

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. 30-043-21537
3a. Address	3b. Phone No. (include area code)	10. Field and Pool, or Exploratory
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		11. Sec., T. R. M. or Blk. and Survey or Area
14. Distance in miles and direction from nearest town or post office*		12. County or Parish
13. State		
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
24. Attachments		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

- | | |
|---|---|
| 1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM. |
|---|---|

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

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
 Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

*(Instructions on page 2)



Additional Operator Remarks

Location of Well

0. SHL: SWSW / 998 FSL / 347 FWL / TWSP: 23N / RANGE: 7W / SECTION: 24 / LAT: 36.206995 / LONG: -107.534742 (TVD: 0 feet, MD: 0 feet)

PPP: SESE / 876 FSL / 330 FEL / TWSP: 23N / RANGE: 7W / SECTION: 23 / LAT: 36.206691 / LONG: -107.537031 (TVD: 5348 feet, MD: 5643 feet)

PPP: SENW / 2358 FNL / 2605 FWL / TWSP: 23N / RANGE: 7W / SECTION: 23 / LAT: 36.212189 / LONG: -107.544822 (TVD: 5377 feet, MD: 11910 feet)

PPP: SWNE / 2593 FNL / 2324 FEL / TWSP: 23N / RANGE: 7W / SECTION: 23 / LAT: 36.211519 / LONG: -107.543873 (TVD: 5377 feet, MD: 11910 feet)

BHL: NWNW / 330 FNL / 236 FWL / TWSP: 23N / RANGE: 7W / SECTION: 23 / LAT: 36.217914 / LONG: -107.552935 (TVD: 5377 feet, MD: 11910 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 30-043-21537	Pool Code 98174	Pool Name ALAMITO N; MANCOS (OIL)
Property Code 325267	Property Name NORTH ALAMITO UNIT	Well Number 550H
OGRID No. 371838	Operator Name DJR OPERATING, LLC	Ground Level Elevation 7121'
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
M	24	23N	7W		998' SOUTH	347' WEST	36.206995° N	107.534742° W	SANDOVAL

Bottom Hole Location (BHL)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
D	23	23N	7W		330' NORTH	236' WEST	36.217914° N	107.552935° W	SANDOVAL

Dedicated Acres SEC 23: SE/4, NE/SW, SW/NE & NW/4 = 400 ACRES	PENETRATED SPACING UNIT; INFILL	Defining Well API	Overlapping Spacing Unit (Y/N) N	Consolidation Code UNITIZATION
Order Numbers: R-14081 R-14081A		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
P	23	23N	7W		876' SOUTH	330' EAST	36.206691° N	107.537031° W	SANDOVAL

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
P	23	23N	7W		876' SOUTH	330' EAST	36.206691° N	107.537031° W	SANDOVAL

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
D	23	23N	7W		330' NORTH	236' WEST	36.217914° N	107.552935° W	SANDOVAL

Unitized Area or Area of Uniform Interest NORTH ALAMITO	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.

Shaw-Marie Ford
Signature

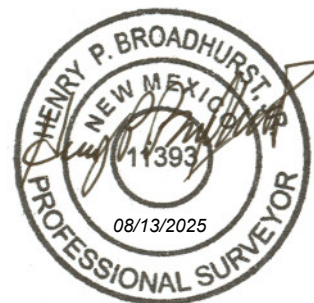
8/13/2025
Date

Shaw-Marie Ford
Printed Name

sford@enduringresources.com
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

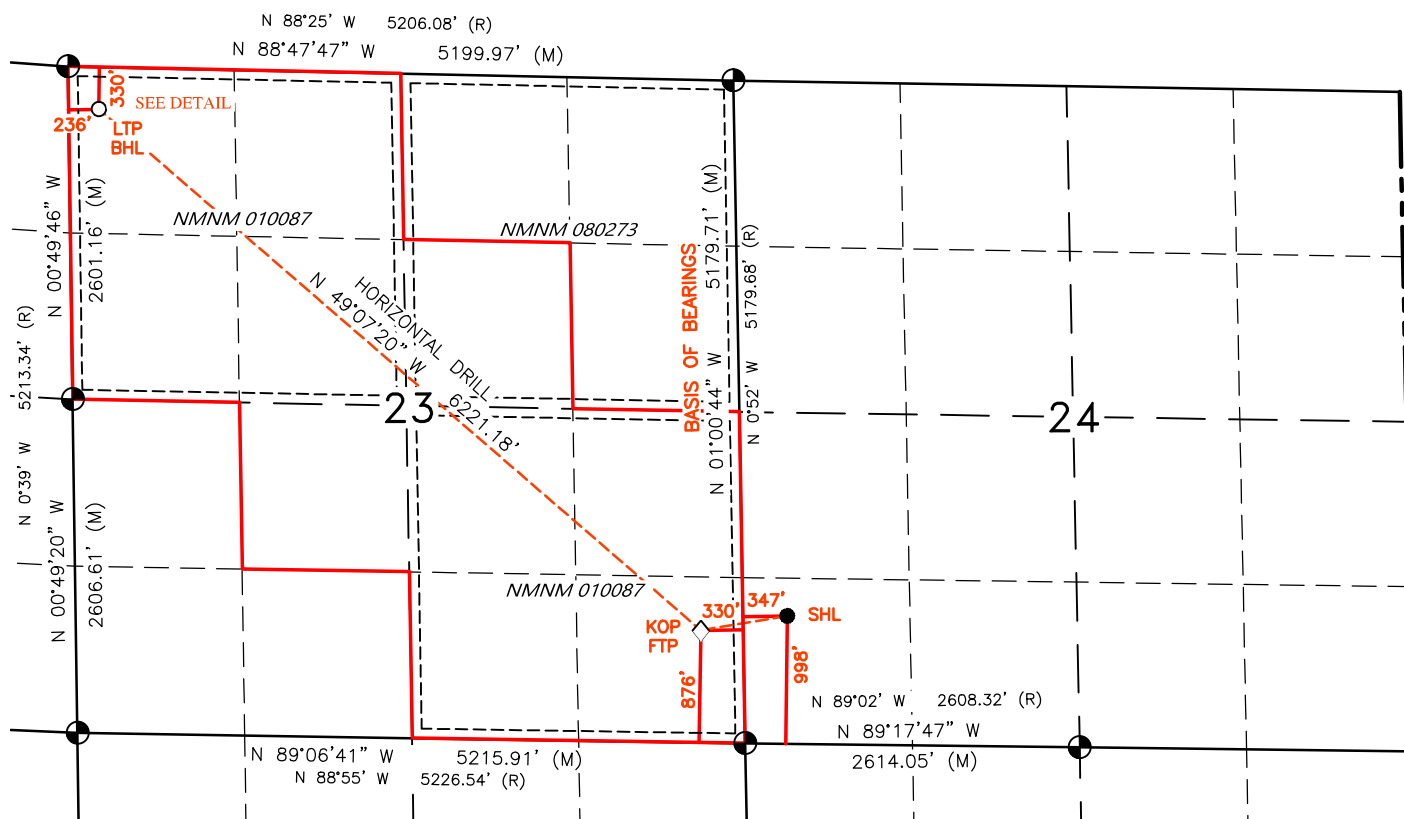
11393

Date of Survey

APRIL 14, 2023

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 2 1/2" BC
GLO 1948



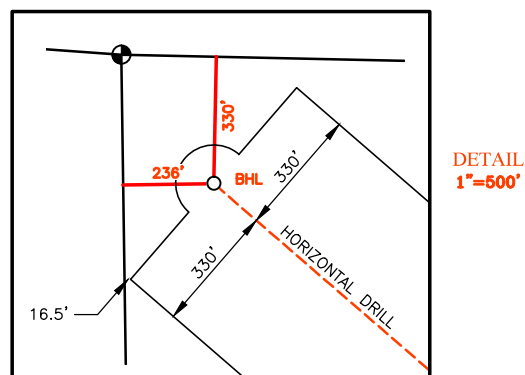
SURFACE LOCATION (SHL) ●
998' FSL 347' FWL
SEC. 24, T23N, R7W
LAT. 36.206995° N (NAD83)
LONG. 107.534742° W (NAD83)

KICK OFF POINT (KOP) ▲
876' FSL 330' FEL
SEC. 23, T23N, R7W
LAT. 36.206691° N (NAD83)
LONG. 107.537031° W (NAD83)

FIRST TAKE POINT (FTP) ◇
876' FSL 330' FEL
SEC. 23, T23N, R7W
LAT. 36.206691° N (NAD83)
LONG. 107.537031° W (NAD83)

LAST TAKE POINT (LTP) □
330' FNL 236' FWL
SEC. 23, T23N, R7W
LAT. 36.217914° N (NAD83)
LONG. 107.552935° W (NAD83)

BOTTOM HOLE LOCATION (BHL) ○
330' FNL 236' FWL
SEC. 23, T23N, R7W
LAT. 36.217914° N (NAD83)
LONG. 107.552935° W (NAD83)



State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: DJR Operating, LLC **OGRID:** 371838 **Date:** 08 / 14 / 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
N. Alamito Unit 201H	TBD	M-24-23N-7W	954 FSL x 386 FWL	434	1278	173
N. Alamito Unit 203H	TBD	M-24-23N-7W	1013 FSL x 334 FWL	374	675	150
N. Alamito Unit 205H	TBD	M-24-23N-7W	984 FSL x 358 FWL	268	1331	107
N. Alamito Unit 540H	TBD	M-24-23N-7W	969 FSL x 373 FWL	459	540	184
N. Alamito Unit 550H	TBD	M-24-23N-7W	998 FSL x 347 FWL	417	945	167
				3-yr Decline	3-yr Decline	3-yr Decline
N. Alamito Unit 201H	TBD	M-24-23N-7W		98	392	39
N. Alamito Unit 203H	TBD	M-24-23N-7W		85	338	34
N. Alamito Unit 205H	TBD	M-24-23N-7W		61	242	24
N. Alamito Unit 540H	TBD	M-24-23N-7W		104	415	41
N. Alamito Unit 550H	TBD	M-24-23N-7W		94	377	38

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 Start Date	Initial Flow Back Date	First Production Date
N. Alamito Unit 201H	TBD	4/26/2026	5/6/2026	6/11/2026	6/21/2026	6/24/2026
N. Alamito Unit 203H	TBD	4/30/2026	5/10/2026	6/11/2026	6/21/2026	6/24/2026
N. Alamito Unit 205H	TBD	5/3/2026	5/13/2026	6/11/2026	6/21/2026	6/24/2026
N. Alamito Unit 540H	TBD	5/7/2026	5/17/2026	6/11/2026	6/21/2026	6/24/2026
N. Alamito Unit 550H	TBD	5/10/2026	5/20/2026	6/11/2026	6/21/2026	6/24/2026

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan**EFFECTIVE APRIL 1, 2022**

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☐ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

If Operator checks this box, Operator will select one of the following:

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: <i>Shaw-Marie Ford</i>
Printed Name: Shaw-Marie Ford
Title: Regulatory Specialist
E-mail Address: sford@djrlc.com
Date: 8/14/2025
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
N. Alamito Unit 201H 203H 205H 540H 550H

SEPARATION EQUIPMENT

DJR Operating LLC (DJR) has pulled representative pressurized samples from wells in the same producing formation. DJR has utilized these samples in process simulations to determine the amount of gas anticipated in each stage of the process and utilized this information with a safety factor to size the equipment listed below:

Separation equipment will be set as follows:

- Individual 3 phase separator will be set for the individual well.
- The separator will be sized based on the anticipated volume of the well and the pressure of the lines utilized for oil, gas, and water takeaway.
- The 3 phase production separator will be equipped with a 0.75 MMBtu/hr indirect fired heater.

Heater treaters will be set as follows:

- Individual heater treaters will be set for the individual well.
- The heater treaters are sized based on the anticipated combined volume of oil and produced water predicted to come from the initial 3 phase separator.
- Oil will be separated from the produced water and the oil/produced water will be sent to its respective tanks.
- The combined oil and natural gas stream is routed to the Vapor Recovery Tower.

