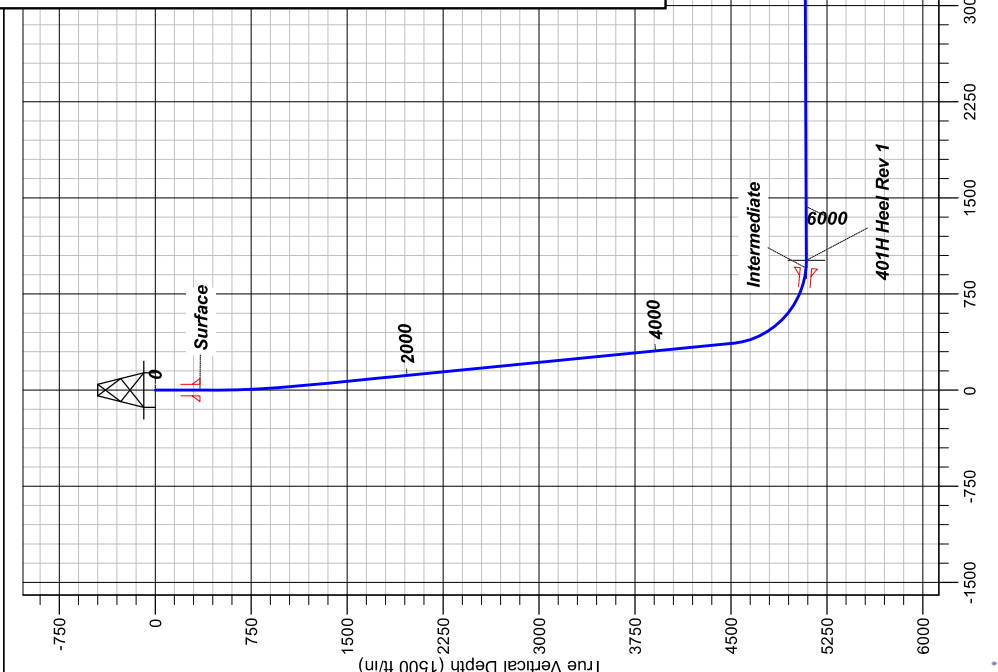
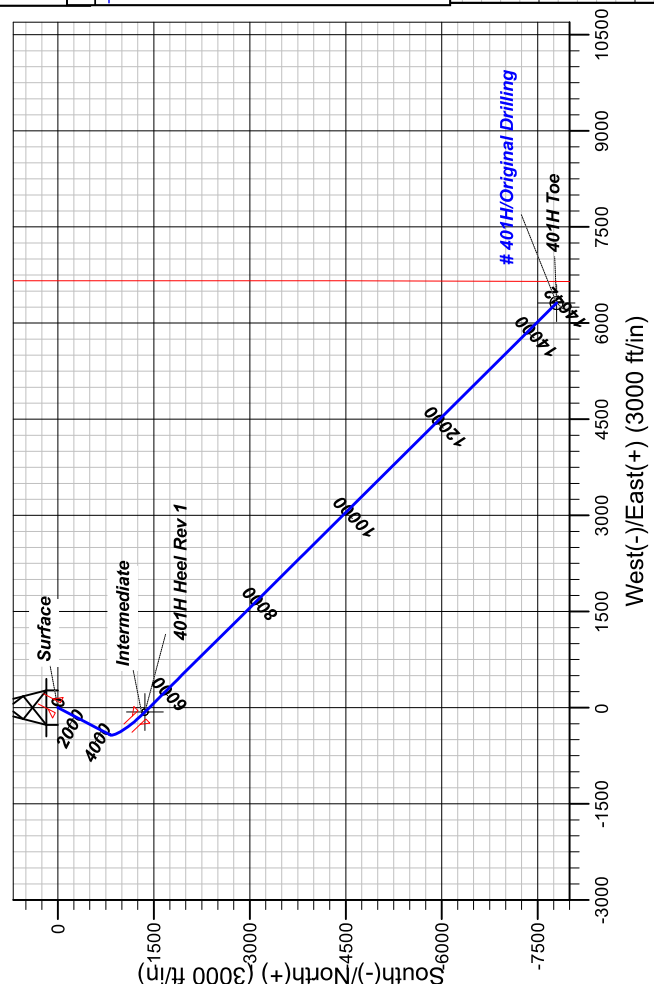
WELL DETAILS: # 401H

GL 6930' & RKB 14' @ 6944ft

Easting Latitude Longitude

DESIGN TARGET DETAILS

Point	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Well Head Rev 1	5089	-1359	-69	1891286.95	2840961.22	36.19710694	-107.43384364
Well Toe	5052	-7795	6313	1884876.99	2847369.25	36.17942400	-107.41222000





DJR Operating

Gallo Canyon Unit

B26 2306 Pad

401H - Slot 1

Original Drilling

Plan: APD

Standard Planning Report

23 July, 2021





Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 401H - Slot 1
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:	# 401H	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	# 401H - Slot 1					
Well Position	+N/-S	0 ft	Northing:	1,892,645.83 usft	Latitude:	36.2008390
	+E/-W	0 ft	Easting:	2,841,024.27 usft	Longitude:	-107.4336110
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	51,255.12431827

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	141.00

Plan Survey Tool Program	Date	7/16/2021		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0	14,642	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	
1141	13.81	207.47	1134	-73	-38	2.00	2.00	0.00	207.47	
4622	13.81	207.47	4515	-811	-422	0.00	0.00	0.00	0.00	
5578	90.24	135.25	5089	-1359	-69	9.00	7.99	-7.55	-72.65	401H Heel Rev 1
14,642	90.24	135.25	5052	-7795	6313	0.00	0.00	0.00	0.00	401H Toe



Lonestar Consulting, LLC

Planning Report



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Project:	Gallo Canyon Unit	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site:	B26 2306 Pad	North Reference:	True
Well:	# 401H	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	207.47	500	0	0	0	2.00	2.00	0.00
600	3.00	207.47	600	-3	-2	2	2.00	2.00	0.00
700	5.00	207.47	700	-10	-5	4	2.00	2.00	0.00
800	7.00	207.47	799	-19	-10	9	2.00	2.00	0.00
900	9.00	207.47	898	-31	-16	14	2.00	2.00	0.00
1000	11.00	207.47	997	-47	-24	21	2.00	2.00	0.00
1100	13.00	207.47	1094	-65	-34	29	2.00	2.00	0.00
1141	13.81	207.47	1134	-73	-38	33	2.00	2.00	0.00
1200	13.81	207.47	1192	-86	-45	39	0.00	0.00	0.00
1300	13.81	207.47	1289	-107	-56	48	0.00	0.00	0.00
1400	13.81	207.47	1386	-128	-67	58	0.00	0.00	0.00
1500	13.81	207.47	1483	-150	-78	67	0.00	0.00	0.00
1600	13.81	207.47	1580	-171	-89	77	0.00	0.00	0.00
1700	13.81	207.47	1677	-192	-100	86	0.00	0.00	0.00
1800	13.81	207.47	1774	-213	-111	96	0.00	0.00	0.00
1900	13.81	207.47	1871	-234	-122	105	0.00	0.00	0.00
2000	13.81	207.47	1968	-256	-133	115	0.00	0.00	0.00
2100	13.81	207.47	2066	-277	-144	124	0.00	0.00	0.00
2200	13.81	207.47	2163	-298	-155	134	0.00	0.00	0.00
2300	13.81	207.47	2260	-319	-166	144	0.00	0.00	0.00
2400	13.81	207.47	2357	-340	-177	153	0.00	0.00	0.00
2500	13.81	207.47	2454	-361	-188	163	0.00	0.00	0.00
2600	13.81	207.47	2551	-383	-199	172	0.00	0.00	0.00
2700	13.81	207.47	2648	-404	-210	182	0.00	0.00	0.00
2800	13.81	207.47	2745	-425	-221	191	0.00	0.00	0.00
2900	13.81	207.47	2842	-446	-232	201	0.00	0.00	0.00
3000	13.81	207.47	2940	-467	-243	210	0.00	0.00	0.00
3100	13.81	207.47	3037	-488	-254	220	0.00	0.00	0.00
3200	13.81	207.47	3134	-510	-265	229	0.00	0.00	0.00
3300	13.81	207.47	3231	-531	-276	239	0.00	0.00	0.00
3400	13.81	207.47	3328	-552	-287	248	0.00	0.00	0.00
3500	13.81	207.47	3425	-573	-298	258	0.00	0.00	0.00
3600	13.81	207.47	3522	-594	-309	267	0.00	0.00	0.00
3700	13.81	207.47	3619	-616	-320	277	0.00	0.00	0.00
3800	13.81	207.47	3716	-637	-331	286	0.00	0.00	0.00
3900	13.81	207.47	3814	-658	-342	296	0.00	0.00	0.00
4000	13.81	207.47	3911	-679	-353	306	0.00	0.00	0.00
4100	13.81	207.47	4008	-700	-364	315	0.00	0.00	0.00
4200	13.81	207.47	4105	-721	-375	325	0.00	0.00	0.00
4300	13.81	207.47	4202	-743	-386	334	0.00	0.00	0.00
4400	13.81	207.47	4299	-764	-397	344	0.00	0.00	0.00
4500	13.81	207.47	4396	-785	-408	353	0.00	0.00	0.00
4600	13.81	207.47	4493	-806	-419	363	0.00	0.00	0.00
4622	13.81	207.47	4515	-811	-422	365	0.00	0.00	0.00
4700	17.24	184.26	4590	-831	-427	377	9.00	4.39	-29.73
4800	23.98	167.04	4684	-865	-423	406	9.00	6.74	-17.22
4900	31.81	157.47	4772	-910	-409	450	9.00	7.83	-9.58
5000	40.09	151.44	4853	-962	-383	507	9.00	8.28	-6.03