Vapor Recovery Equipment will be set as follows:

- The Vapor Recovery Tower has been sized, based on the anticipated volume of gas from the heater treater and oil and water tanks.
- The Vapor Recovery Unit has been sized, based on the anticipated volume of gas from the heater treater and oil and water tanks. The Vapor Recovery Unit is utilized to push the recovered gas into the sales pipeline.

Production storage tanks will be set as follows:

- The oil and produced water tanks utilize a closed vent capture system to ensure all breathing, working, and flashing losses are routed to the Vapor Recovery Tower and Vapor Recovery Unit.
- Each of the production storage tanks will be equipped with a 0.5 MMBtu/hr indirect heater.



DJR Operating LLC.
OGRID No: 371838
NATURAL GAS MANAGEMENT PLAN
N. Alamito Unit 201H 203H 205H 540H 550H

VENTING and FLARING

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

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

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

DJR will only flare gas during the following times:

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



DJR Operating LLC.
OGRID No: 371838
NATURAL GAS MANAGEMENT PLAN
N. Alamito Unit 201H 203H 205H 540H 550H

OPERATIONAL PRACTICES

19.15.27.8 A. Venting and Flaring of Natural Gas

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.



DJR Operating LLC.

OGRID No: 371838

NATURAL GAS MANAGEMENT PLAN

N. Alamito Unit 201H 203H 205H 540H 550H

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.



DJR Operating LLC.

OGRID No: 371838

NATURAL GAS MANAGEMENT PLAN

N. Alamito Unit 201H 203H 205H 540H 550H

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

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

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



DJR Operating LLC.
OGRID No: 371838
NATURAL GAS MANAGEMENT PLAN
N. Alamito Unit 201H 203H 205H 540H 550H

BEST MANAGEMENT PRACTICES

DJR utilizes the following Best Management Practices to minimize venting during active and planned maintenance.

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

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

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

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

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

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

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

Rev 1



DRILLING PLAN

North Alamito Unit #550H

Sandoval County, New Mexico

Surface Location

347-ft FWL & 998-ft FSL
 Sec 24 T23N R7W
 Graded Elevation 7121' MSL
 RKB Elevation 7135' (14' KB)

SHL Geographical Coordinates (NAD-83)

Latitude 36.2069950° N
 Longitude 107.5347420° W

Kick Off Point for Horizontal Build Curve

4820-ft MD
 4794-ft TVD

Local Coordinates (from SHL)

422-ft South
 226-ft West

Heel Location (Pay zone entry)

330-ft FEL & 876-ft FSL
 Sec 23 T23N R7W

Heel Geographical Coordinates (NAD-83)

Latitude 36.206691° N
 Longitude 107.53703100° W

Bottom Hole Location (TD)

236-ft FWL & 330-ft FNL
 Sec 23 T23N R7W

BHL Geographical Coordinates (NAD-83)

Latitude 36.217914° N
 Longitude 107.5529350° W

Well objectives

This well is planned as a 6220-ft lateral in the Gallup B sand.

Bottom Hole temperature and pressure

The temperature in the Gallup B horizontal objective is 143°F. Bottom hole pressure in the Gallup B is forecast to be 1985 psi.

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

Name	MD (ft)	TVD (ft)	Lithology	Pore fluid	Expected Pore Pressure (ppg)	Planned Mud Weight (ppg)
Ojo Alamo	1358	1353	Sd	W	8.3	8.4 – 8.8
Kirtland	1534	1528	Sh	-	8.3	8.4 – 8.8
Fruitland	1739	1732	C	G	8.3	9.0 - 9.5
Pictured Cliffs	1981	1972	Sd	W	8.3	9.0 - 9.5
Lewis	2094	2085	Sh	-		9.0 - 9.5
Chacra	2826	2812	Sd	-	8.3	9.0 - 9.5
Menefee	3512	3494	Sd, C	G	8.3	9.0 - 9.5
Point Lookout	4323	4300	Sd	-	8.3	9.0 - 9.5
Mancos	4469	4445	Sh	-		9.0 - 9.5
Mancos Silt	4840	4814	Slt	O/G	6.6	9.0 - 9.5
Gallup A	5465	5304	Slt	O/G	6.6	9.0 - 9.5
Gallup B	5586	5340	Sd	O/G	6.6	8.8 -9.0
Gallup C	NP	NP	Sd	O/G	6.6	8.8 -9.0
Target	5689	5350	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	5643	surf	5348	surface
4-1/2"	6-1/8"	11.6	P-110	BTC	5404	11910	5276	5377	5404

Note: all casing will be new

Rev 1



Casing Design Load Cases

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

Note

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

Casing Design Factors

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

Cement Design

9-5/8" Surface Casing

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

7" Intermediate Casing

	<u>Lead</u>	<u>Tail</u>
	American	American
Type	I/II	Poz/G
Planned top	Surface	4469-ft
Density (ppg)	12.30	13.50
Yield (cf/sx)	2.34	1.51
Mix water (gal/sx)	13.22	7.13
Volume (sx)	496	123
Volume (bbls)	207	33
Volume (cu.ft.)	1161	186
Excess %	78	0



Rev 1

4-1/2" Production Liner

Type	American
Planned top	Poz/G
Density (ppg)	5404-ft
Yield (cf/sx)	13.3
Mix water (gal/sx)	1.52
Volume (sx)	7.52
Volume (bbls)	562
Volume (cu.ft)	152
Excess %	855
	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 – 5643	9.0 – 9.5	38 – 45	8 – 14	<20
Production	Low solids, non-dispersed	5643 – 11910	8.8 – 9.2	34 – 38	6 – 8	6 – 8

Cores, tests and logs

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

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

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

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

Cuttings and drilling fluids management

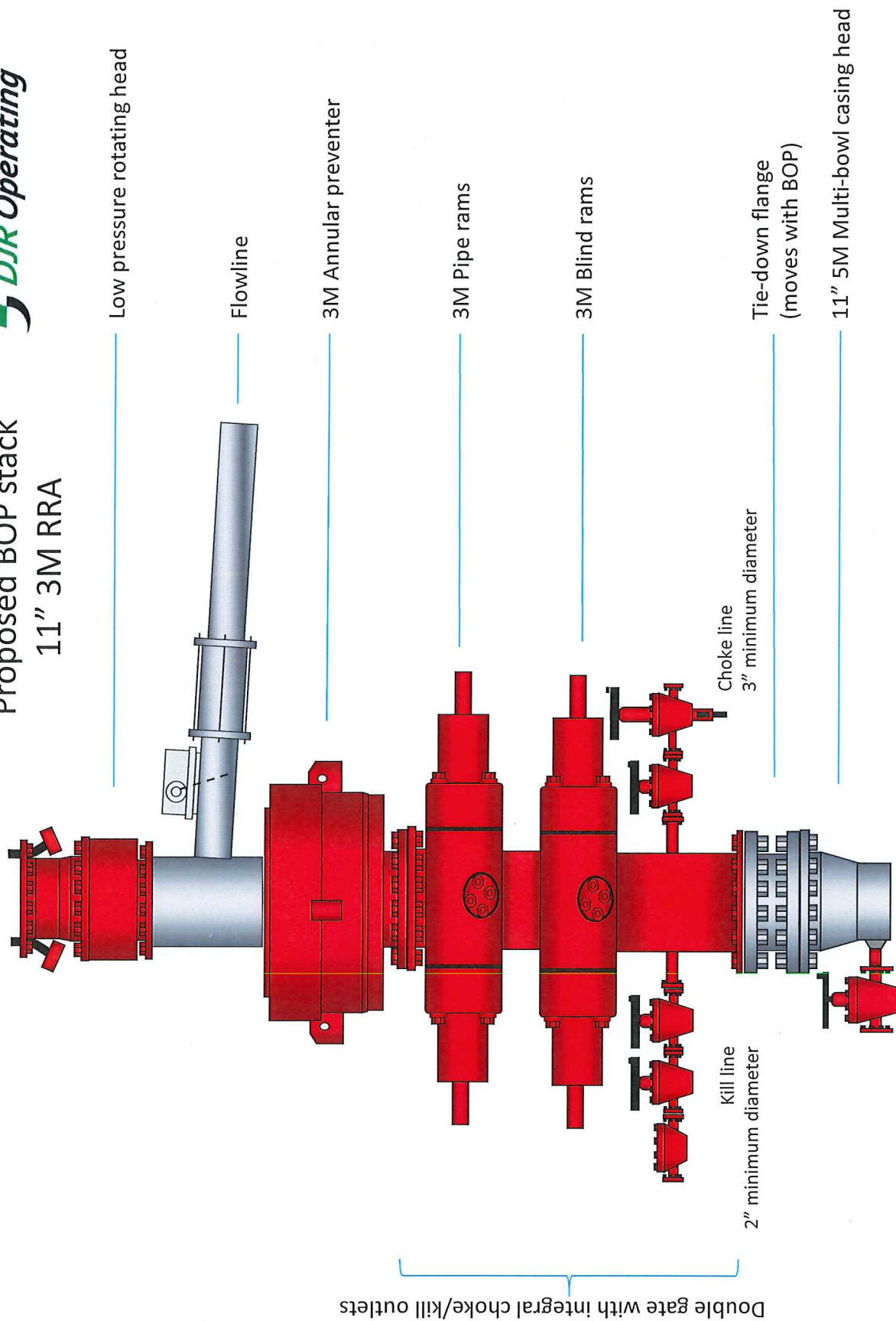
A closed loop, steel tank-based circulating system will be used. In addition to the rig solids control equipment, a dewatering centrifuge and chemical flocculation system will be operational to strip solids from the whole mud. All solids will be collected in 3-sided bins and will then be put into transports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

Completion

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



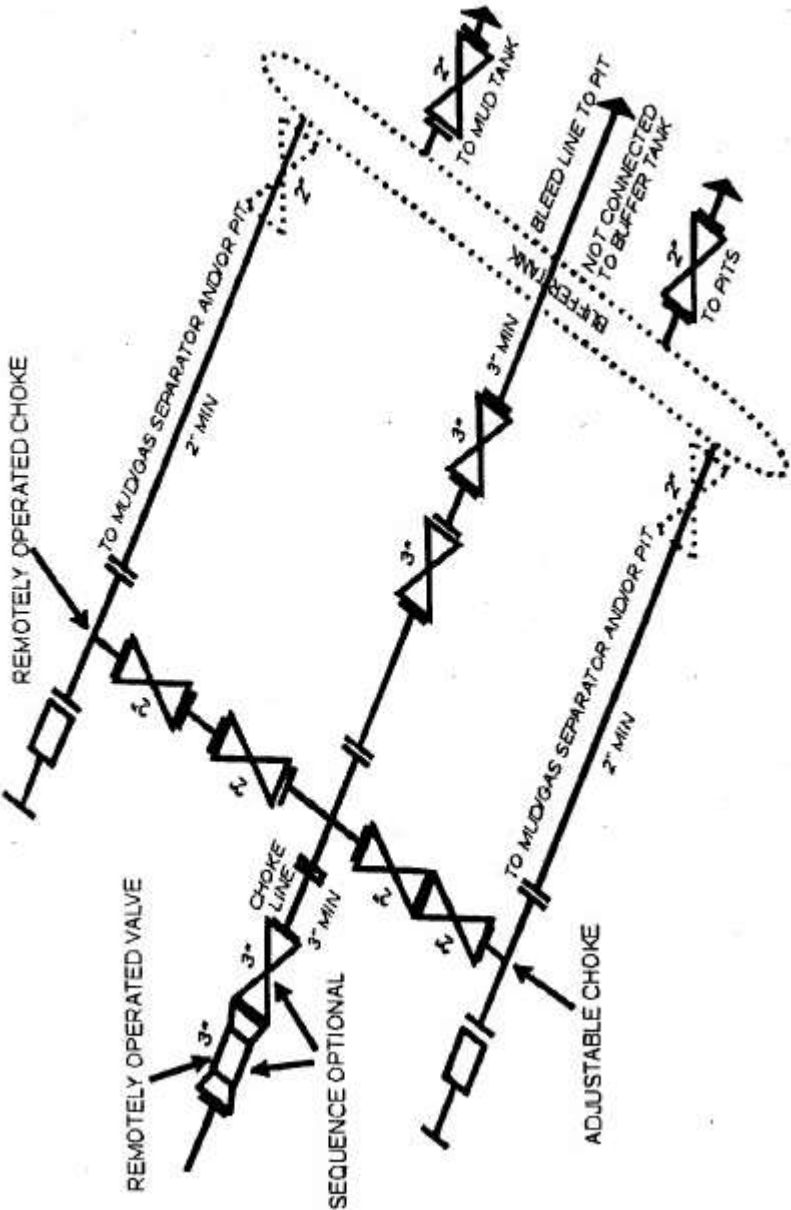
Proposed BOP stack 11" 3M RRA





Choke Manifold

Actual system to conform with Onshore Order 2



Released to Imaging: 9/9/2025 10:04:50 AM

Received by OCB: 9/9/2025 3:14 PM

Page 20 of 50

Company: DJR Operating

Project: North Alamito Unit

Site: M24 2307 Pad

Well: # 550H

Wellbore: Original Drilling

Design: APD Rev 1

Geodetic System: US State Plane 1983

Datum: North American Datum 1983

Ellipsoid: GRS 1980

Zone: New Mexico Western Zone

System Datum: Mean Sea Level

Local North: True

WELL DETAILS: # 550H

GL 7121' & RKB 14' @ 7135ft

+N/-S +E/-W Northing Easting Latitude Longitude

0 0 1894779.35 2811179.96 36.20699500 -107.53474200 4

Plan: APD Rev 1 (# 550H/Original Drilling)

Created By: Janie Collins Date: 13:52, September 01 2023

DESIGN TARGET DETAILS

MD Inc Azi TVD +N/-S +E/-W Dleg TFace VSec

0 0.00 0.00 0 0 0 0.00 0.00 0

350 0.00 0.00 350 0 0 0.00 0.00 0

669 6.38 208.19 668 -16 -8 2.00 208.19 -3

4820 6.38 208.19 4794 -422 -226 0.00 0.00 -69

5689 89.75 311.06 5350 -111 -675 10.50 102.82 477

11910 89.75 311.06 5377 3975 -5366 0.00 0.00 6678

NAME TVD +N/-S +E/-W Northing Easting Latitude Longitude

550H Heel 5350 -111 -675 1894666.62 2810505.01 36.20669100 -107.53703100

550H Toe Rev1 5377 3975 -5366 1898738.09 2805801.28 36.21791400 -107.55293500

CASING DETAILS

TVD MD Name

350 350 Surface

5348 5643 Intermediate

FORMATION DETAILS

TVDPath MDPATH Formation

1353 1358 Ojo Alamo

1528 1534 Kirtland

1732 1739 Fruitland

1972 1981 Pictured Cliffs

2085 2094 Lewis

2812 2826 Chacra

3494 3512 Menefee

4300 4323 Point Lookout

4445 4469 Mancos

4814 4840 Mancos Silt

5304 5465 Gallup A

5340 5586 Gallup B

Vertical Section at 306.53° (750 ft/in)

Surface

2000

4000

Intermediate

550H Heel

6000

8000

10000

550H/APD Rev 1

550H Toe Rev1

11910

Vertical Section at 306.53° (750 ft/in)

Surface

Intermediate

550H Heel

550H Toe Rev1

11910

Vertical Section at 306.53° (750 ft/in)

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550H Heel

550H Toe Rev1

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Vertical Section at 306.53° (750 ft/in)

Surface

Intermediate

550H Heel

550H Toe Rev1

11910

Vertical Section at 306.53° (750



DJR Operating

North Alamito Unit

M24 2307 Pad

550H - Slot 4

Original Drilling

Plan: APD Rev 1

Standard Planning Report

01 September, 2023





Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 550H - Slot 4
Company:	DJR Operating	TVD Reference:	GL 7121' & RKB 14' @ 7135ft
Project:	North Alamito Unit	MD Reference:	GL 7121' & RKB 14' @ 7135ft
Site:	M24 2307 Pad	North Reference:	True
Well:	# 550H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD Rev 1		

Project	North Alamito Unit		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site	M24 2307 Pad				
Site Position:		Northing:	1,894,734.70 usft	Latitude:	36.20687200
From:	Lat/Long	Easting:	2,811,219.92 usft	Longitude:	-107.53460700
Position Uncertainty:	0 ft	Slot Radius:	13.20 in		

Well	# 550H - Slot 4					
Well Position	+N/-S	0 ft	Northing:	1,894,779.35 usft	Latitude:	36.20699500
	+E/-W	0 ft	Easting:	2,811,179.96 usft	Longitude:	-107.53474200
Position Uncertainty		0 ft	Wellhead Elevation:	ft	Ground Level:	7121 ft
Grid Convergence:		0.18 °				

Wellbore	Original Drilling				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2000	12/31/2004	10.76	63.26	51,242.32237638

Design	APD Rev 1			
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	306.53

Plan Survey Tool Program	Date	9/1/2023		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0	11,910 APD Rev 1 (Original Drilling)	MWD+IGRF	
			OWSG MWD + IGRF or WMM	

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0	0.00	0.00	0	0	0	0.00	0.00	0.00	0.00	
350	0.00	0.00	350	0	0	0.00	0.00	0.00	0.00	
669	6.38	208.19	668	-16	-8	2.00	2.00	0.00	208.19	
4820	6.38	208.19	4794	-422	-226	0.00	0.00	0.00	0.00	
5689	89.75	311.06	5350	-111	-675	10.50	9.60	11.85	102.82	550H Heel
11,910	89.75	311.06	5377	3975	-5366	0.00	0.00	0.00	0.00	550H Toe Rev1



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 550H - Slot 4
Company:	DJR Operating	TVD Reference:	GL 7121' & RKB 14' @ 7135ft
Project:	North Alamito Unit	MD Reference:	GL 7121' & RKB 14' @ 7135ft
Site:	M24 2307 Pad	North Reference:	True
Well:	# 550H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD Rev 1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0	0.00	0.00	0	0	0	0	0.00	0.00	0.00
100	0.00	0.00	100	0	0	0	0.00	0.00	0.00
200	0.00	0.00	200	0	0	0	0.00	0.00	0.00
300	0.00	0.00	300	0	0	0	0.00	0.00	0.00
350	0.00	0.00	350	0	0	0	0.00	0.00	0.00
400	1.00	208.19	400	0	0	0	2.00	2.00	0.00
500	3.00	208.19	500	-3	-2	-1	2.00	2.00	0.00
600	5.00	208.19	600	-10	-5	-2	2.00	2.00	0.00
669	6.38	208.19	668	-16	-8	-3	2.00	2.00	0.00
700	6.38	208.19	699	-19	-10	-3	0.00	0.00	0.00
800	6.38	208.19	799	-28	-15	-5	0.00	0.00	0.00
900	6.38	208.19	898	-38	-20	-6	0.00	0.00	0.00
1000	6.38	208.19	997	-48	-26	-8	0.00	0.00	0.00
1100	6.38	208.19	1097	-58	-31	-10	0.00	0.00	0.00
1200	6.38	208.19	1196	-68	-36	-11	0.00	0.00	0.00
1300	6.38	208.19	1295	-77	-41	-13	0.00	0.00	0.00
1400	6.38	208.19	1395	-87	-47	-14	0.00	0.00	0.00
1500	6.38	208.19	1494	-97	-52	-16	0.00	0.00	0.00
1600	6.38	208.19	1594	-107	-57	-18	0.00	0.00	0.00
1700	6.38	208.19	1693	-117	-62	-19	0.00	0.00	0.00
1800	6.38	208.19	1792	-126	-68	-21	0.00	0.00	0.00
1900	6.38	208.19	1892	-136	-73	-22	0.00	0.00	0.00
2000	6.38	208.19	1991	-146	-78	-24	0.00	0.00	0.00
2100	6.38	208.19	2090	-156	-83	-26	0.00	0.00	0.00
2200	6.38	208.19	2190	-165	-89	-27	0.00	0.00	0.00
2300	6.38	208.19	2289	-175	-94	-29	0.00	0.00	0.00
2400	6.38	208.19	2389	-185	-99	-30	0.00	0.00	0.00
2500	6.38	208.19	2488	-195	-104	-32	0.00	0.00	0.00
2600	6.38	208.19	2587	-205	-110	-34	0.00	0.00	0.00
2700	6.38	208.19	2687	-214	-115	-35	0.00	0.00	0.00
2800	6.38	208.19	2786	-224	-120	-37	0.00	0.00	0.00
2900	6.38	208.19	2886	-234	-125	-39	0.00	0.00	0.00
3000	6.38	208.19	2985	-244	-131	-40	0.00	0.00	0.00
3100	6.38	208.19	3084	-254	-136	-42	0.00	0.00	0.00
3200	6.38	208.19	3184	-263	-141	-43	0.00	0.00	0.00
3300	6.38	208.19	3283	-273	-146	-45	0.00	0.00	0.00
3400	6.38	208.19	3382	-283	-152	-47	0.00	0.00	0.00
3500	6.38	208.19	3482	-293	-157	-48	0.00	0.00	0.00
3600	6.38	208.19	3581	-302	-162	-50	0.00	0.00	0.00
3700	6.38	208.19	3681	-312	-167	-51	0.00	0.00	0.00
3800	6.38	208.19	3780	-322	-173	-53	0.00	0.00	0.00
3900	6.38	208.19	3879	-332	-178	-55	0.00	0.00	0.00
4000	6.38	208.19	3979	-342	-183	-56	0.00	0.00	0.00
4100	6.38	208.19	4078	-351	-188	-58	0.00	0.00	0.00
4200	6.38	208.19	4178	-361	-194	-59	0.00	0.00	0.00
4300	6.38	208.19	4277	-371	-199	-61	0.00	0.00	0.00
4400	6.38	208.19	4376	-381	-204	-63	0.00	0.00	0.00
4500	6.38	208.19	4476	-391	-209	-64	0.00	0.00	0.00
4600	6.38	208.19	4575	-400	-215	-66	0.00	0.00	0.00
4700	6.38	208.19	4674	-410	-220	-68	0.00	0.00	0.00
4800	6.38	208.19	4774	-420	-225	-69	0.00	0.00	0.00
4820	6.38	208.19	4794	-422	-226	-69	0.00	0.00	0.00
4900	9.30	269.41	4873	-426	-235	-65	10.50	3.68	76.94
5000	18.48	292.06	4970	-420	-257	-43	10.50	9.17	22.65



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 550H - Slot 4
Company:	DJR Operating	TVD Reference:	GL 7121' & RKB 14' @ 7135ft
Project:	North Alamito Unit	MD Reference:	GL 7121' & RKB 14' @ 7135ft
Site:	M24 2307 Pad	North Reference:	True
Well:	# 550H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD Rev 1		