Lonestar Consulting, LLC

Planning Report



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Project:	Gallo Canyon Unit	MD Reference:	GL 6930' & RKB 14' @ 6944ft
Site:	B26 2306 Pad	North Reference:	True
Well:	# 401H	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	48.60	147.21	4924	-1022	-347	576	9.00	8.50	-4.23
5200	57.22	143.97	4985	-1088	-302	655	9.00	8.62	-3.24
5300	65.91	141.31	5032	-1158	-249	743	9.00	8.69	-2.66
5400	74.64	138.98	5066	-1230	-188	837	9.00	8.73	-2.32
5500	83.40	136.85	5085	-1303	-123	935	9.00	8.75	-2.13
5578	90.24	135.25	5089	-1359	-69	1013	9.00	8.76	-2.06
5600	90.24	135.25	5089	-1374	-53	1034	0.00	0.00	0.00
5700	90.24	135.25	5089	-1445	17	1134	0.00	0.00	0.00
5800	90.24	135.25	5088	-1516	88	1233	0.00	0.00	0.00
5900	90.24	135.25	5088	-1587	158	1333	0.00	0.00	0.00
6000	90.24	135.25	5087	-1658	228	1432	0.00	0.00	0.00
6100	90.24	135.25	5087	-1729	299	1532	0.00	0.00	0.00
6200	90.24	135.25	5087	-1800	369	1631	0.00	0.00	0.00
6300	90.24	135.25	5086	-1871	440	1731	0.00	0.00	0.00
6400	90.24	135.25	5086	-1942	510	1830	0.00	0.00	0.00
6500	90.24	135.25	5085	-2013	580	1930	0.00	0.00	0.00
6600	90.24	135.25	5085	-2084	651	2029	0.00	0.00	0.00
6700	90.24	135.25	5085	-2155	721	2129	0.00	0.00	0.00
6800	90.24	135.25	5084	-2226	792	2228	0.00	0.00	0.00
6900	90.24	135.25	5084	-2297	862	2328	0.00	0.00	0.00
7000	90.24	135.25	5083	-2368	933	2427	0.00	0.00	0.00
7100	90.24	135.25	5083	-2439	1003	2527	0.00	0.00	0.00
7200	90.24	135.25	5083	-2510	1073	2626	0.00	0.00	0.00
7300	90.24	135.25	5082	-2581	1144	2726	0.00	0.00	0.00
7400	90.24	135.25	5082	-2652	1214	2825	0.00	0.00	0.00
7500	90.24	135.25	5081	-2723	1285	2925	0.00	0.00	0.00
7600	90.24	135.25	5081	-2794	1355	3024	0.00	0.00	0.00
7700	90.24	135.25	5080	-2865	1425	3124	0.00	0.00	0.00
7800	90.24	135.25	5080	-2936	1496	3223	0.00	0.00	0.00
7900	90.24	135.25	5080	-3007	1566	3323	0.00	0.00	0.00
8000	90.24	135.25	5079	-3079	1637	3422	0.00	0.00	0.00
8100	90.24	135.25	5079	-3150	1707	3522	0.00	0.00	0.00
8200	90.24	135.25	5078	-3221	1777	3621	0.00	0.00	0.00
8300	90.24	135.25	5078	-3292	1848	3721	0.00	0.00	0.00
8400	90.24	135.25	5078	-3363	1918	3820	0.00	0.00	0.00
8500	90.24	135.25	5077	-3434	1989	3920	0.00	0.00	0.00
8600	90.24	135.25	5077	-3505	2059	4019	0.00	0.00	0.00
8700	90.24	135.25	5076	-3576	2129	4119	0.00	0.00	0.00
8800	90.24	135.25	5076	-3647	2200	4218	0.00	0.00	0.00
8900	90.24	135.25	5076	-3718	2270	4318	0.00	0.00	0.00
9000	90.24	135.25	5075	-3789	2341	4417	0.00	0.00	0.00
9100	90.24	135.25	5075	-3860	2411	4517	0.00	0.00	0.00
9200	90.24	135.25	5074	-3931	2481	4616	0.00	0.00	0.00
9300	90.24	135.25	5074	-4002	2552	4716	0.00	0.00	0.00
9400	90.24	135.25	5073	-4073	2622	4815	0.00	0.00	0.00
9500	90.24	135.25	5073	-4144	2693	4915	0.00	0.00	0.00
9600	90.24	135.25	5073	-4215	2763	5014	0.00	0.00	0.00
9700	90.24	135.25	5072	-4286	2833	5114	0.00	0.00	0.00
9800	90.24	135.25	5072	-4357	2904	5213	0.00	0.00	0.00
9900	90.24	135.25	5071	-4428	2974	5313	0.00	0.00	0.00
10,000	90.24	135.25	5071	-4499	3045	5412	0.00	0.00	0.00
10,100	90.24	135.25	5071	-4570	3115	5512	0.00	0.00	0.00
10,200	90.24	135.25	5070	-4641	3186	5611	0.00	0.00	0.00
10,300	90.24	135.25	5070	-4712	3256	5711	0.00	0.00	0.00



Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 401H - Slot 1
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:	# 401H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,400	90.24	135.25	5069	-4783	3326	5810	0.00	0.00	0.00
10,500	90.24	135.25	5069	-4854	3397	5910	0.00	0.00	0.00
10,600	90.24	135.25	5069	-4925	3467	6009	0.00	0.00	0.00
10,700	90.24	135.25	5068	-4996	3538	6109	0.00	0.00	0.00
10,800	90.24	135.25	5068	-5067	3608	6208	0.00	0.00	0.00
10,900	90.24	135.25	5067	-5138	3678	6308	0.00	0.00	0.00
11,000	90.24	135.25	5067	-5209	3749	6407	0.00	0.00	0.00
11,100	90.24	135.25	5067	-5280	3819	6507	0.00	0.00	0.00
11,200	90.24	135.25	5066	-5351	3890	6606	0.00	0.00	0.00
11,300	90.24	135.25	5066	-5422	3960	6706	0.00	0.00	0.00
11,400	90.24	135.25	5065	-5493	4030	6805	0.00	0.00	0.00
11,500	90.24	135.25	5065	-5564	4101	6905	0.00	0.00	0.00
11,600	90.24	135.25	5064	-5635	4171	7004	0.00	0.00	0.00
11,700	90.24	135.25	5064	-5706	4242	7104	0.00	0.00	0.00
11,800	90.24	135.25	5064	-5777	4312	7203	0.00	0.00	0.00
11,900	90.24	135.25	5063	-5848	4382	7303	0.00	0.00	0.00
12,000	90.24	135.25	5063	-5919	4453	7402	0.00	0.00	0.00
12,100	90.24	135.25	5062	-5990	4523	7502	0.00	0.00	0.00
12,200	90.24	135.25	5062	-6061	4594	7601	0.00	0.00	0.00
12,300	90.24	135.25	5062	-6132	4664	7701	0.00	0.00	0.00
12,400	90.24	135.25	5061	-6203	4734	7800	0.00	0.00	0.00
12,500	90.24	135.25	5061	-6274	4805	7900	0.00	0.00	0.00
12,600	90.24	135.25	5060	-6345	4875	7999	0.00	0.00	0.00
12,700	90.24	135.25	5060	-6416	4946	8099	0.00	0.00	0.00
12,800	90.24	135.25	5060	-6487	5016	8198	0.00	0.00	0.00
12,900	90.24	135.25	5059	-6558	5087	8298	0.00	0.00	0.00
13,000	90.24	135.25	5059	-6629	5157	8397	0.00	0.00	0.00
13,100	90.24	135.25	5058	-6700	5227	8497	0.00	0.00	0.00
13,200	90.24	135.25	5058	-6771	5298	8596	0.00	0.00	0.00
13,300	90.24	135.25	5057	-6842	5368	8696	0.00	0.00	0.00
13,400	90.24	135.25	5057	-6913	5439	8795	0.00	0.00	0.00
13,500	90.24	135.25	5057	-6984	5509	8895	0.00	0.00	0.00
13,600	90.24	135.25	5056	-7055	5579	8994	0.00	0.00	0.00
13,700	90.24	135.25	5056	-7126	5650	9094	0.00	0.00	0.00
13,800	90.24	135.25	5055	-7197	5720	9193	0.00	0.00	0.00
13,900	90.24	135.25	5055	-7268	5791	9293	0.00	0.00	0.00
14,000	90.24	135.25	5055	-7339	5861	9392	0.00	0.00	0.00
14,100	90.24	135.25	5054	-7410	5931	9492	0.00	0.00	0.00
14,200	90.24	135.25	5054	-7481	6002	9591	0.00	0.00	0.00
14,300	90.24	135.25	5053	-7552	6072	9691	0.00	0.00	0.00
14,400	90.24	135.25	5053	-7623	6143	9790	0.00	0.00	0.00
14,500	90.24	135.25	5053	-7694	6213	9890	0.00	0.00	0.00
14,600	90.24	135.25	5052	-7765	6283	9989	0.00	0.00	0.00
14,642	90.24	135.25	5052	-7795	6313	10,031	0.00	0.00	0.00



Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 401H - Slot 1
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:	# 401H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
401H Toe	0.00	0.00	5052	-7795	6313	1,884,876.99	2,847,369.26	36.17942400	-107.41222000
- hit/miss target									
- Shape									
- plan hits target center									
- Circle (radius 100)									
401H Heel Rev 1	0.00	0.00	5089	-1359	-69	1,891,286.96	2,840,961.23	36.19710684	-107.43384364
- plan hits target center									
- Circle (radius 50)									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
350	350	Surface	9.63	12.25	
5518	5087	Intermediate	7.00	8.75	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1439	1424	Ojo Alamo		0.00	0.00
1552	1533	Kirtland		0.00	0.00
1751	1727	Fruitland		0.00	0.00
1963	1933	Pictured Cliffs		0.00	0.00
2083	2049	Lewis		0.00	0.00
2840	2784	Chacra		0.00	0.00
3568	3491	Menefee		0.00	0.00
4263	4166	Point Lookout		0.00	0.00
4461	4358	Mancos		0.00	0.00
4878	4753	Mancos Silt		0.00	0.00



DJR Operating

Gallo Canyon Unit

B26 2306 Pad

401H

Original Drilling

APD

Anticollision Report

23 July, 2021





Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 401H - Slot 1
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:	# 401H	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	7/16/2021		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0	14,642	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	457	457	60	57	20.996	CC
# 310H - Original Drilling - APD	500	499	60	57	19.081	ES
# 310H - Original Drilling - APD	4600	4563	517	470	10.934	SF
# 311H - Original Drilling - APD	459	459	40	37	13.943	CC
# 311H - Original Drilling - APD	500	500	40	37	12.734	ES
# 311H - Original Drilling - APD	9100	9771	486	347	3.516	SF
# 315H - Original Drilling - APD	303	303	80	78	45.316	CC
# 315H - Original Drilling - APD	400	399	80	78	32.808	ES
# 315H - Original Drilling - APD	14,100	14,718	567	127	1.288	Level 3, SF
# 316H - Original Drilling - APD	455	455	100	97	35.095	CC, ES
# 316H - Original Drilling - APD	1600	1580	205	193	17.046	SF
# 402H - Original Drilling - APD	466	466	20	17	6.872	CC
# 402H - Original Drilling - APD	600	600	21	17	5.381	ES
# 402H - Original Drilling - APD	4500	4497	134	89	2.982	SF

Offset Design: B26 2306 Pad - # 310H - Original Drilling - APD													Offset Site Error: 0 ft	
Survey Program: 0-MWD+IGRF				Rule Assigned:							Offset Well Error: 0 ft			
Reference		Offset		Semi Major Axis		Offset Wellbore Centre			Distance				Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0	0	0	0	0	0	-70.53	20	-57	60					
100	100	100	100	0	0	-70.53	20	-57	60	60	0.31	194.890		
200	200	200	200	1	1	-70.53	20	-57	60	59	1.03	58.603		
300	300	300	300	1	1	-70.53	20	-57	60	58	1.74	34.487		
400	400	400	400	1	1	-70.53	20	-57	60	58	2.46	24.432		
457	457	457	457	1	1	82.25	20	-57	60	57	2.86	20.996	CC	
500	500	499	499	2	2	82.07	20	-57	60	57	3.16	19.081	ES	
600	600	598	598	2	2	82.62	18	-60	62	58	3.83	16.148		
700	700	697	697	2	2	83.66	14	-65	65	60	4.52	14.347		
800	799	796	795	3	3	85.03	8	-74	69	64	5.24	13.242		
900	898	894	892	3	3	86.58	0	-85	76	70	6.01	12.577		
1000	997	992	989	3	3	88.18	-10	-98	83	76	6.83	12.197		
1100	1094	1090	1085	4	4	89.73	-21	-115	93	85	7.72	12.000		
1200	1192	1188	1180	4	4	90.95	-35	-134	104	95	8.69	11.930		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 401H - Slot 1
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:	# 401H	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 (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
1300	1289	1287	1276	5	5	90.99	-50	-155	116	106	9.70	11.923		
1400	1386	1386	1371	5	5	90.95	-65	-177	128	117	10.76	11.886		
1500	1483	1486	1467	6	6	90.92	-80	-198	140	128	11.83	11.834		
1600	1580	1585	1563	7	7	90.89	-95	-220	152	139	12.92	11.777		
1700	1677	1684	1658	7	7	90.87	-110	-241	164	150	14.03	11.719		
1800	1774	1783	1754	8	8	90.85	-126	-263	177	161	15.14	11.662		
1900	1871	1883	1850	8	8	90.83	-141	-284	189	172	16.25	11.608		
2000	1968	1982	1945	9	9	90.82	-156	-306	201	183	17.38	11.556		
2100	2066	2081	2041	9	10	90.81	-171	-327	213	194	18.51	11.508		
2200	2163	2180	2137	10	10	90.80	-186	-349	225	206	19.64	11.463		
2300	2260	2280	2233	10	11	90.79	-202	-370	237	217	20.78	11.422		
2400	2357	2379	2328	11	11	90.78	-217	-392	249	228	21.92	11.383		
2500	2454	2478	2424	12	12	90.77	-232	-413	262	239	23.06	11.346		
2600	2551	2578	2520	12	13	90.76	-247	-435	274	250	24.21	11.312		
2700	2648	2677	2615	13	13	90.75	-262	-456	286	261	25.35	11.281		
2800	2745	2776	2711	13	14	90.75	-277	-478	298	272	26.50	11.251		
2900	2842	2875	2807	14	14	90.74	-293	-499	310	283	27.65	11.224		
3000	2940	2975	2902	14	15	90.74	-308	-521	322	294	28.80	11.198		
3100	3037	3074	2998	15	16	90.73	-323	-542	335	305	29.95	11.173		
3200	3134	3173	3094	16	16	90.73	-338	-564	347	316	31.10	11.151		
3300	3231	3272	3190	16	17	90.72	-353	-585	359	327	32.25	11.129		
3400	3328	3372	3285	17	18	90.72	-369	-607	371	338	33.41	11.109		
3500	3425	3471	3381	17	18	90.71	-384	-628	383	349	34.56	11.090		
3600	3522	3570	3477	18	19	90.71	-399	-650	395	360	35.72	11.071		
3700	3619	3669	3572	19	19	90.71	-414	-671	408	371	36.87	11.054		
3800	3716	3769	3668	19	20	90.70	-429	-693	420	382	38.03	11.038		
3900	3814	3868	3764	20	21	90.70	-445	-714	432	393	39.19	11.023		
4000	3911	3967	3859	20	21	90.70	-460	-736	444	404	40.34	11.008		
4100	4008	4066	3955	21	22	90.69	-475	-757	456	415	41.50	10.994		
4200	4105	4166	4051	21	22	90.69	-490	-779	468	426	42.66	10.981		
4300	4202	4265	4147	22	23	90.69	-505	-800	481	437	43.82	10.968		
4400	4299	4364	4242	23	24	90.69	-520	-822	493	448	44.97	10.956		
4500	4396	4463	4338	23	24	90.68	-536	-843	505	459	46.13	10.945		
4600	4493	4563	4434	24	25	90.68	-551	-865	517	470	47.29	10.934 SF		
4700	4590	4661	4529	24	26	112.85	-566	-886	534	485	48.47	11.011		
4800	4684	4756	4620	25	26	128.75	-580	-907	565	515	49.70	11.363		
4900	4772	4845	4706	26	27	136.89	-594	-926	610	559	50.91	11.974		
5000	4853	4925	4783	26	27	141.12	-606	-943	667	615	52.06	12.821		
5100	4924	4996	4851	27	28	142.89	-617	-959	737	684	53.10	13.880		
5200	4985	5051	4905	28	28	142.34	-626	-971	817	763	53.96	15.135		
5300	5032	5071	4924	29	28	137.21	-628	-975	905	851	54.38	16.647		
5400	5066	5082	4934	30	28	122.82	-630	-978	1000	946	54.66	18.299		
5500	5085	5100	4952	31	28	87.14	-632	-983	1099	1044	55.04	19.960		
5600	5089	5084	4936	32	28	40.13	-630	-978	1197	1142	54.99	21.771		
5700	5089	5081	4933	33	28	39.39	-630	-977	1296	1241	55.09	23.519		
5800	5088	5078	4930	35	28	38.73	-629	-977	1394	1339	55.18	25.272		
5900	5088	5075	4928	36	28	38.15	-629	-976	1493	1438	55.25	27.029		
6000	5087	5072	4925	38	28	37.62	-629	-976	1592	1537	55.32	28.788		
6100	5087	5070	4923	40	28	37.15	-628	-975	1692	1636	55.37	30.550		
6200	5087	5051	4905	42	28	33.32	-626	-971	1791	1736	55.22	32.437		
6300	5086	5051	4905	44	28	33.32	-626	-971	1890	1835	55.29	34.192		
6400	5086	5051	4905	46	28	33.32	-626	-971	1990	1934	55.35	35.947		



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 401H - Slot 1
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:	# 401H	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