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	28.56	299.54	5062	-402	-293	-4	10.50	10.09	7.48	
5200	38.86	303.31	5145	-373	-340	51	10.50	10.29	3.77	
5300	49.23	305.69	5217	-334	-397	121	10.50	10.37	2.38	
5400	59.63	307.42	5275	-285	-463	202	10.50	10.41	1.73	
5500	70.06	308.82	5317	-229	-534	292	10.50	10.42	1.39	
5600	80.49	310.04	5342	-168	-608	389	10.50	10.43	1.22	
5689	89.75	311.06	5350	-111	-675	477	10.50	10.44	1.15	
5700	89.75	311.06	5350	-103	-684	488	0.00	0.00	0.00	
5800	89.75	311.06	5350	-38	-759	588	0.00	0.00	0.00	
5900	89.75	311.06	5351	28	-835	687	0.00	0.00	0.00	
6000	89.75	311.06	5351	94	-910	787	0.00	0.00	0.00	
6100	89.75	311.06	5352	159	-985	887	0.00	0.00	0.00	
6200	89.75	311.06	5352	225	-1061	986	0.00	0.00	0.00	
6300	89.75	311.06	5353	291	-1136	1086	0.00	0.00	0.00	
6400	89.75	311.06	5353	357	-1212	1186	0.00	0.00	0.00	
6500	89.75	311.06	5354	422	-1287	1286	0.00	0.00	0.00	
6600	89.75	311.06	5354	488	-1362	1385	0.00	0.00	0.00	
6700	89.75	311.06	5354	554	-1438	1485	0.00	0.00	0.00	
6800	89.75	311.06	5355	619	-1513	1585	0.00	0.00	0.00	
6900	89.75	311.06	5355	685	-1589	1684	0.00	0.00	0.00	
7000	89.75	311.06	5356	751	-1664	1784	0.00	0.00	0.00	
7100	89.75	311.06	5356	816	-1740	1884	0.00	0.00	0.00	
7200	89.75	311.06	5357	882	-1815	1983	0.00	0.00	0.00	
7300	89.75	311.06	5357	948	-1890	2083	0.00	0.00	0.00	
7400	89.75	311.06	5357	1013	-1966	2183	0.00	0.00	0.00	
7500	89.75	311.06	5358	1079	-2041	2282	0.00	0.00	0.00	
7600	89.75	311.06	5358	1145	-2117	2382	0.00	0.00	0.00	
7700	89.75	311.06	5359	1210	-2192	2482	0.00	0.00	0.00	
7800	89.75	311.06	5359	1276	-2267	2581	0.00	0.00	0.00	
7900	89.75	311.06	5360	1342	-2343	2681	0.00	0.00	0.00	
8000	89.75	311.06	5360	1407	-2418	2781	0.00	0.00	0.00	
8100	89.75	311.06	5360	1473	-2494	2881	0.00	0.00	0.00	
8200	89.75	311.06	5361	1539	-2569	2980	0.00	0.00	0.00	
8300	89.75	311.06	5361	1604	-2644	3080	0.00	0.00	0.00	
8400	89.75	311.06	5362	1670	-2720	3180	0.00	0.00	0.00	
8500	89.75	311.06	5362	1736	-2795	3279	0.00	0.00	0.00	
8600	89.75	311.06	5363	1801	-2871	3379	0.00	0.00	0.00	
8700	89.75	311.06	5363	1867	-2946	3479	0.00	0.00	0.00	
8800	89.75	311.06	5363	1933	-3021	3578	0.00	0.00	0.00	
8900	89.75	311.06	5364	1998	-3097	3678	0.00	0.00	0.00	
9000	89.75	311.06	5364	2064	-3172	3778	0.00	0.00	0.00	
9100	89.75	311.06	5365	2130	-3248	3877	0.00	0.00	0.00	
9200	89.75	311.06	5365	2196	-3323	3977	0.00	0.00	0.00	
9300	89.75	311.06	5366	2261	-3398	4077	0.00	0.00	0.00	
9400	89.75	311.06	5366	2327	-3474	4176	0.00	0.00	0.00	
9500	89.75	311.06	5367	2393	-3549	4276	0.00	0.00	0.00	
9600	89.75	311.06	5367	2458	-3625	4376	0.00	0.00	0.00	
9700	89.75	311.06	5367	2524	-3700	4476	0.00	0.00	0.00	
9800	89.75	311.06	5368	2590	-3775	4575	0.00	0.00	0.00	
9900	89.75	311.06	5368	2655	-3851	4675	0.00	0.00	0.00	
10,000	89.75	311.06	5369	2721	-3926	4775	0.00	0.00	0.00	
10,100	89.75	311.06	5369	2787	-4002	4874	0.00	0.00	0.00	
10,200	89.75	311.06	5370	2852	-4077	4974	0.00	0.00	0.00	
10,300	89.75	311.06	5370	2918	-4153	5074	0.00	0.00	0.00	



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 550H - Slot 4
Company:	DJR Operating	TVD Reference:	GL 7121' & RKB 14' @ 7135ft
Project:	North Alamito Unit	MD Reference:	GL 7121' & RKB 14' @ 7135ft
Site:	M24 2307 Pad	North Reference:	True
Well:	# 550H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD Rev 1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,400	89.75	311.06	5370	2984	-4228	5173	0.00	0.00	0.00	
10,500	89.75	311.06	5371	3049	-4303	5273	0.00	0.00	0.00	
10,600	89.75	311.06	5371	3115	-4379	5373	0.00	0.00	0.00	
10,700	89.75	311.06	5372	3181	-4454	5472	0.00	0.00	0.00	
10,800	89.75	311.06	5372	3246	-4530	5572	0.00	0.00	0.00	
10,900	89.75	311.06	5373	3312	-4605	5672	0.00	0.00	0.00	
11,000	89.75	311.06	5373	3378	-4680	5771	0.00	0.00	0.00	
11,100	89.75	311.06	5373	3443	-4756	5871	0.00	0.00	0.00	
11,200	89.75	311.06	5374	3509	-4831	5971	0.00	0.00	0.00	
11,300	89.75	311.06	5374	3575	-4907	6071	0.00	0.00	0.00	
11,400	89.75	311.06	5375	3640	-4982	6170	0.00	0.00	0.00	
11,500	89.75	311.06	5375	3706	-5057	6270	0.00	0.00	0.00	
11,600	89.75	311.06	5376	3772	-5133	6370	0.00	0.00	0.00	
11,700	89.75	311.06	5376	3837	-5208	6469	0.00	0.00	0.00	
11,800	89.75	311.06	5377	3903	-5284	6569	0.00	0.00	0.00	
11,900	89.75	311.06	5377	3969	-5359	6669	0.00	0.00	0.00	
11,910	89.75	311.06	5377	3975	-5366	6678	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude		Longitude
550H Heel	0.00	0.00	5350	-111	-675	1,894,666.62	2,810,505.01	36.20669100		-107.53703100
- hit/miss target										
- Shape										
- plan hits target center										
- Circle (radius 50)										
550H Toe Rev1	0.00	0.00	5377	3975	-5366	1,898,738.09	2,805,801.28	36.21791400		-107.55293500
- plan hits target center										
- Circle (radius 100)										

Casing Points						Casing Diameter (in)	Hole Diameter (in)
Measured Depth (ft)	Vertical Depth (ft)	Name					
350	350	Surface				9.63	12.25
5643	5348	Intermediate				7.00	8.75



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 550H - Slot 4
Company:	DJR Operating	TVD Reference:	GL 7121' & RKB 14' @ 7135ft
Project:	North Alamito Unit	MD Reference:	GL 7121' & RKB 14' @ 7135ft
Site:	M24 2307 Pad	North Reference:	True
Well:	# 550H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD Rev 1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1358	1353	Ojo Alamo		0.00	0.00	
1534	1528	Kirtland		0.00	0.00	
1739	1732	Fruitland		0.00	0.00	
1981	1972	Pictured Cliffs		0.00	0.00	
2094	2085	Lewis		0.00	0.00	
2826	2812	Chacra		0.00	0.00	
3512	3494	Menefee		0.00	0.00	
4323	4300	Point Lookout		0.00	0.00	
4469	4445	Mancos		0.00	0.00	
4840	4814	Mancos Silt		0.00	0.00	
5465	5304	Gallup A		0.00	0.00	
5586	5340	Gallup B		0.00	0.00	



DJR Operating

North Alamito Unit

M24 2307 Pad

550H

Original Drilling

APD Rev 1

Anticollision Report

01 September, 2023





Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 550H - Slot 4
Project:	North Alamito Unit	TVD Reference:	GL 7121' & RKB 14' @ 7135ft
Reference Site:	M24 2307 Pad	MD Reference:	GL 7121' & RKB 14' @ 7135ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 550H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 1	Offset TVD Reference:	Offset Datum

Reference	APD Rev 1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 15,000ft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program			Date	9/1/2023	
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0	11,910	APD Rev 1 (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						
M24 2307 Pad						
# 201H - Original Drilling - APD Rev 1	350	350	60	58	26.576	CC
# 201H - Original Drilling - APD Rev 1	400	399	60	58	23.195	ES
# 201H - Original Drilling - APD Rev 1	800	790	81	76	15.060	SF
# 203H - Original Drilling - APD Rev 1	350	350	20	18	8.292	CC, ES
# 203H - Original Drilling - APD Rev 1	11,104	10,737	691	413	2.483	SF
# 205H - Original Drilling - APD Rev 1	350	350	18	16	7.676	CC
# 205H - Original Drilling - APD Rev 1	669	668	19	15	4.201	ES
# 205H - Original Drilling - APD Rev 1	11,910	12,434	662	335	2.024	SF
# 540H - Original Drilling - APD Rev 1	350	350	40	38	16.584	CC
# 540H - Original Drilling - APD Rev 1	500	499	40	37	11.814	ES
# 540H - Original Drilling - APD Rev 1	900	896	49	43	7.715	SF

Offset Design: M24 2307 Pad - # 201H - Original Drilling - APD Rev 1													Offset Site Error: 0 ft	
Survey Program: 0-MWD+IGRF													Offset Well Error: 0 ft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0	0	0	0	0	0	138.35	-45	40	60					
100	100	100	100	0	0	138.35	-45	40	60	59	0.46	129.575		
200	200	200	200	1	1	138.35	-45	40	60	59	1.18	50.809		
300	300	300	300	1	1	138.35	-45	40	60	58	1.90	31.600		
350	350	350	350	1	1	138.35	-45	40	60	58	2.25	26.576 CC		
400	400	399	399	1	1	-70.04	-45	40	60	58	2.59	23.195 ES		
500	500	497	497	2	2	-71.61	-48	41	62	59	3.26	19.056		
600	600	595	595	2	2	-74.46	-55	43	66	62	3.94	16.737		
669	668	662	662	2	2	-76.91	-61	44	70	66	4.43	15.793		
700	699	693	692	2	2	-78.02	-65	45	72	68	4.66	15.508		
800	799	790	789	3	3	-80.21	-77	49	81	76	5.40	15.060 SF		
900	898	887	884	3	3	-80.68	-93	53	93	87	6.15	15.131		
1000	997	985	980	4	4	-80.08	-112	59	107	100	6.93	15.487		
1100	1097	1084	1077	4	4	-79.48	-131	64	122	114	7.73	15.773		
1200	1196	1183	1173	4	4	-79.01	-151	70	136	128	8.53	15.993		
1300	1295	1282	1270	5	5	-78.63	-170	75	151	142	9.35	16.163		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 550H - Slot 4
Project:	North Alamito Unit	TVD Reference:	GL 7121' & RKB 14' @ 7135ft
Reference Site:	M24 2307 Pad	MD Reference:	GL 7121' & RKB 14' @ 7135ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 550H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 1	Offset TVD Reference:	Offset Datum