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 401H - Slot 1
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:	# 401H	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
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0	0	0	0	0	0	-70.37	13	-38	40					
100	100	100	100	0	0	-70.37	13	-38	40	40	0.31	130.058		
200	200	200	200	1	1	-70.37	13	-38	40	39	1.03	39.109		
300	300	300	300	1	1	-70.37	13	-38	40	38	1.74	23.014		
400	400	400	400	1	1	-70.37	13	-38	40	38	2.46	16.305		
459	459	459	459	1	1	82.57	13	-38	40	37	2.87	13.943 CC		
500	500	500	500	2	2	82.22	13	-38	40	37	3.16	12.734 ES		
600	600	599	599	2	2	82.69	11	-41	41	37	3.83	10.795		
700	700	698	698	2	2	83.55	6	-46	43	39	4.52	9.617		
800	799	798	797	3	3	84.69	-1	-53	47	41	5.25	8.904		
900	898	897	895	3	3	85.98	-11	-63	51	45	6.02	8.484		
1000	997	996	993	3	3	87.30	-22	-75	57	50	6.86	8.251		
1100	1094	1095	1090	4	4	88.56	-37	-90	63	55	7.76	8.138		
1200	1192	1194	1186	4	4	89.31	-53	-107	71	62	8.74	8.106		
1300	1289	1294	1282	5	5	88.59	-71	-126	79	70	9.78	8.116		
1400	1386	1393	1378	5	5	87.96	-89	-145	88	77	10.84	8.105		
1500	1483	1493	1474	6	6	87.45	-107	-164	96	84	11.92	8.084		
1600	1580	1592	1570	7	7	87.02	-125	-183	105	92	13.02	8.058		
1700	1677	1692	1666	7	7	86.65	-144	-202	113	99	14.12	8.030		
1800	1774	1792	1762	8	8	86.34	-162	-221	122	107	15.24	8.002		
1900	1871	1891	1858	8	8	86.07	-180	-240	130	114	16.36	7.975		
2000	1968	1991	1955	9	9	85.83	-198	-259	139	121	17.48	7.949		
2100	2066	2091	2051	9	10	85.61	-216	-278	148	129	18.61	7.924		
2200	2163	2190	2147	10	10	85.42	-234	-296	156	136	19.75	7.901		
2300	2260	2290	2243	10	11	85.26	-252	-315	165	144	20.89	7.879		
2400	2357	2390	2339	11	11	85.10	-271	-334	173	151	22.03	7.859		
2500	2454	2489	2435	12	12	84.96	-289	-353	182	158	23.17	7.840		
2600	2551	2589	2531	12	13	84.84	-307	-372	190	166	24.31	7.822		
2700	2648	2688	2627	13	13	84.72	-325	-391	199	173	25.46	7.806		
2800	2745	2788	2724	13	14	84.62	-343	-410	207	181	26.60	7.790		
2900	2842	2888	2820	14	14	84.52	-361	-429	216	188	27.75	7.776		
3000	2940	2987	2916	14	15	84.43	-379	-448	224	195	28.90	7.762		
3100	3037	3087	3012	15	16	84.35	-397	-467	233	203	30.05	7.750		
3200	3134	3187	3108	16	16	84.27	-416	-486	241	210	31.20	7.737		
3300	3231	3286	3204	16	17	84.20	-434	-505	250	218	32.35	7.726		
3400	3328	3386	3300	17	18	84.13	-452	-524	259	225	33.50	7.715		
3500	3425	3485	3396	17	18	84.07	-470	-543	267	232	34.66	7.705		
3600	3522	3585	3493	18	19	84.01	-488	-562	276	240	35.81	7.696		
3700	3619	3685	3589	19	19	83.95	-506	-580	284	247	36.96	7.687		
3800	3716	3784	3685	19	20	83.90	-524	-599	293	255	38.12	7.678		
3900	3814	3884	3781	20	21	83.85	-543	-618	301	262	39.27	7.670		
4000	3911	3984	3877	20	21	83.81	-561	-637	310	269	40.43	7.662		
4100	4008	4083	3973	21	22	83.76	-579	-656	318	277	41.58	7.655		
4200	4105	4183	4069	21	22	83.72	-597	-675	327	284	42.74	7.648		
4300	4202	4283	4165	22	23	83.68	-615	-694	335	291	43.89	7.641		
4400	4299	4382	4262	23	24	83.64	-633	-713	344	299	45.05	7.635		
4500	4396	4482	4358	23	24	83.61	-651	-732	352	306	46.20	7.629		
4600	4493	4581	4454	24	25	83.57	-669	-751	361	314	47.36	7.623		
4700	4590	4681	4549	24	25	105.83	-687	-770	374	325	48.57	7.699		
4800	4684	4777	4642	25	26	122.12	-705	-788	401	351	49.89	8.030		
4900	4772	4867	4729	26	27	130.84	-721	-805	441	390	51.24	8.607		
5000	4853	4950	4809	26	27	135.72	-737	-821	495	442	52.54	9.414		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 401H - Slot 1
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:	# 401H	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
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5100	4924	5096	4950	27	28	140.46	-767	-845	559	505	54.12	10.337	
5200	4985	5833	5459	28	32	145.12	-1188	-624	582	552	30.20	19.269	
5300	5032	6081	5483	29	33	143.66	-1367	-456	538	514	24.68	21.808	
5400	5066	6174	5482	30	34	144.19	-1433	-390	505	478	27.04	18.689	
5500	5085	6272	5482	31	35	144.38	-1503	-321	487	457	29.46	16.517	
5600	5089	6372	5481	32	37	144.40	-1574	-251	482	450	31.83	15.143	
5700	5089	6472	5480	33	38	144.39	-1645	-180	482	448	33.96	14.186	
5800	5088	6572	5480	35	39	144.38	-1716	-110	482	445	36.45	13.212	
5900	5088	6672	5479	36	41	144.37	-1786	-39	481	442	39.00	12.341	
6000	5087	6772	5478	38	43	144.36	-1857	31	481	440	41.64	11.555	
6100	5087	6872	5478	40	45	144.35	-1928	102	481	437	44.35	10.845	
6200	5087	6972	5477	42	46	144.34	-1999	172	481	434	47.12	10.203	
6300	5086	7072	5477	44	48	144.33	-2070	242	481	431	49.94	9.624	
6400	5086	7172	5476	46	50	144.32	-2141	313	480	428	52.79	9.099	
6500	5085	7272	5475	48	52	144.32	-2212	383	480	424	55.69	8.622	
6600	5085	7372	5475	50	55	144.31	-2283	454	480	421	58.61	8.189	
6700	5085	7472	5474	52	57	144.30	-2354	524	480	418	61.57	7.793	
6800	5084	7572	5474	54	59	144.29	-2425	595	480	415	64.54	7.431	
6900	5084	7672	5473	56	61	144.28	-2496	665	479	412	67.53	7.098	
7000	5083	7772	5472	58	63	144.27	-2567	736	479	409	70.54	6.793	
7100	5083	7872	5472	61	65	144.26	-2638	806	479	405	73.57	6.510	
7200	5083	7972	5471	63	68	144.25	-2709	876	479	402	76.61	6.249	
7300	5082	8072	5470	65	70	144.24	-2780	947	479	399	79.66	6.007	
7400	5082	8172	5470	68	72	144.23	-2851	1017	478	396	82.73	5.783	
7500	5081	8272	5469	70	75	144.22	-2922	1088	478	392	85.80	5.573	
7600	5081	8372	5469	72	77	144.21	-2993	1158	478	389	88.89	5.377	
7700	5080	8472	5468	74	79	144.21	-3064	1229	478	386	91.98	5.195	
7800	5080	8572	5467	77	82	144.20	-3135	1299	478	383	95.08	5.023	
7900	5080	8672	5467	79	84	144.19	-3206	1370	477	379	98.18	4.862	
8000	5079	8772	5466	81	86	144.18	-3277	1440	477	376	101.30	4.711	
8100	5079	8872	5466	84	89	144.17	-3348	1510	477	373	104.41	4.568	
8200	5078	8972	5465	86	91	144.16	-3419	1581	477	369	107.54	4.434	
8300	5078	9072	5464	89	93	144.15	-3490	1651	477	366	110.67	4.307	
8400	5078	9172	5464	91	96	144.14	-3561	1722	476	363	113.80	4.186	
8500	5077	9272	5463	93	98	144.13	-3632	1792	476	359	116.94	4.072	
8600	5077	9372	5462	96	100	144.12	-3703	1863	476	356	120.08	3.964	
8700	5076	9472	5462	98	103	144.11	-3774	1933	476	353	123.23	3.861	
8800	5076	9572	5461	101	105	144.10	-3845	2004	476	349	126.38	3.763	
8900	5076	9672	5461	103	108	144.09	-3916	2074	475	346	129.53	3.670	
9000	5075	9771	5460	105	110	144.08	-3986	2144	475	342	132.73	3.580	
9000	5075	9771	5460	105	110	144.08	-3986	2144	475	342	132.74	3.580	
9100	5075	9771	5460	108	110	144.08	-3986	2144	486	347	138.12	3.516 SF	
9200	5074	9771	5460	110	110	144.08	-3986	2144	516	377	138.49	3.722	
9300	5074	9771	5460	113	110	144.08	-3986	2144	562	427	135.27	4.154	
9400	5073	9771	5460	115	110	144.08	-3986	2144	621	491	130.19	4.771	
9500	5073	9771	5460	117	110	144.08	-3986	2144	690	565	124.55	5.538	
9600	5073	9771	5460	120	110	144.08	-3986	2144	765	646	119.05	6.428	
9700	5072	9771	5460	122	110	144.08	-3986	2144	846	732	114.03	7.419	
9800	5072	9771	5460	125	110	144.08	-3986	2144	930	821	109.57	8.492	
9900	5071	9771	5460	127	110	144.08	-3986	2144	1018	912	105.65	9.632	
10,000	5071	9771	5460	130	110	144.08	-3986	2144	1107	1005	102.24	10.828	
10,100	5071	9771	5460	132	110	144.08	-3986	2144	1198	1099	99.26	12.071	



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 401H - Slot 1
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:	# 401H	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:		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		
10,200	5070	9771	5460	134	110	144.08	-3986	2144	1291	1194	96.66	13.352		
10,300	5070	9771	5460	137	110	144.08	-3986	2144	1384	1290	94.38	14.665		
10,400	5069	9771	5460	139	110	144.08	-3986	2144	1478	1386	92.36	16.006		
10,500	5069	9771	5460	142	110	144.08	-3986	2144	1573	1483	90.58	17.369		
10,600	5069	9771	5460	144	110	144.08	-3986	2144	1669	1580	89.00	18.752		
10,700	5068	9771	5460	147	110	144.08	-3986	2144	1765	1677	87.59	20.152		
10,800	5068	9771	5460	149	110	144.08	-3986	2144	1862	1775	86.32	21.565		
10,900	5067	9771	5460	152	110	144.08	-3986	2144	1958	1873	85.18	22.991		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 401H - Slot 1
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:	# 401H	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		Distance		Rule Assigned:		Warning						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0	0	0	0	0	0	-70.62	27	-76	80					
100	100	100	100	0	0	-70.62	27	-76	80	80	0.31	259.722		
200	200	200	200	1	1	-70.62	27	-76	80	79	1.03	78.098		
300	300	300	300	1	1	-70.62	27	-76	80	78	1.74	45.959		
303	303	303	303	1	1	-70.62	27	-76	80	78	1.77	45.316 CC		
400	400	399	399	1	1	-70.82	26	-76	80	78	2.45	32.808 ES		
500	500	497	497	2	2	80.37	25	-79	83	80	3.14	26.409		
600	600	595	594	2	2	79.53	22	-85	87	83	3.81	22.894		
700	700	693	692	2	2	79.50	18	-94	94	89	4.51	20.739		
800	799	793	791	3	3	81.06	14	-104	100	95	5.25	19.049		
900	898	892	890	3	3	84.29	9	-114	106	100	6.02	17.615		
1000	997	992	989	3	3	88.91	4	-124	112	106	6.84	16.433		
1100	1094	1091	1087	4	4	94.62	0	-134	120	112	7.70	15.533		
1200	1192	1189	1185	4	4	100.93	-5	-144	128	120	8.60	14.942		
1300	1289	1288	1283	5	5	106.55	-9	-154	139	129	9.50	14.611		
1400	1386	1386	1381	5	5	111.36	-14	-164	150	140	10.40	14.456		
1500	1483	1485	1479	6	5	115.48	-18	-174	163	151	11.29	14.418		
1600	1580	1584	1577	7	6	119.00	-23	-184	176	164	12.16	14.456		
1700	1677	1682	1675	7	6	122.03	-27	-193	190	176	13.03	14.542		
1800	1774	1781	1773	8	7	124.65	-32	-203	204	190	13.89	14.658		
1900	1871	1879	1871	8	7	126.93	-36	-213	218	203	14.75	14.792		
2000	1968	1978	1969	9	7	128.92	-41	-223	233	217	15.60	14.935		
2100	2066	2077	2067	9	8	130.67	-45	-233	248	232	16.44	15.082		
2200	2163	2175	2165	10	8	132.23	-50	-243	263	246	17.28	15.230		
2300	2260	2274	2263	10	9	133.61	-54	-253	279	261	18.12	15.375		
2400	2357	2372	2361	11	9	134.85	-59	-263	294	275	18.96	15.518		
2500	2454	2471	2459	12	10	135.96	-63	-273	310	290	19.79	15.655		
2600	2551	2569	2557	12	10	136.97	-68	-283	326	305	20.63	15.788		
2700	2648	2668	2655	13	10	137.88	-72	-293	342	320	21.46	15.916		
2800	2745	2767	2753	13	11	138.71	-77	-302	357	335	22.29	16.038		
2900	2842	2865	2851	14	11	139.48	-81	-312	374	350	23.12	16.155		
3000	2940	2964	2949	14	12	140.17	-86	-322	390	366	23.95	16.267		
3100	3037	3062	3047	15	12	140.82	-91	-332	406	381	24.78	16.374		
3200	3134	3161	3145	16	12	141.41	-95	-342	422	396	25.61	16.476		
3300	3231	3260	3243	16	13	141.96	-100	-352	438	412	26.43	16.574		
3400	3328	3358	3341	17	13	142.47	-104	-362	454	427	27.26	16.667		
3500	3425	3457	3439	17	14	142.95	-109	-372	471	443	28.09	16.756		
3600	3522	3555	3537	18	14	143.39	-113	-382	487	458	28.91	16.841		
3700	3619	3654	3635	19	14	143.81	-118	-392	503	474	29.74	16.923		
3800	3716	3753	3733	19	15	144.20	-122	-402	520	489	30.57	17.001		
3900	3814	3851	3831	20	15	144.56	-127	-411	536	505	31.39	17.076		
4000	3911	3950	3929	20	16	144.91	-131	-421	552	520	32.22	17.147		
4100	4008	4048	4027	21	16	145.23	-136	-431	569	536	33.04	17.216		
4200	4105	4147	4125	21	17	145.54	-140	-441	585	551	33.87	17.281		
4300	4202	4246	4223	22	17	145.82	-145	-451	602	567	34.69	17.345		
4400	4299	4344	4321	23	17	146.10	-149	-461	618	583	35.52	17.405		
4500	4396	4443	4419	23	18	146.36	-154	-471	635	598	36.35	17.463		
4600	4493	4541	4517	24	18	146.60	-158	-481	651	614	37.17	17.519		
4700	4590	4639	4614	24	19	169.94	-163	-491	671	633	38.01	17.664		
4800	4684	5090	5037	25	20	-169.87	-280	-436	684	648	35.67	19.169		
4900	4772	5492	5266	26	21	-147.78	-523	-225	653	623	30.83	21.193		
5000	4853	5682	5295	26	23	-133.94	-658	-95	610	575	34.58	17.635		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 401H - Slot 1
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:	# 401H	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
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5100	4924	5762	5295	27	24	-128.46	-714	-38	573	534	38.49	14.884	
5200	4985	5840	5295	28	26	-123.85	-769	17	548	505	42.22	12.970	
5300	5032	5927	5295	29	27	-119.51	-831	79	532	486	45.92	11.587	
5400	5066	6021	5294	30	29	-115.97	-897	145	524	474	49.55	10.570	
5500	5085	6119	5294	31	30	-113.74	-966	214	520	467	53.10	9.798	
5574	5090	6192	5294	32	32	-113.06	-1018	266	520	464	55.70	9.330	
5600	5089	6218	5293	32	32	-113.14	-1036	285	520	463	56.49	9.204	
5700	5089	6318	5293	33	34	-113.12	-1107	356	520	461	59.94	8.683	
5800	5088	6418	5293	35	36	-113.09	-1177	427	521	458	63.54	8.200	
5900	5088	6518	5292	36	38	-113.06	-1248	497	522	454	67.27	7.754	
6000	5087	6618	5292	38	40	-113.03	-1319	568	522	451	71.10	7.343	
6100	5087	6718	5291	40	43	-113.00	-1389	639	523	448	75.03	6.967	
6200	5087	6818	5291	42	45	-112.98	-1460	710	523	444	79.03	6.621	
6300	5086	6918	5290	44	47	-112.95	-1530	781	524	441	83.09	6.303	
6400	5086	7018	5290	46	49	-112.92	-1601	852	524	437	87.22	6.012	
6500	5085	7118	5290	48	52	-112.89	-1671	922	525	433	91.39	5.743	
6600	5085	7218	5289	50	54	-112.87	-1742	993	525	430	95.61	5.496	
6700	5085	7318	5289	52	56	-112.84	-1813	1064	526	426	99.86	5.267	
6800	5084	7418	5288	54	59	-112.81	-1883	1135	527	422	104.15	5.055	
6900	5084	7518	5288	56	61	-112.78	-1954	1206	527	419	108.47	4.859	
7000	5083	7618	5287	58	63	-112.76	-2024	1277	528	415	112.81	4.677	
7100	5083	7718	5287	61	66	-112.73	-2095	1347	528	411	117.18	4.507	
7200	5083	7818	5287	63	68	-112.70	-2166	1418	529	407	121.57	4.349	
7300	5082	7918	5286	65	70	-112.68	-2236	1489	529	403	125.98	4.201	
7400	5082	8018	5286	68	73	-112.65	-2307	1560	530	399	130.41	4.063	
7500	5081	8118	5285	70	75	-112.62	-2377	1631	530	396	134.85	3.933	
7600	5081	8218	5285	72	78	-112.60	-2448	1702	531	392	139.30	3.811	
7700	5080	8318	5284	74	80	-112.57	-2518	1772	531	388	143.77	3.697	
7800	5080	8418	5284	77	82	-112.54	-2589	1843	532	384	148.25	3.589	
7900	5080	8518	5284	79	85	-112.52	-2660	1914	533	380	152.75	3.487	
8000	5079	8618	5283	81	87	-112.49	-2730	1985	533	376	157.25	3.390	
8100	5079	8718	5283	84	90	-112.46	-2801	2056	534	372	161.76	3.299	
8200	5078	8818	5282	86	92	-112.44	-2871	2127	534	368	166.28	3.213	
8300	5078	8918	5282	89	94	-112.41	-2942	2197	535	364	170.81	3.131	
8400	5078	9018	5281	91	97	-112.38	-3013	2268	535	360	175.35	3.053	
8500	5077	9118	5281	93	99	-112.36	-3083	2339	536	356	179.89	2.979	
8600	5077	9218	5281	96	102	-112.33	-3154	2410	536	352	184.45	2.908	
8700	5076	9318	5280	98	104	-112.30	-3224	2481	537	348	189.00	2.841	
8800	5076	9418	5280	101	107	-112.28	-3295	2552	538	344	193.57	2.777	
8900	5076	9518	5279	103	109	-112.25	-3365	2622	538	340	198.14	2.716	
9000	5075	9618	5279	105	111	-112.23	-3436	2693	539	336	202.71	2.657	
9100	5075	9718	5278	108	114	-112.20	-3507	2764	539	332	207.29	2.601	
9200	5074	9818	5278	110	116	-112.17	-3577	2835	540	328	211.88	2.547	
9300	5074	9918	5278	113	119	-112.15	-3648	2906	540	324	216.47	2.496	
9400	5073	10,018	5277	115	121	-112.12	-3718	2977	541	320	221.07	2.446	
9500	5073	10,118	5277	117	124	-112.10	-3789	3047	541	316	225.66	2.399	
9600	5073	10,218	5276	120	126	-112.07	-3860	3118	542	312	230.27	2.353	
9700	5072	10,318	5276	122	129	-112.05	-3930	3189	542	308	234.88	2.310	
9800	5072	10,418	5275	125	131	-112.02	-4001	3260	543	304	239.49	2.267	
9900	5071	10,518	5275	127	134	-111.99	-4071	3331	544	299	244.10	2.227	
10,000	5071	10,618	5275	130	136	-111.97	-4142	3402	544	295	248.72	2.188	
10,100	5071	10,718	5274	132	138	-111.94	-4213	3472	545	291	253.34	2.150	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 401H - Slot 1
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:	# 401H	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		Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)		
10,200	5070	10,818	5274	134	141	-111.92	-4283	3543	545	287	257.97	2.114
10,300	5070	10,918	5273	137	143	-111.89	-4354	3614	546	283	262.60	2.078
10,400	5069	11,018	5273	139	146	-111.87	-4424	3685	546	279	267.23	2.044
10,500	5069	11,118	5272	142	148	-111.84	-4495	3756	547	275	271.86	2.012
10,600	5069	11,218	5272	144	151	-111.82	-4565	3827	547	271	276.50	1.980
10,700	5068	11,318	5272	147	153	-111.79	-4636	3897	548	267	281.14	1.949
10,800	5068	11,418	5271	149	156	-111.77	-4707	3968	549	263	285.78	1.919
10,900	5067	11,518	5271	152	158	-111.74	-4777	4039	549	259	290.43	1.891
11,000	5067	11,618	5270	154	161	-111.72	-4848	4110	550	255	295.08	1.863
11,100	5067	11,718	5270	156	163	-111.69	-4918	4181	550	250	299.73	1.836
11,200	5066	11,818	5269	159	166	-111.67	-4989	4252	551	246	304.38	1.809
11,300	5066	11,918	5269	161	168	-111.64	-5060	4322	551	242	309.04	1.784
11,400	5065	12,018	5269	164	170	-111.62	-5130	4393	552	238	313.69	1.759
11,500	5065	12,118	5268	166	173	-111.59	-5201	4464	552	234	318.35	1.735
11,600	5064	12,218	5268	169	175	-111.57	-5271	4535	553	230	323.02	1.712
11,700	5064	12,318	5267	171	178	-111.54	-5342	4606	554	226	327.68	1.689
11,800	5064	12,418	5267	174	180	-111.52	-5412	4676	554	222	332.35	1.667
11,900	5063	12,518	5266	176	183	-111.49	-5483	4747	555	218	337.02	1.646
12,000	5063	12,618	5266	178	185	-111.47	-5554	4818	555	214	341.69	1.625
12,100	5062	12,718	5266	181	188	-111.44	-5624	4889	556	209	346.36	1.605
12,200	5062	12,818	5265	183	190	-111.42	-5695	4960	556	205	351.04	1.585
12,300	5062	12,918	5265	186	193	-111.40	-5765	5031	557	201	355.71	1.565
12,400	5061	13,018	5264	188	195	-111.37	-5836	5101	557	197	360.39	1.547
12,500	5061	13,118	5264	191	198	-111.35	-5907	5172	558	193	365.07	1.528
12,600	5060	13,218	5263	193	200	-111.32	-5977	5243	559	189	369.76	1.510
12,700	5060	13,318	5263	196	203	-111.30	-6048	5314	559	185	374.44	1.493 Level 3
12,800	5060	13,418	5263	198	205	-111.27	-6118	5385	560	180	379.13	1.476 Level 3
12,900	5059	13,518	5262	201	208	-111.25	-6189	5456	560	176	383.82	1.459 Level 3
13,000	5059	13,618	5262	203	210	-111.23	-6259	5526	561	172	388.51	1.443 Level 3
13,100	5058	13,718	5261	206	212	-111.20	-6330	5597	561	168	393.20	1.427 Level 3
13,200	5058	13,818	5261	208	215	-111.18	-6401	5668	562	164	397.89	1.412 Level 3
13,300	5057	13,918	5260	210	217	-111.15	-6471	5739	562	160	402.59	1.397 Level 3
13,400	5057	14,018	5260	213	220	-111.13	-6542	5810	563	156	407.28	1.382 Level 3
13,500	5057	14,118	5260	215	222	-111.11	-6612	5881	564	152	411.98	1.368 Level 3
13,600	5056	14,218	5259	218	225	-111.08	-6683	5951	564	147	416.68	1.354 Level 3
13,700	5056	14,318	5259	220	227	-111.06	-6754	6022	565	143	421.38	1.340 Level 3
13,800	5055	14,418	5258	223	230	-111.04	-6824	6093	565	139	426.09	1.326 Level 3
13,900	5055	14,518	5258	225	232	-111.01	-6895	6164	566	135	430.79	1.313 Level 3
14,000	5055	14,618	5257	228	235	-110.99	-6965	6235	566	131	435.50	1.300 Level 3
14,100	5054	14,718	5257	230	237	-110.96	-7036	6306	567	127	440.21	1.288 Level 3, SF
14,200	5054	14,730	5257	233	237	-110.96	-7044	6314	574	140	434.32	1.322 Level 3
14,300	5053	14,730	5257	235	237	-110.96	-7044	6314	598	182	416.10	1.438 Level 3
14,400	5053	14,730	5257	238	237	-110.96	-7044	6314	638	247	390.11	1.634
14,500	5053	14,730	5257	240	237	-110.96	-7044	6314	689	328	360.66	1.911
14,600	5052	14,730	5257	242	237	-110.96	-7044	6314	751	419	331.05	2.267
14,642	5052	14,730	5257	244	237	-110.97	-7044	6314	778	459	319.08	2.440