Offset Design: M24 2307 Pad - # 201H - Original Drilling - APD Rev 1												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	
1400	1395	1381	1367	5	5	-78.32	-190	80	166	155	10.16	16.300	
1500	1494	1479	1464	6	6	-78.06	-209	86	180	169	10.98	16.413	
1600	1594	1578	1561	6	6	-77.83	-229	91	195	183	11.81	16.506	
1700	1693	1677	1658	6	7	-77.64	-248	97	210	197	12.63	16.585	
1800	1792	1776	1754	7	8	-77.48	-267	102	224	211	13.46	16.652	
1900	1892	1875	1851	7	8	-77.33	-287	108	239	224	14.29	16.710	
2000	1991	1974	1948	8	9	-77.20	-306	113	253	238	15.12	16.760	
2100	2090	2073	2045	8	9	-77.08	-326	119	268	252	15.95	16.804	
2200	2190	2172	2142	9	10	-76.98	-345	124	283	266	16.78	16.843	
2300	2289	2271	2239	9	10	-76.89	-365	129	297	280	17.61	16.878	
2400	2389	2370	2335	9	11	-76.80	-384	135	312	293	18.45	16.909	
2500	2488	2469	2432	10	11	-76.73	-404	140	327	307	19.28	16.937	
2600	2587	2568	2529	10	12	-76.66	-423	146	341	321	20.11	16.963	
2700	2687	2667	2626	11	12	-76.59	-443	151	356	335	20.95	16.986	
2800	2786	2765	2723	11	13	-76.53	-462	157	370	349	21.78	17.007	
2900	2886	2864	2820	11	13	-76.48	-481	162	385	362	22.62	17.026	
3000	2985	2963	2917	12	14	-76.43	-501	168	400	376	23.45	17.044	
3100	3084	3062	3013	12	14	-76.38	-520	173	414	390	24.29	17.060	
3200	3184	3161	3110	13	15	-76.34	-540	179	429	404	25.12	17.075	
3300	3283	3260	3207	13	15	-76.29	-559	184	444	418	25.96	17.089	
3400	3382	3359	3304	14	16	-76.26	-579	189	458	431	26.79	17.102	
3500	3482	3458	3401	14	16	-76.22	-598	195	473	445	27.63	17.114	
3600	3581	3557	3498	14	17	-76.19	-618	200	487	459	28.47	17.125	
3700	3681	3656	3594	15	17	-76.15	-637	206	502	473	29.30	17.136	
3800	3780	3755	3691	15	18	-76.12	-656	211	517	487	30.14	17.146	
3900	3879	3854	3788	16	18	-76.09	-676	217	531	500	30.98	17.155	
4000	3979	3953	3885	16	19	-76.07	-695	222	546	514	31.81	17.164	
4100	4078	4051	3982	16	19	-76.04	-715	228	561	528	32.65	17.172	
4200	4178	4150	4079	17	20	-76.02	-734	233	575	542	33.49	17.180	
4300	4277	4249	4175	17	21	-75.99	-754	238	590	556	34.32	17.187	
4400	4376	4348	4272	18	21	-75.97	-773	244	605	569	35.16	17.194	
4500	4476	4447	4369	18	22	-75.95	-793	249	619	583	36.00	17.201	
4600	4575	4546	4466	19	22	-75.93	-812	255	634	597	36.84	17.207	
4700	4674	4645	4563	19	23	-75.91	-832	260	648	611	37.67	17.213	
4800	4774	4744	4660	19	23	-75.89	-851	266	663	625	38.51	17.219	
4820	4794	4764	4679	19	23	-75.89	-855	267	666	627	38.68	17.220	
4850	4823	4793	4708	20	23	-103.81	-861	268	671	632	38.93	17.242	
4900	4873	4842	4755	20	24	-136.62	-870	271	683	644	39.34	17.372	
4950	4922	4889	4801	20	24	-151.34	-879	274	700	660	39.74	17.616	
5000	4970	4934	4846	20	24	-158.62	-888	276	721	681	40.12	17.968	
5050	5017	4978	4888	20	24	-162.77	-897	279	746	705	40.48	18.423	
5100	5062	5018	4928	20	25	-165.40	-905	281	775	734	40.82	18.974	
5150	5104	5057	4966	21	25	-167.15	-912	283	807	766	41.14	19.615	
5200	5145	5091	5000	21	25	-168.37	-919	285	843	801	41.43	20.341	
5250	5182	5123	5031	21	25	-169.21	-926	287	881	840	41.69	21.144	
5300	5217	5151	5058	21	25	-169.76	-931	288	923	881	41.92	22.019	
5350	5247	5175	5081	21	25	-170.05	-936	289	967	925	42.11	22.958	
5400	5275	5193	5099	21	26	-170.04	-939	290	1013	970	42.26	23.964	
5450	5298	5200	5106	21	26	-169.53	-941	291	1060	1018	42.32	25.054	
5500	5317	5200	5106	22	26	-167.81	-941	291	1109	1067	42.32	26.207	
5550	5332	5200	5106	22	26	-160.28	-941	291	1159	1117	42.33	27.376	
5600	5342	5200	5106	23	26	-19.42	-941	291	1209	1166	42.35	28.546	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 550H - Slot 4
Project:	North Alamito Unit	TVD Reference:	GL 7121' & RKB 14' @ 7135ft
Reference Site:	M24 2307 Pad	MD Reference:	GL 7121' & RKB 14' @ 7135ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 550H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 1	Offset TVD Reference:	Offset Datum

Offset Design: M24 2307 Pad - # 201H - Original Drilling - APD Rev 1													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	
5650	5348	5200	5106	23	26	-0.37	-941	291	1259	1216	42.37	29.707		
5689	5350	5200	5106	23	26	2.08	-941	291	1297	1255	42.39	30.592		
5700	5350	5200	5106	24	26	2.08	-941	291	1308	1266	42.40	30.849		
5800	5350	5196	5102	25	26	2.16	-940	291	1406	1364	42.43	33.143		
5900	5351	5187	5094	26	25	2.31	-938	290	1505	1463	42.43	35.470		
6000	5351	5171	5077	28	25	2.57	-935	289	1604	1561	42.36	37.852		
6100	5352	5154	5061	30	25	2.80	-932	288	1702	1660	42.30	40.240		
6200	5352	5137	5045	32	25	3.00	-928	287	1801	1759	42.24	42.635		
6300	5353	5121	5028	34	25	3.18	-925	286	1899	1857	42.18	45.035		
6400	5353	5104	5012	36	25	3.35	-922	286	1998	1956	42.11	47.442		
6500	5354	5087	4996	38	25	3.50	-918	285	2097	2055	42.05	49.854		
6600	5354	5071	4979	40	25	3.63	-915	284	2195	2153	42.00	52.272		
6700	5354	5054	4963	42	25	3.76	-912	283	2294	2252	41.94	54.695		
6800	5355	5037	4947	44	25	3.87	-909	282	2392	2351	41.88	57.123		
6900	5355	5021	4931	47	25	3.98	-905	281	2491	2449	41.83	59.555		
7000	5356	5004	4914	49	25	4.07	-902	280	2590	2548	41.77	61.991		
7100	5356	4987	4898	51	24	4.16	-899	279	2688	2646	41.72	64.432		
7200	5357	4971	4882	54	24	4.25	-896	278	2787	2745	41.67	66.876		
7300	5357	4954	4865	56	24	4.32	-892	277	2885	2844	41.62	69.323		
7400	5357	4938	4849	58	24	4.40	-889	276	2984	2942	41.58	71.774		
7500	5358	4921	4833	61	24	4.46	-886	275	3083	3041	41.53	74.227		
7600	5358	4904	4817	63	24	4.53	-882	275	3181	3140	41.49	76.683		
7700	5359	4888	4800	65	24	4.59	-879	274	3280	3238	41.44	79.141		
7800	5359	4871	4784	68	24	4.64	-876	273	3378	3337	41.40	81.600		
7900	5360	4854	4768	70	24	4.70	-873	272	3477	3436	41.36	84.062		
8000	5360	4838	4751	73	24	4.75	-869	271	3576	3534	41.33	86.524		
8100	5360	4821	4735	75	24	4.80	-866	270	3674	3633	41.29	88.988		
8200	5361	4804	4719	77	23	4.84	-863	269	3773	3732	41.25	91.453		
8300	5361	4788	4703	80	23	4.88	-860	268	3871	3830	41.22	93.918		
8400	5362	4771	4686	82	23	4.93	-856	267	3970	3929	41.19	96.383		
8500	5362	4754	4670	85	23	4.96	-853	266	4069	4027	41.16	98.848		
8600	5363	4738	4654	87	23	5.00	-850	265	4167	4126	41.13	101.313		
8700	5363	4721	4637	90	23	5.04	-847	264	4266	4225	41.11	103.776		
8800	5363	4705	4621	92	23	5.07	-843	264	4364	4323	41.08	106.240		
8900	5364	4688	4605	95	23	5.10	-840	263	4463	4422	41.06	108.701		
9000	5364	4671	4588	97	23	5.13	-837	262	4562	4521	41.04	111.162		
9100	5365	4655	4572	100	23	5.16	-833	261	4660	4619	41.02	113.620		
9200	5365	4638	4556	102	23	5.19	-830	260	4759	4718	41.00	116.077		
9300	5366	4621	4540	105	22	5.22	-827	259	4857	4817	40.98	118.531		
9400	5366	4605	4523	107	22	5.24	-824	258	4956	4915	40.97	120.983		
9500	5367	4588	4507	109	22	5.27	-820	257	5055	5014	40.95	123.432		
9600	5367	4571	4491	112	22	5.29	-817	256	5153	5112	40.94	125.878		
9700	5367	4555	4474	114	22	5.32	-814	255	5252	5211	40.93	128.321		
9800	5368	4538	4458	117	22	5.34	-811	254	5351	5310	40.92	130.760		
9900	5368	4521	4442	119	22	5.36	-807	253	5449	5408	40.91	133.195		
10,000	5369	4505	4426	122	22	5.38	-804	253	5548	5507	40.90	135.627		
10,100	5369	4488	4409	124	22	5.40	-801	252	5646	5605	40.90	138.054		
10,200	5370	4472	4393	127	22	5.42	-797	251	5745	5704	40.90	140.477		
10,300	5370	4455	4377	129	22	5.44	-794	250	5844	5803	40.89	142.895		
10,400	5370	4438	4360	132	22	5.46	-791	249	5942	5901	40.89	145.308		
10,500	5371	4422	4344	134	21	5.47	-788	248	6041	6000	40.89	147.716		
10,600	5371	4405	4328	137	21	5.49	-784	247	6139	6098	40.90	150.119		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 550H - Slot 4
Project:	North Alamito Unit	TVD Reference:	GL 7121' & RKB 14' @ 7135ft
Reference Site:	M24 2307 Pad	MD Reference:	GL 7121' & RKB 14' @ 7135ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 550H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 1	Offset TVD Reference:	Offset Datum

Offset Design: M24 2307 Pad - # 201H - Original Drilling - APD Rev 1												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)	Semi Major Axis Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,700	5372	4388	4312	139	21	5.51	-781	246	6238	6197	40.90	152.517	
10,800	5372	4372	4295	142	21	5.52	-778	245	6337	6296	40.91	154.909	
10,900	5373	4355	4279	144	21	5.54	-775	244	6435	6394	40.91	157.294	
11,000	5373	4338	4263	147	21	5.55	-771	243	6534	6493	40.92	159.674	
11,100	5373	4322	4246	149	21	5.57	-768	242	6632	6591	40.93	162.048	
11,200	5374	4305	4230	152	21	5.58	-765	242	6731	6690	40.94	164.415	
11,300	5374	4288	4214	154	21	5.60	-761	241	6830	6789	40.95	166.775	
11,400	5375	4272	4197	157	21	5.61	-758	240	6928	6887	40.96	169.129	
11,500	5375	4255	4181	159	21	5.62	-755	239	7027	6986	40.98	171.476	
11,600	5376	4239	4165	162	20	5.63	-752	238	7125	7084	40.99	173.816	
11,700	5376	4222	4149	164	20	5.65	-748	237	7224	7183	41.01	176.149	
11,800	5377	4205	4132	167	20	5.66	-745	236	7323	7282	41.03	178.474	
11,910	5377	4187	4114	170	20	5.67	-741	235	7431	7390	41.05	181.019	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 550H - Slot 4
Project:	North Alamito Unit	TVD Reference:	GL 7121' & RKB 14' @ 7135ft
Reference Site:	M24 2307 Pad	MD Reference:	GL 7121' & RKB 14' @ 7135ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 550H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 1	Offset TVD Reference:	Offset Datum