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 401H - Slot 1
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:	# 401H	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 - # 316H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0	0	0	0	0	0	-70.41	33	-94	100					
100	100	100	100	0	0	-70.41	33	-94	100	100	0.31	324.046		
200	200	200	200	1	1	-70.41	33	-94	100	99	1.03	97.441		
300	300	300	300	1	1	-70.41	33	-94	100	98	1.74	57.342		
400	400	400	400	1	1	-70.41	33	-94	100	97	2.46	40.624		
455	455	455	455	1	1	82.26	33	-94	100	97	2.85	35.095 CC, ES		
500	500	499	499	2	2	82.21	33	-95	100	97	3.16	31.729		
600	600	596	596	2	2	82.97	32	-98	102	99	3.82	26.801		
700	700	693	693	2	2	84.37	31	-104	107	103	4.51	23.750		
800	799	791	790	3	3	86.32	28	-113	114	109	5.22	21.826		
900	898	890	889	3	3	89.42	25	-124	122	116	5.98	20.324		
1000	997	989	987	3	3	93.66	22	-134	130	123	6.78	19.124		
1100	1094	1088	1085	4	4	98.73	19	-144	139	131	7.63	18.231		
1200	1192	1186	1183	4	4	104.26	16	-154	150	142	8.50	17.648		
1300	1289	1285	1281	5	5	109.18	13	-165	162	153	9.38	17.304		
1400	1386	1383	1379	5	5	113.39	10	-175	176	166	10.27	17.122		
1500	1483	1481	1476	6	5	116.99	7	-185	190	179	11.14	17.048		
1600	1580	1580	1574	7	6	120.09	4	-195	205	193	12.01	17.046 SF		
1700	1677	1678	1672	7	6	122.77	1	-206	220	207	12.88	17.092		
1800	1774	1776	1770	8	7	125.09	-2	-216	236	222	13.74	17.168		
1900	1871	1875	1867	8	7	127.13	-5	-226	252	237	14.60	17.264		
2000	1968	1973	1965	9	7	128.92	-8	-236	268	253	15.45	17.370		
2100	2066	2071	2063	9	8	130.50	-11	-246	285	269	16.30	17.484		
2200	2163	2170	2161	10	8	131.91	-14	-257	302	285	17.14	17.599		
2300	2260	2268	2258	10	9	133.18	-17	-267	319	301	17.99	17.715		
2400	2357	2366	2356	11	9	134.31	-20	-277	336	317	18.83	17.830		
2500	2454	2465	2454	12	9	135.34	-23	-287	353	333	19.67	17.942		
2600	2551	2563	2552	12	10	136.26	-26	-297	370	350	20.51	18.051		
2700	2648	2661	2649	13	10	137.11	-29	-308	388	366	21.35	18.156		
2800	2745	2760	2747	13	11	137.89	-32	-318	405	383	22.18	18.258		
2900	2842	2858	2845	14	11	138.60	-35	-328	423	400	23.02	18.356		
3000	2940	2956	2943	14	11	139.25	-38	-338	440	416	23.86	18.450		
3100	3037	3055	3040	15	12	139.85	-41	-349	458	433	24.69	18.540		
3200	3134	3153	3138	16	12	140.41	-44	-359	475	450	25.52	18.626		
3300	3231	3251	3236	16	13	140.93	-47	-369	493	467	26.36	18.709		
3400	3328	3349	3334	17	13	141.41	-50	-379	511	484	27.19	18.788		
3500	3425	3448	3431	17	13	141.86	-53	-389	529	501	28.03	18.864		
3600	3522	3546	3529	18	14	142.29	-56	-400	546	518	28.86	18.937		
3700	3619	3644	3627	19	14	142.68	-58	-410	564	535	29.69	19.007		
3800	3716	3743	3725	19	15	143.05	-61	-420	582	552	30.52	19.074		
3900	3814	3841	3822	20	15	143.40	-64	-430	600	569	31.36	19.138		
4000	3911	3939	3920	20	15	143.73	-67	-440	618	586	32.19	19.199		
4100	4008	4038	4018	21	16	144.04	-70	-451	636	603	33.02	19.259		
4200	4105	4136	4116	21	16	144.33	-73	-461	654	620	33.85	19.315		
4300	4202	4234	4213	22	17	144.61	-76	-471	672	637	34.68	19.370		
4400	4299	4333	4311	23	17	144.87	-79	-481	690	654	35.51	19.423		
4500	4396	4431	4409	23	17	145.12	-82	-492	708	671	36.35	19.473		
4600	4493	4529	4507	24	18	145.36	-85	-502	726	689	37.18	19.522		
4700	4590	4627	4604	24	18	168.76	-88	-512	747	709	38.01	19.663		
4800	4684	4721	4697	25	19	-173.79	-91	-522	781	742	38.84	20.100		
4900	4772	4767	4743	26	19	-162.97	-92	-527	827	788	39.28	21.057		
5000	4853	4800	4775	26	19	-154.21	-90	-533	888	848	39.54	22.457		



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 401H - Slot 1
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:	# 401H	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 - # 316H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Distance		Rule Assigned:		Warning				
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5100	4924	4828	4803	27	19	-145.21	-89	-538	961	921	39.74	24.175		
5200	4985	4850	4824	28	19	-133.98	-87	-543	1042	1002	39.87	26.144		
5300	5032	4850	4824	29	19	-117.24	-87	-543	1130	1090	39.75	28.434		
5400	5066	4850	4824	30	19	-96.73	-87	-543	1221	1181	39.70	30.762		
5500	5085	4850	4824	31	19	-76.70	-87	-543	1313	1273	39.73	33.040		
5600	5089	4850	4824	32	19	-64.19	-87	-543	1403	1363	39.84	35.212		
5700	5089	4850	4824	33	19	-64.19	-87	-543	1493	1453	39.97	37.359		
5800	5088	4850	4824	35	19	-64.19	-87	-543	1585	1545	40.09	39.536		
5900	5088	4830	4805	36	19	-62.67	-88	-539	1677	1637	39.97	41.957		
6000	5087	4824	4799	38	19	-62.23	-89	-537	1770	1730	40.01	44.240		
6100	5087	4819	4793	40	19	-61.83	-89	-536	1864	1824	40.05	46.534		
6200	5087	4800	4775	42	19	-60.48	-90	-533	1958	1918	39.96	49.005		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 401H - Slot 1
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:	# 401H	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:												
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre	Distance	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0	0	0	0	0	0	-69.88	7	-19	20					
100	100	100	100	0	0	-69.88	7	-19	20	20	0.31	65.230		
200	200	200	200	1	1	-69.88	7	-19	20	19	1.03	19.615		
300	300	300	300	1	1	-69.88	7	-19	20	18	1.74	11.543		
400	400	400	400	1	1	-69.88	7	-19	20	18	2.46	8.178		
466	466	466	466	1	1	83.59	7	-19	20	17	2.92	6.872 CC		
500	500	500	500	2	2	82.68	7	-19	20	17	3.16	6.382		
600	600	600	600	2	2	82.92	4	-21	21	17	3.83	5.381 ES		
700	700	700	699	2	2	83.37	-2	-25	21	17	4.52	4.744		
800	799	799	798	3	3	83.97	-11	-31	23	17	5.25	4.328		
900	898	899	897	3	3	84.68	-22	-39	24	18	6.04	4.054		
1000	997	999	996	3	3	85.43	-36	-49	27	20	6.88	3.870		
1100	1094	1099	1093	4	4	86.18	-53	-60	29	21	7.80	3.746		
1200	1192	1199	1191	4	4	88.46	-72	-73	32	23	8.79	3.641		
1300	1289	1299	1288	5	5	90.85	-91	-86	35	25	9.82	3.549		
1400	1386	1399	1385	5	5	92.88	-109	-99	38	27	10.87	3.472		
1500	1483	1499	1483	6	6	94.61	-128	-112	41	29	11.93	3.408		
1600	1580	1598	1580	7	6	96.11	-147	-125	44	31	13.01	3.354		
1700	1677	1698	1677	7	7	97.42	-165	-138	47	33	14.09	3.309		
1800	1774	1798	1775	8	8	98.57	-184	-151	50	34	15.18	3.270		
1900	1871	1898	1872	8	8	99.59	-202	-164	53	36	16.27	3.237		
2000	1968	1998	1969	9	9	100.50	-221	-177	56	38	17.36	3.209		
2100	2066	2098	2067	9	9	101.31	-240	-190	59	40	18.46	3.184		
2200	2163	2198	2164	10	10	102.04	-258	-203	62	42	19.55	3.163		
2300	2260	2298	2261	10	10	102.70	-277	-215	65	44	20.65	3.144		
2400	2357	2398	2359	11	11	103.31	-296	-228	68	46	21.75	3.127		
2500	2454	2498	2456	12	11	103.86	-314	-241	71	48	22.84	3.112		
2600	2551	2598	2553	12	12	104.36	-333	-254	74	50	23.94	3.099		
2700	2648	2698	2651	13	13	104.83	-352	-267	77	52	25.04	3.087		
2800	2745	2798	2748	13	13	105.25	-370	-280	80	54	26.14	3.076		
2900	2842	2898	2845	14	14	105.65	-389	-293	84	56	27.24	3.066		
3000	2940	2998	2943	14	14	106.02	-408	-306	87	58	28.34	3.057		
3100	3037	3098	3040	15	15	106.36	-426	-319	90	60	29.44	3.049		
3200	3134	3198	3137	16	15	106.68	-445	-332	93	62	30.54	3.041		
3300	3231	3298	3235	16	16	106.98	-464	-345	96	64	31.64	3.035		
3400	3328	3398	3332	17	16	107.26	-482	-357	99	66	32.74	3.028		
3500	3425	3498	3429	17	17	107.52	-501	-370	102	68	33.84	3.022		
3600	3522	3597	3527	18	18	107.77	-520	-383	105	70	34.93	3.017		
3700	3619	3697	3624	19	18	108.00	-538	-396	109	72	36.03	3.012		
3800	3716	3797	3721	19	19	108.22	-557	-409	112	75	37.13	3.007		
3900	3814	3897	3819	20	19	108.43	-576	-422	115	77	38.23	3.003		
4000	3911	3997	3916	20	20	108.62	-594	-435	118	79	39.33	2.999		
4100	4008	4097	4013	21	20	108.81	-613	-448	121	81	40.43	2.995		
4200	4105	4197	4111	21	21	108.99	-632	-461	124	83	41.53	2.991		
4300	4202	4297	4208	22	21	109.16	-650	-474	127	85	42.63	2.988		
4400	4299	4397	4305	23	22	109.32	-669	-487	131	87	43.73	2.985		
4500	4396	4497	4403	23	23	109.47	-688	-499	134	89	44.82	2.982 SF		
4600	4493	4588	4492	24	23	109.58	-704	-512	138	93	45.77	3.023		
4700	4590	4668	4569	24	24	131.90	-712	-529	159	113	46.04	3.446		
4800	4684	4737	4635	25	24	147.88	-713	-550	204	159	45.77	4.465		
4900	4772	4791	4685	26	24	156.28	-710	-569	271	226	45.21	5.992		
5000	4853	4830	4720	26	24	161.28	-705	-585	353	308	44.64	7.900		