Offset Design: M24 2307 Pad - # 203H - Original Drilling - APD Rev 1													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		
0	0	0	0	0	0	-41.65	15	-13	20					
100	100	100	100	0	0	-41.65	15	-13	20	19	0.62	32.395		
200	200	200	200	1	1	-41.65	15	-13	20	19	1.33	14.979		
300	300	300	300	1	1	-41.65	15	-13	20	18	2.05	9.742		
350	350	350	350	1	1	-41.65	15	-13	20	18	2.41	8.292 CC, ES		
400	400	400	400	1	1	111.40	15	-14	21	18	2.76	7.456		
500	500	499	499	2	2	119.16	18	-16	26	22	3.45	7.399		
600	600	597	597	2	2	127.90	24	-20	36	32	4.16	8.723		
669	668	664	664	2	2	132.52	29	-23	47	42	4.65	10.124		
700	699	695	694	2	2	134.29	31	-25	52	48	4.87	10.762		
800	799	793	792	3	3	138.11	39	-31	70	64	5.59	12.507		
900	898	892	890	3	3	140.40	47	-37	88	81	6.32	13.870		
1000	997	990	988	4	4	141.92	55	-43	105	98	7.04	14.955		
1100	1097	1088	1086	4	4	143.00	64	-49	123	115	7.78	15.836		
1200	1196	1187	1183	4	4	143.81	72	-55	141	132	8.51	16.564		
1300	1295	1285	1281	5	5	144.43	80	-60	159	150	9.25	17.175		
1400	1395	1384	1379	5	5	144.93	88	-66	177	167	9.99	17.694		
1500	1494	1482	1477	6	6	145.34	96	-72	195	184	10.73	18.141		
1600	1594	1580	1575	6	6	145.68	104	-78	212	201	11.47	18.529		
1700	1693	1679	1673	6	6	145.96	112	-84	230	218	12.21	18.869		
1800	1792	1777	1771	7	7	146.21	120	-90	248	235	12.95	19.170		
1900	1892	1875	1869	7	7	146.42	128	-96	266	252	13.69	19.437		
2000	1991	1974	1966	8	8	146.61	136	-102	284	270	14.44	19.676		
2100	2090	2072	2064	8	8	146.77	144	-107	302	287	15.18	19.892		
2200	2190	2171	2162	9	8	146.92	152	-113	320	304	15.93	20.087		
2300	2289	2269	2260	9	9	147.05	160	-119	338	321	16.67	20.264		
2400	2389	2367	2358	9	9	147.16	168	-125	356	338	17.42	20.426		
2500	2488	2466	2456	10	10	147.27	176	-131	374	355	18.16	20.575		
2600	2587	2564	2554	10	10	147.36	185	-137	392	373	18.91	20.711		
2700	2687	2662	2652	11	10	147.45	193	-143	409	390	19.65	20.837		
2800	2786	2761	2749	11	11	147.53	201	-149	427	407	20.40	20.954		
2900	2886	2859	2847	11	11	147.60	209	-154	445	424	21.14	21.062		
3000	2985	2958	2945	12	11	147.67	217	-160	463	441	21.89	21.163		
3100	3084	3056	3043	12	12	147.74	225	-166	481	459	22.64	21.257		
3200	3184	3154	3141	13	12	147.79	233	-172	499	476	23.38	21.345		
3300	3283	3253	3239	13	13	147.85	241	-178	517	493	24.13	21.427		
3400	3382	3351	3337	14	13	147.90	249	-184	535	510	24.88	21.504		
3500	3482	3450	3435	14	13	147.95	257	-190	553	527	25.62	21.577		
3600	3581	3548	3532	14	14	147.99	265	-196	571	544	26.37	21.646		
3700	3681	3646	3630	15	14	148.03	273	-201	589	562	27.12	21.711		
3800	3780	3745	3728	15	15	148.07	281	-207	607	579	27.86	21.772		
3900	3879	3843	3826	16	15	148.11	289	-213	625	596	28.61	21.830		
4000	3979	3941	3924	16	15	148.14	297	-219	642	613	29.36	21.885		
4100	4078	4040	4022	16	16	148.18	306	-225	660	630	30.11	21.937		
4200	4178	4138	4120	17	16	148.21	314	-231	678	647	30.85	21.987		
4300	4277	4237	4218	17	17	148.24	322	-237	696	665	31.60	22.034		
4400	4376	4335	4315	18	17	148.27	330	-243	714	682	32.35	22.079		
4500	4476	4433	4413	18	17	148.29	338	-248	732	699	33.09	22.122		
4600	4575	4532	4511	19	18	148.32	346	-254	750	716	33.84	22.163		
4700	4674	4630	4609	19	18	148.34	354	-260	768	733	34.59	22.202		
4800	4774	4728	4707	19	19	148.37	362	-266	786	751	35.34	22.240		
4820	4794	4749	4727	19	19	148.37	364	-267	790	754	35.49	22.247		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 550H - Slot 4
Project:	North Alamito Unit	TVD Reference:	GL 7121' & RKB 14' @ 7135ft
Reference Site:	M24 2307 Pad	MD Reference:	GL 7121' & RKB 14' @ 7135ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 550H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 1	Offset TVD Reference:	Offset Datum

Offset Design: M24 2307 Pad - # 203H - Original Drilling - APD Rev 1												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	
4850	4823	4778	4756	20	19	120.12	366	-269	794	759	35.71	22.242	
4900	4873	4827	4805	20	19	87.14	370	-272	800	764	36.09	22.159	
4950	4922	4877	4854	20	19	72.71	374	-275	802	766	36.48	21.988	
5000	4970	4926	4903	20	19	66.16	378	-278	801	764	36.87	21.733	
5050	5017	4974	4951	20	20	63.17	382	-281	797	760	37.26	21.402	
5100	5062	5020	4997	20	20	62.15	386	-283	791	753	37.66	21.001	
5150	5104	5065	5042	21	20	62.41	390	-286	782	744	38.06	20.539	
5200	5145	5102	5078	21	20	63.36	393	-288	770	732	38.42	20.051	
5250	5182	5128	5104	21	20	64.53	395	-290	758	719	38.73	19.568	
5300	5217	5150	5126	21	20	65.98	398	-293	745	706	39.03	19.081	
5350	5247	5172	5148	21	20	67.78	401	-296	731	692	39.37	18.567	
5400	5275	5200	5175	21	21	70.14	406	-301	717	677	39.84	18.006	
5450	5298	5216	5190	21	21	72.09	410	-304	704	663	40.24	17.488	
5500	5317	5238	5210	22	21	74.49	415	-309	690	650	40.78	16.929	
5550	5332	5259	5230	22	21	76.99	420	-314	678	636	41.41	16.369	
5600	5342	5280	5249	23	21	79.50	426	-320	666	624	42.13	15.820	
5650	5348	5300	5268	23	21	81.97	432	-327	656	613	42.90	15.300	
5689	5350	5315	5281	23	21	83.82	437	-332	650	606	43.54	14.925	
5700	5350	5320	5285	24	21	84.17	438	-333	648	604	43.73	14.822	
5797	5350	5365	5324	25	22	87.59	454	-350	640	595	45.43	14.091	
5800	5350	5366	5325	25	22	87.73	455	-351	640	595	45.49	14.069	
5900	5351	5429	5375	26	22	92.19	480	-378	643	595	47.37	13.569	
6000	5351	5514	5436	28	23	97.56	520	-422	654	604	49.40	13.231	
6100	5352	5631	5503	30	24	103.23	584	-493	668	616	51.82	12.882	
6104	5352	5637	5506	30	24	103.47	588	-497	668	616	51.95	12.863	
6200	5352	5782	5556	32	27	107.56	678	-598	679	624	55.20	12.296	
6204	5352	5790	5558	32	27	107.69	683	-604	679	624	55.38	12.261	
6300	5353	5932	5570	34	29	108.61	776	-710	682	622	59.45	11.464	
6304	5353	5937	5570	34	29	108.61	779	-714	682	622	59.61	11.433	
6400	5353	6032	5571	36	31	108.61	842	-786	682	619	63.09	10.805	
6404	5353	6037	5571	36	31	108.61	845	-789	682	618	63.26	10.777	
6500	5354	6132	5571	38	33	108.60	908	-861	682	615	66.89	10.195	
6504	5354	6137	5571	38	33	108.60	911	-864	682	615	67.06	10.169	
6600	5354	6232	5571	40	35	108.60	974	-936	682	611	70.80	9.634	
6604	5354	6237	5572	40	35	108.60	977	-939	682	611	70.98	9.610	
6700	5354	6332	5572	42	37	108.59	1040	-1011	682	608	74.83	9.119	
6704	5354	6337	5572	42	37	108.59	1043	-1015	682	607	75.01	9.097	
6800	5355	6432	5572	44	39	108.59	1106	-1087	683	604	78.94	8.646	
6804	5355	6437	5572	44	39	108.59	1108	-1090	683	603	79.13	8.626	
6900	5355	6532	5573	47	41	108.59	1171	-1162	683	600	83.13	8.213	
6904	5355	6537	5573	47	41	108.59	1174	-1165	683	599	83.32	8.194	
7000	5356	6632	5573	49	43	108.58	1237	-1237	683	596	87.39	7.815	
7004	5356	6637	5573	49	43	108.58	1240	-1241	683	595	87.58	7.798	
7100	5356	6732	5574	51	45	108.58	1303	-1312	683	591	91.70	7.450	
7104	5356	6737	5574	51	45	108.58	1306	-1316	683	591	91.90	7.434	
7200	5357	6832	5574	54	47	108.57	1369	-1388	683	587	96.06	7.114	
7204	5357	6837	5574	54	47	108.57	1372	-1391	683	587	96.26	7.099	
7300	5357	6932	5575	56	50	108.57	1435	-1463	684	583	100.47	6.804	
7304	5357	6937	5575	56	50	108.57	1438	-1466	684	583	100.66	6.791	
7400	5357	7032	5575	58	52	108.57	1501	-1538	684	579	104.91	6.518	
7404	5357	7037	5575	58	52	108.57	1503	-1542	684	579	105.10	6.506	
7500	5358	7132	5576	61	54	108.56	1566	-1614	684	575	109.38	6.253	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 550H - Slot 4
Project:	North Alamito Unit	TVD Reference:	GL 7121' & RKB 14' @ 7135ft
Reference Site:	M24 2307 Pad	MD Reference:	GL 7121' & RKB 14' @ 7135ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 550H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 1	Offset TVD Reference:	Offset Datum

Offset Design: M24 2307 Pad - # 203H - Original Drilling - APD Rev 1													Offset Site Error:	0 ft	
Survey Program:		0-MWD+IGRF						Rule Assigned:						Offset Well Error:	0 ft
Measured Depth	Vertical	Measured	Vertical	Semi Major Axis		Highside Toolface	Offset Wellbore Centre		Distance		Minimum Separation	Separation Factor	Warning		
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	Reference	Offset		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)					
7504	5358	7137	5576	61	54	108.56	1569	-1617	684	574	109.58	6.242			
7600	5358	7232	5576	63	57	108.56	1632	-1689	684	570	113.88	6.008			
7604	5358	7237	5576	63	57	108.56	1635	-1692	684	570	114.08	5.998			
7700	5359	7332	5576	65	59	108.55	1698	-1764	684	566	118.40	5.780			
7704	5359	7337	5576	65	59	108.55	1701	-1767	684	566	118.60	5.770			
7800	5359	7432	5577	68	61	108.55	1764	-1839	685	562	122.95	5.568			
7804	5359	7437	5577	68	61	108.55	1767	-1843	685	561	123.15	5.559			
7900	5360	7532	5577	70	64	108.55	1830	-1915	685	557	127.52	5.370			
7904	5360	7537	5577	70	64	108.55	1833	-1918	685	557	127.72	5.362			
8000	5360	7632	5578	73	66	108.54	1896	-1990	685	553	132.10	5.185			
8004	5360	7637	5578	73	66	108.54	1898	-1993	685	553	132.31	5.177			
8100	5360	7732	5578	75	68	108.54	1961	-2065	685	549	136.70	5.012			
8104	5360	7737	5578	75	68	108.54	1964	-2068	685	548	136.91	5.005			
8200	5361	7832	5579	77	71	108.53	2027	-2140	685	544	141.32	4.850			
8204	5361	7837	5579	78	71	108.53	2030	-2144	685	544	141.53	4.843			
8300	5361	7932	5579	80	73	108.53	2093	-2216	686	540	145.95	4.698			
8304	5361	7937	5579	80	73	108.53	2096	-2219	686	539	146.15	4.691			
8400	5362	8032	5580	82	76	108.53	2159	-2291	686	535	150.59	4.554			
8404	5362	8037	5580	82	76	108.53	2162	-2294	686	535	150.80	4.548			
8500	5362	8132	5580	85	78	108.52	2225	-2366	686	531	155.24	4.419			
8504	5362	8137	5580	85	78	108.52	2228	-2370	686	531	155.45	4.413			
8600	5363	8232	5581	87	80	108.52	2291	-2441	686	526	159.90	4.292			
8604	5363	8237	5581	87	81	108.52	2293	-2445	686	526	160.11	4.286			
8700	5363	8332	5581	90	83	108.51	2356	-2517	686	522	164.57	4.171			
8704	5363	8337	5581	90	83	108.51	2359	-2520	686	522	164.78	4.166			
8800	5363	8432	5581	92	85	108.51	2422	-2592	687	517	169.25	4.057			
8804	5364	8437	5581	92	85	108.51	2425	-2595	687	517	169.46	4.052			
8900	5364	8532	5582	95	88	108.51	2488	-2667	687	513	173.94	3.949			
8904	5364	8537	5582	95	88	108.51	2491	-2671	687	513	174.15	3.944			
9000	5364	8632	5582	97	90	108.50	2554	-2743	687	508	178.63	3.846			
9004	5364	8637	5582	97	90	108.50	2557	-2746	687	508	178.84	3.842			
9100	5365	8732	5583	100	93	108.50	2620	-2818	687	504	183.34	3.749			
9104	5365	8737	5583	100	93	108.50	2623	-2821	687	504	183.54	3.744			
9200	5365	8832	5583	102	95	108.49	2686	-2893	687	499	188.04	3.656			
9204	5365	8837	5583	102	95	108.49	2689	-2896	687	499	188.25	3.652			
9300	5366	8932	5584	105	98	108.49	2751	-2968	688	495	192.75	3.568			
9304	5366	8937	5584	105	98	108.49	2754	-2972	688	495	192.96	3.564			
9400	5366	9032	5584	107	100	108.49	2817	-3044	688	490	197.47	3.483			
9404	5366	9037	5584	107	100	108.49	2820	-3047	688	490	197.68	3.480			
9500	5367	9132	5585	109	103	108.48	2883	-3119	688	486	202.19	3.403			
9504	5367	9137	5585	110	103	108.48	2886	-3122	688	486	202.40	3.400			
9600	5367	9232	5585	112	105	108.48	2949	-3194	688	481	206.92	3.326			
9604	5367	9237	5585	112	105	108.48	2952	-3198	688	481	207.13	3.323			
9700	5367	9332	5586	114	108	108.47	3015	-3269	688	477	211.65	3.253			
9704	5367	9337	5586	115	108	108.47	3018	-3273	688	477	211.86	3.250			
9800	5368	9432	5586	117	110	108.47	3081	-3345	689	472	216.39	3.183			
9804	5368	9437	5586	117	110	108.47	3084	-3348	689	472	216.60	3.180			
9900	5368	9532	5586	119	112	108.47	3146	-3420	689	468	221.13	3.115			
9904	5368	9537	5586	120	113	108.47	3149	-3423	689	468	221.34	3.112			
10,000	5369	9632	5587	122	115	108.46	3212	-3495	689	463	225.87	3.051			
10,004	5369	9637	5587	122	115	108.46	3215	-3499	689	463	226.08	3.048			
10,100	5369	9732	5587	124	117	108.46	3278	-3571	689	459	230.62	2.989			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 550H - Slot 4
Project:	North Alamito Unit	TVD Reference:	GL 7121' & RKB 14' @ 7135ft
Reference Site:	M24 2307 Pad	MD Reference:	GL 7121' & RKB 14' @ 7135ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 550H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 1	Offset TVD Reference:	Offset Datum

Offset Design: M24 2307 Pad - # 203H - Original Drilling - APD Rev 1												Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF												Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,104	5369	9737	5587	125	118	108.46	3281	-3574	689	458	230.83	2.986	
10,200	5370	9832	5588	127	120	108.45	3344	-3646	690	454	235.37	2.930	
10,204	5370	9837	5588	127	120	108.45	3347	-3649	690	454	235.58	2.927	
10,300	5370	9932	5588	129	122	108.45	3410	-3721	690	450	240.12	2.872	
10,304	5370	9937	5588	129	123	108.45	3413	-3724	690	449	240.33	2.870	
10,400	5370	10,032	5589	132	125	108.45	3476	-3796	690	445	244.87	2.817	
10,404	5370	10,037	5589	132	125	108.45	3479	-3800	690	445	245.08	2.815	
10,500	5371	10,132	5589	134	127	108.44	3541	-3872	690	440	249.63	2.765	
10,504	5371	10,137	5589	134	127	108.44	3544	-3875	690	440	249.84	2.762	
10,600	5371	10,232	5590	137	130	108.44	3607	-3947	690	436	254.39	2.714	
10,604	5371	10,237	5590	137	130	108.44	3610	-3950	690	436	254.60	2.711	
10,700	5372	10,332	5590	139	132	108.43	3673	-4022	691	431	259.15	2.665	
10,704	5372	10,337	5590	139	132	108.43	3676	-4025	691	431	259.37	2.662	
10,800	5372	10,432	5591	142	135	108.43	3739	-4097	691	427	263.92	2.617	
10,804	5372	10,437	5591	142	135	108.43	3742	-4101	691	427	264.13	2.615	
10,900	5373	10,532	5591	144	137	108.43	3805	-4173	691	422	268.68	2.572	
10,904	5373	10,537	5591	144	137	108.43	3808	-4176	691	422	268.90	2.570	
11,000	5373	10,632	5591	147	140	108.42	3871	-4248	691	418	273.45	2.527	
11,004	5373	10,637	5591	147	140	108.42	3874	-4251	691	417	273.67	2.526	
11,100	5373	10,732	5592	149	142	108.42	3936	-4323	691	413	278.22	2.485	
11,104	5373	10,737	5592	149	142	108.42	3939	-4327	691	413	278.44	2.483 SF	
11,200	5374	10,753	5592	152	143	108.42	3950	-4339	696	417	278.81	2.496	
11,204	5374	10,753	5592	152	143	108.42	3950	-4339	697	418	278.69	2.499	
11,300	5374	10,753	5592	154	143	108.42	3950	-4339	715	441	273.51	2.612	
11,304	5374	10,753	5592	154	143	108.42	3950	-4339	716	442	273.17	2.620	
11,400	5375	10,753	5592	157	143	108.42	3950	-4339	746	482	263.91	2.827	
11,500	5375	10,753	5592	159	143	108.42	3950	-4339	789	538	251.50	3.138	
11,600	5376	10,753	5592	162	143	108.42	3950	-4339	842	604	237.69	3.542	
11,700	5376	10,753	5592	164	143	108.42	3950	-4339	903	679	223.62	4.037	
11,800	5377	10,753	5592	167	143	108.42	3950	-4339	970	760	210.00	4.619	
11,910	5377	10,753	5592	170	143	108.42	3950	-4339	1050	854	196.02	5.356	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 550H - Slot 4
Project:	North Alamito Unit	TVD Reference:	GL 7121' & RKB 14' @ 7135ft
Reference Site:	M24 2307 Pad	MD Reference:	GL 7121' & RKB 14' @ 7135ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 550H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 1	Offset TVD Reference:	Offset Datum

Offset Design: M24 2307 Pad - # 205H - Original Drilling - APD Rev 1													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	143.82	-15	11	18					
100	100	100	100	0	0	143.82	-15	11	18	18	0.62	29.985		
200	200	200	200	1	1	143.82	-15	11	18	17	1.33	13.865		
300	300	300	300	1	1	143.82	-15	11	18	16	2.05	9.017		
350	350	350	350	1	1	143.82	-15	11	18	16	2.41	7.676 CC		
400	400	400	400	1	1	-64.41	-15	11	19	16	2.75	6.731		
500	500	500	499	2	2	-64.72	-18	9	19	15	3.42	5.466		
600	600	599	599	2	2	-65.32	-25	6	19	15	4.12	4.627		
669	668	668	667	2	2	-65.89	-31	4	19	15	4.61	4.201 ES		
700	699	699	698	2	2	-65.73	-34	2	20	15	4.84	4.055		
800	799	799	797	3	3	-59.94	-47	-4	22	16	5.59	3.867		
900	898	898	894	3	3	-49.20	-62	-11	26	20	6.33	4.124		
1000	997	997	991	4	4	-38.20	-81	-20	34	27	7.02	4.836		
1100	1097	1095	1087	4	4	-29.57	-102	-29	45	38	7.71	5.902		
1200	1196	1194	1183	4	5	-24.17	-124	-40	58	50	8.42	6.931		
1300	1295	1293	1279	5	5	-20.74	-146	-50	72	62	9.14	7.823		
1400	1395	1392	1375	5	6	-18.38	-169	-60	85	75	9.87	8.595		
1500	1494	1491	1471	6	6	-16.67	-191	-70	98	88	10.61	9.267		
1600	1594	1590	1567	6	7	-15.37	-213	-81	112	100	11.35	9.854		
1700	1693	1689	1663	6	7	-14.34	-235	-91	125	113	12.09	10.370		
1800	1792	1788	1759	7	8	-13.52	-257	-101	139	126	12.84	10.827		
1900	1892	1887	1855	7	9	-12.85	-279	-111	153	139	13.58	11.234		
2000	1991	1986	1951	8	9	-12.28	-301	-122	166	152	14.33	11.599		
2100	2090	2085	2047	8	10	-11.80	-323	-132	180	165	15.08	11.927		
2200	2190	2185	2143	9	10	-11.39	-345	-142	194	178	15.83	12.224		
2300	2289	2284	2239	9	11	-11.04	-368	-152	207	191	16.59	12.495		
2400	2389	2383	2335	9	11	-10.72	-390	-163	221	204	17.34	12.741		
2500	2488	2482	2431	10	12	-10.45	-412	-173	235	216	18.09	12.967		
2600	2587	2581	2527	10	13	-10.20	-434	-183	248	229	18.85	13.174		
2700	2687	2680	2623	11	13	-9.98	-456	-193	262	242	19.60	13.366		
2800	2786	2779	2719	11	14	-9.78	-478	-204	276	255	20.35	13.543		
2900	2886	2878	2815	11	14	-9.60	-500	-214	289	268	21.11	13.707		
3000	2985	2977	2911	12	15	-9.44	-522	-224	303	281	21.87	13.860		
3100	3084	3076	3007	12	16	-9.29	-544	-234	317	294	22.62	14.003		
3200	3184	3175	3103	13	16	-9.15	-567	-245	330	307	23.38	14.136		
3300	3283	3274	3199	13	17	-9.03	-589	-255	344	320	24.13	14.261		
3400	3382	3373	3295	14	17	-8.91	-611	-265	358	333	24.89	14.378		
3500	3482	3472	3391	14	18	-8.80	-633	-275	372	346	25.65	14.488		
3600	3581	3571	3487	14	18	-8.70	-655	-286	385	359	26.40	14.592		
3700	3681	3670	3583	15	19	-8.61	-677	-296	399	372	27.16	14.690		
3800	3780	3769	3679	15	20	-8.52	-699	-306	413	385	27.92	14.783		
3900	3879	3868	3775	16	20	-8.44	-721	-316	426	398	28.68	14.870		
4000	3979	3968	3871	16	21	-8.36	-744	-327	440	411	29.43	14.954		
4100	4078	4067	3967	16	21	-8.29	-766	-337	454	424	30.19	15.032		
4200	4178	4166	4063	17	22	-8.22	-788	-347	468	437	30.95	15.107		
4300	4277	4265	4159	17	23	-8.16	-810	-357	481	450	31.71	15.179		
4400	4376	4364	4255	18	23	-8.10	-832	-367	495	463	32.47	15.247		
4500	4476	4463	4351	18	24	-8.04	-854	-378	509	475	33.22	15.312		
4600	4575	4562	4447	19	24	-7.99	-876	-388	522	488	33.98	15.374		
4700	4674	4661	4543	19	25	-7.94	-898	-398	536	501	34.74	15.433		
4800	4774	4760	4639	19	25	-7.89	-920	-408	550	514	35.50	15.489		
4820	4794	4780	4659	19	26	-7.88	-925	-411	553	517	35.65	15.501		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 550H - Slot 4
Project:	North Alamito Unit	TVD Reference:	GL 7121' & RKB 14' @ 7135ft
Reference Site:	M24 2307 Pad	MD Reference:	GL 7121' & RKB 14' @ 7135ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 550H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 1	Offset TVD Reference:	Offset Datum