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 401H - Slot 1
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:	# 401H	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		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)			
5100	4924	4850	4738	27	24	164.91	-702	-594	445	401	44.00	10.103	
5200	4985	4866	4753	28	24	169.04	-700	-601	542	498	43.99	12.320	
5300	5032	4869	4755	29	24	-31.93	-699	-602	642	598	43.97	14.596	
5400	5066	4864	4751	30	24	-16.25	-700	-600	741	697	44.11	16.801	
5500	5085	4850	4738	31	24	-14.54	-702	-594	838	794	44.28	18.923	
5600	5089	4850	4738	32	24	-14.10	-702	-594	931	886	45.12	20.633	
5700	5089	4822	4713	33	24	-14.04	-706	-582	1023	978	45.10	22.674	
5800	5088	4800	4693	35	24	-13.99	-709	-573	1116	1070	45.20	24.677	
5900	5088	4800	4693	36	24	-13.99	-709	-573	1209	1163	45.76	26.422	
6000	5087	4800	4693	38	24	-13.99	-709	-573	1303	1257	46.20	28.212	
6100	5087	4774	4669	40	24	-13.94	-711	-563	1398	1352	46.07	30.345	
6200	5087	4750	4647	42	24	-13.90	-712	-554	1493	1447	45.97	32.491	
6300	5086	4750	4647	44	24	-13.90	-712	-554	1589	1543	46.28	34.335	
6400	5086	4750	4647	46	24	-13.90	-712	-554	1685	1638	46.54	36.201	
6500	5085	4750	4647	48	24	-13.90	-712	-554	1781	1735	46.77	38.086	
6600	5085	4750	4647	50	24	-13.90	-712	-554	1878	1831	46.97	39.986	
6700	5085	4728	4627	52	24	-13.86	-713	-547	1975	1928	46.83	42.166	



Lonestar Consulting, LLC

Anticollision Report



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Reference Well:	# 401H	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

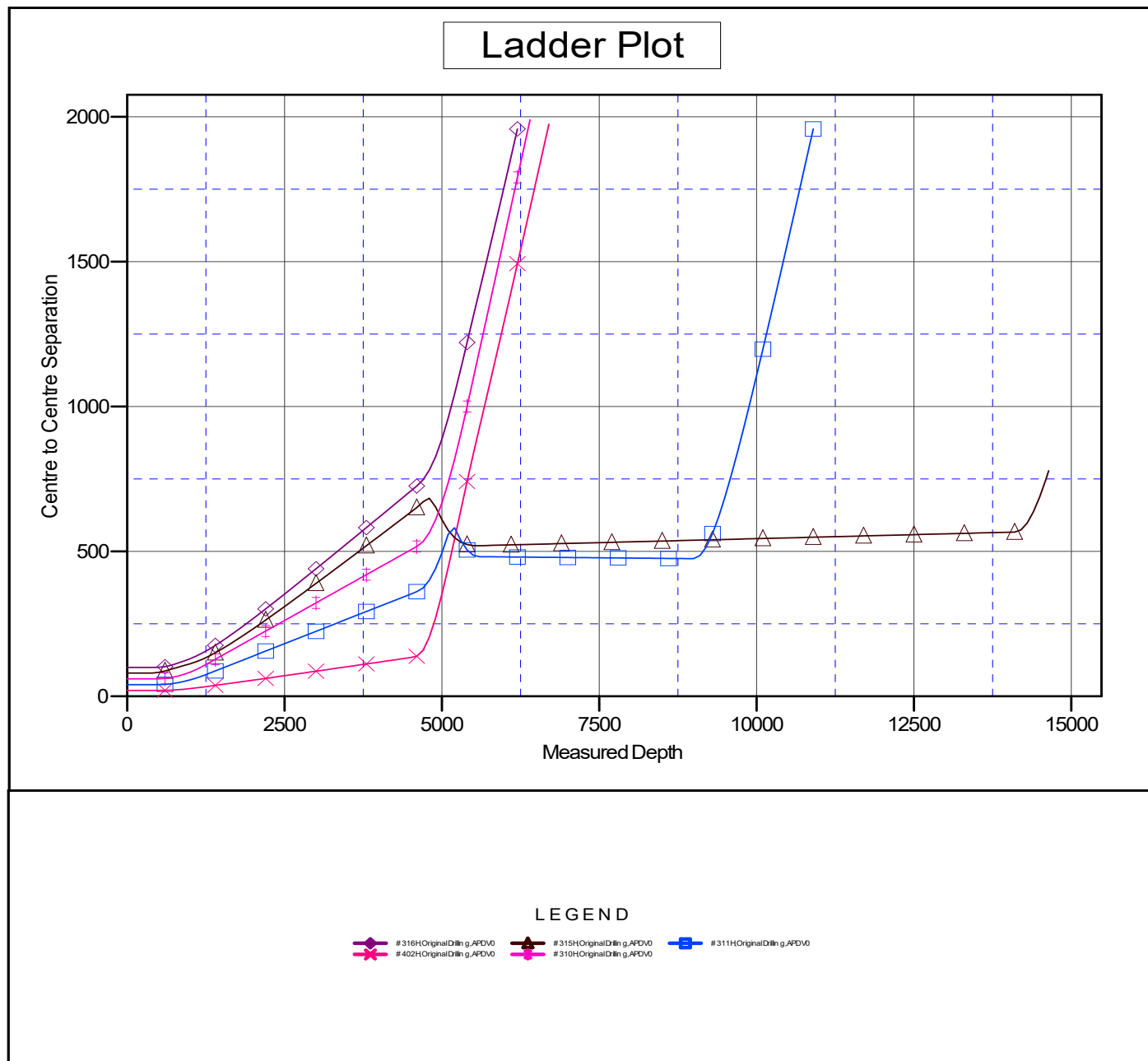
Offset Depths are relative to Offset Datum

Central Meridian is -107.83333333

Coordinates are relative to: # 401H - Slot 1

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

Grid Convergence at Surface is: 0.24°





Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 401H - Slot 1
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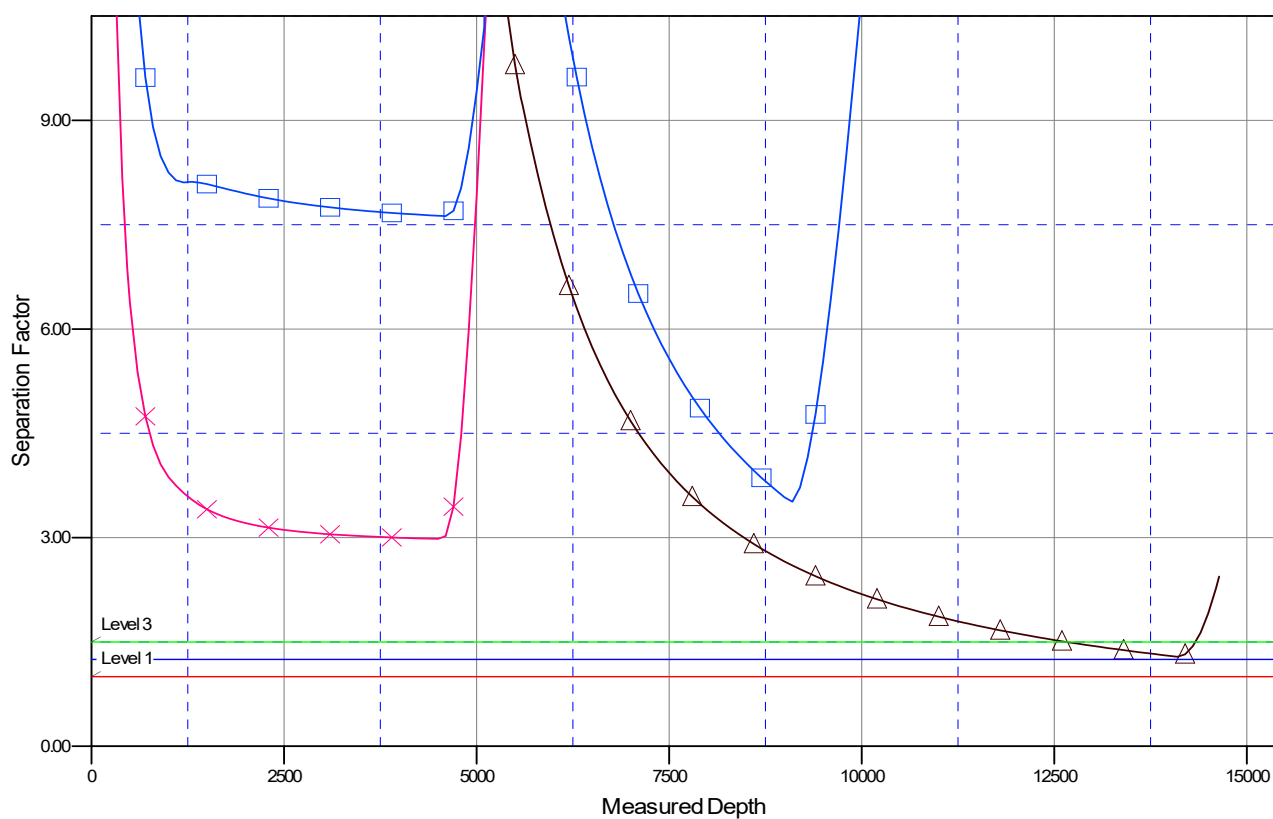
Central Meridian is -107.8333333

Coordinates are relative to: # 401H - Slot 1

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

Grid Convergence at Surface is: 0.24°

Separation Factor Plot



LEGEND

■ # 316H Original Drilling, APOVO
 ▲ # 315H Original Drilling, APOVO
 ■ # 311H Original Drilling, APOVO
× # 402H Original Drilling, APOVO
× # 310H Original Drilling, APOVO



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

#401H GALLO CANYON UNIT

Lease: NMNM118128 Agreement: NMNM131017A

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

Sandoval County, New Mexico

BH: NE¼SE¼ Section 36, 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/oed/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 456440

CONDITIONS

Operator: DJR OPERATING, LLC 200 Energy Court Farmington, NM 87401	OGRID: 371838
	Action Number: 456440
	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