Offset Design: M24 2307 Pad - # 205H - Original Drilling - APD Rev 1													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		
4850	4823	4809	4687	20	26	-35.45	-931	-414	557	521	35.88	15.523		
4900	4873	4858	4734	20	26	-67.88	-942	-419	566	529	36.28	15.591		
4950	4922	4907	4781	20	26	-82.46	-953	-424	576	539	36.68	15.696		
5000	4970	4954	4827	20	27	-89.79	-964	-428	588	551	37.12	15.834		
5050	5017	4999	4870	20	27	-94.10	-974	-433	601	564	37.58	16.003		
5100	5062	5042	4912	20	27	-96.90	-983	-438	617	579	38.10	16.202		
5150	5104	5083	4952	21	27	-98.77	-993	-442	635	597	38.66	16.430		
5200	5145	5147	5014	21	28	-101.29	-1006	-450	655	616	39.48	16.598		
5250	5182	5237	5101	21	28	-104.26	-1016	-470	674	634	40.31	16.726		
5300	5217	5404	5254	21	29	-108.74	-1009	-535	690	650	40.41	17.082		
5350	5247	5577	5389	21	29	-110.88	-966	-633	701	661	39.51	17.741		
5400	5275	5736	5479	21	30	-110.93	-898	-744	704	666	38.72	18.191		
5450	5298	5943	5537	21	30	-108.34	-779	-901	701	662	38.46	18.218		
5500	5317	6027	5540	22	30	-107.03	-723	-965	693	653	39.69	17.452		
5550	5332	6075	5540	22	30	-106.74	-692	-1001	687	646	40.97	16.757		
5600	5342	6124	5541	23	31	-106.51	-660	-1038	682	640	42.27	16.142		
5650	5348	6174	5541	23	31	-106.37	-627	-1075	680	636	43.57	15.603		
5659	5349	6183	5541	23	31	-106.36	-621	-1082	680	636	43.79	15.520		
5689	5350	6212	5541	23	31	-106.35	-601	-1104	679	635	44.57	15.241		
5691	5350	6215	5541	23	31	-106.35	-600	-1106	679	635	44.63	15.219		
5700	5350	6224	5541	24	31	-106.35	-594	-1113	679	634	44.87	15.137		
5721	5350	6245	5541	24	32	-106.35	-580	-1129	679	634	45.44	14.945		
5800	5350	6324	5542	25	32	-106.36	-528	-1188	679	631	47.67	14.241		
5821	5351	6345	5542	25	33	-106.37	-514	-1204	679	631	48.33	14.047		
5900	5351	6424	5542	26	33	-106.38	-462	-1263	679	628	50.81	13.357		
5921	5351	6445	5542	27	34	-106.38	-448	-1279	679	627	51.53	13.168		
6000	5351	6524	5543	28	35	-106.40	-396	-1338	678	624	54.18	12.520		
6021	5351	6545	5543	28	35	-106.40	-382	-1354	678	623	54.83	12.371		
6100	5352	6624	5543	30	36	-106.41	-330	-1413	678	620	57.68	11.756		
6121	5352	6645	5543	30	37	-106.41	-316	-1430	678	620	58.46	11.597		
6200	5352	6724	5544	32	38	-106.43	-264	-1489	678	616	61.46	11.029		
6221	5352	6745	5544	32	38	-106.43	-250	-1505	678	615	62.28	10.882		
6300	5353	6824	5544	34	40	-106.44	-199	-1564	678	612	65.37	10.365		
6321	5353	6845	5545	34	40	-106.45	-184	-1580	677	611	66.22	10.231		
6400	5353	6924	5545	36	42	-106.46	-133	-1639	677	608	69.40	9.759		
6421	5353	6945	5545	36	42	-106.46	-118	-1655	677	607	70.27	9.637		
6500	5354	7024	5546	38	44	-106.48	-67	-1714	677	603	73.52	9.208		
6521	5354	7045	5546	38	44	-106.48	-53	-1730	677	603	74.42	9.096		
6600	5354	7124	5546	40	46	-106.49	-1	-1789	677	599	77.74	8.705		
6621	5354	7145	5546	40	46	-106.49	13	-1806	677	598	78.65	8.603		
6700	5354	7224	5547	42	48	-106.51	65	-1865	676	594	82.02	8.247		
6721	5354	7245	5547	43	48	-106.51	79	-1881	676	593	82.95	8.154		
6800	5355	7324	5547	44	50	-106.52	131	-1940	676	590	86.36	7.829		
6821	5355	7345	5547	45	50	-106.53	145	-1956	676	589	87.30	7.745		
6900	5355	7424	5548	47	52	-106.54	197	-2015	676	585	90.76	7.447		
6921	5355	7445	5548	47	52	-106.54	211	-2031	676	584	91.71	7.370		
7000	5356	7524	5548	49	54	-106.56	263	-2090	676	580	95.20	7.097		
7021	5356	7545	5548	49	55	-106.56	277	-2106	676	579	96.15	7.026		
7100	5356	7624	5549	51	56	-106.57	329	-2165	675	576	99.67	6.775		
7121	5356	7645	5549	52	57	-106.58	343	-2181	675	575	100.64	6.710		
7200	5357	7724	5549	54	59	-106.59	395	-2241	675	571	104.18	6.480		
7221	5357	7745	5549	54	59	-106.59	409	-2257	675	570	105.15	6.419		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 550H - Slot 4
Project:	North Alamito Unit	TVD Reference:	GL 7121' & RKB 14' @ 7135ft
Reference Site:	M24 2307 Pad	MD Reference:	GL 7121' & RKB 14' @ 7135ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 550H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 1	Offset TVD Reference:	Offset Datum

Offset Design: M24 2307 Pad - # 205H - Original Drilling - APD Rev 1												Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF												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	
7300	5357	7824	5550	56	61	-106.60	461	-2316	675	566	108.72	6.206	
7321	5357	7845	5550	56	61	-106.61	475	-2332	675	565	109.70	6.151	
7400	5357	7924	5550	58	63	-106.62	527	-2391	675	561	113.29	5.954	
7421	5358	7945	5550	59	64	-106.62	541	-2407	674	560	114.27	5.902	
7500	5358	8024	5551	61	66	-106.64	592	-2466	674	556	117.88	5.720	
7521	5358	8045	5551	61	66	-106.64	607	-2482	674	555	118.86	5.672	
7600	5358	8124	5551	63	68	-106.65	658	-2541	674	551	122.48	5.503	
7621	5358	8145	5552	63	68	-106.66	673	-2557	674	550	123.47	5.458	
7700	5359	8224	5552	65	70	-106.67	724	-2617	674	547	127.11	5.300	
7721	5359	8245	5552	66	71	-106.67	738	-2633	674	546	128.10	5.259	
7800	5359	8324	5553	68	73	-106.68	790	-2692	673	542	131.75	5.111	
7821	5359	8345	5553	68	73	-106.69	804	-2708	673	541	132.74	5.073	
7900	5360	8424	5553	70	75	-106.70	856	-2767	673	537	136.40	4.935	
7921	5360	8445	5553	71	75	-106.70	870	-2783	673	536	137.40	4.899	
8000	5360	8524	5554	73	77	-106.72	922	-2842	673	532	141.07	4.770	
8021	5360	8545	5554	73	78	-106.72	936	-2858	673	531	142.07	4.736	
8100	5360	8624	5554	75	80	-106.73	988	-2917	673	527	145.75	4.615	
8121	5361	8645	5554	76	80	-106.74	1002	-2933	673	526	146.75	4.583	
8200	5361	8724	5555	77	82	-106.75	1054	-2993	672	522	150.44	4.469	
8221	5361	8745	5555	78	83	-106.75	1068	-3009	672	521	151.44	4.439	
8300	5361	8824	5555	80	84	-106.77	1120	-3068	672	517	155.13	4.332	
8321	5361	8845	5555	80	85	-106.77	1134	-3084	672	516	156.14	4.304	
8400	5362	8924	5556	82	87	-106.78	1186	-3143	672	512	159.84	4.203	
8421	5362	8945	5556	83	87	-106.79	1200	-3159	672	511	160.85	4.176	
8500	5362	9024	5556	85	89	-106.80	1252	-3218	672	507	164.55	4.081	
8521	5362	9045	5556	85	90	-106.80	1266	-3234	671	506	165.56	4.056	
8600	5363	9124	5557	87	92	-106.81	1318	-3293	671	502	169.27	3.965	
8621	5363	9145	5557	88	92	-106.82	1332	-3309	671	501	170.28	3.942	
8700	5363	9224	5557	90	94	-106.83	1383	-3369	671	497	174.00	3.856	
8721	5363	9245	5557	90	95	-106.83	1398	-3385	671	496	175.01	3.834	
8800	5363	9324	5558	92	97	-106.85	1449	-3444	671	492	178.73	3.753	
8821	5364	9345	5558	93	97	-106.85	1464	-3460	671	491	179.74	3.731	
8900	5364	9424	5558	95	99	-106.86	1515	-3519	670	487	183.46	3.654	
8921	5364	9445	5559	95	99	-106.87	1529	-3535	670	486	184.48	3.634	
9000	5364	9524	5559	97	101	-106.88	1581	-3594	670	482	188.20	3.561	
9021	5364	9545	5559	98	102	-106.88	1595	-3610	670	481	189.22	3.541	
9100	5365	9624	5559	100	104	-106.90	1647	-3669	670	477	192.95	3.472	
9121	5365	9645	5560	100	104	-106.90	1661	-3685	670	476	193.96	3.453	
9200	5365	9724	5560	102	106	-106.91	1713	-3745	670	472	197.70	3.387	
9221	5365	9745	5560	103	107	-106.92	1727	-3761	670	471	198.71	3.369	
9300	5366	9824	5561	105	109	-106.93	1779	-3820	669	467	202.45	3.306	
9321	5366	9845	5561	105	109	-106.93	1793	-3836	669	466	203.47	3.289	
9400	5366	9924	5561	107	111	-106.95	1845	-3895	669	462	207.21	3.229	
9421	5366	9945	5561	108	112	-106.95	1859	-3911	669	461	208.22	3.213	
9500	5367	10,024	5562	109	114	-106.96	1911	-3970	669	457	211.97	3.155	
9521	5367	10,045	5562	110	114	-106.97	1925	-3986	669	456	212.98	3.140	
9600	5367	10,124	5562	112	116	-106.98	1977	-4045	668	452	216.73	3.085	
9621	5367	10,145	5562	112	117	-106.98	1991	-4061	668	451	217.75	3.070	
9700	5367	10,224	5563	114	119	-106.99	2043	-4121	668	447	221.49	3.017	
9721	5367	10,245	5563	115	119	-107.00	2057	-4137	668	446	222.51	3.003	
9800	5368	10,324	5563	117	121	-107.01	2109	-4196	668	442	226.26	2.952	
9821	5368	10,345	5563	117	122	-107.01	2123	-4212	668	441	227.28	2.939	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 550H - Slot 4
Project:	North Alamito Unit	TVD Reference:	GL 7121' & RKB 14' @ 7135ft
Reference Site:	M24 2307 Pad	MD Reference:	GL 7121' & RKB 14' @ 7135ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 550H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 1	Offset TVD Reference:	Offset Datum

Offset Design: M24 2307 Pad - # 205H - Original Drilling - APD Rev 1													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													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		
9900	5368	10,424	5564	119	123	-107.03	2174	-4271	668	437	231.03	2.890		
9921	5368	10,445	5564	120	124	-107.03	2189	-4287	668	436	232.05	2.877		
10,000	5369	10,524	5564	122	126	-107.04	2240	-4346	667	432	235.80	2.830		
10,021	5369	10,545	5564	122	126	-107.05	2254	-4362	667	431	236.82	2.818		
10,100	5369	10,624	5565	124	128	-107.06	2306	-4421	667	427	240.57	2.773		
10,121	5369	10,645	5565	125	129	-107.06	2320	-4437	667	425	241.59	2.761		
10,200	5370	10,724	5565	127	131	-107.08	2372	-4497	667	422	245.34	2.718		
10,221	5370	10,745	5566	127	131	-107.08	2386	-4513	667	420	246.36	2.707		
10,300	5370	10,824	5566	129	133	-107.09	2438	-4572	667	416	250.12	2.665		
10,321	5370	10,845	5566	130	134	-107.10	2452	-4588	667	415	251.14	2.654		
10,400	5370	10,924	5566	132	136	-107.11	2504	-4647	666	411	254.89	2.614		
10,421	5371	10,945	5567	132	136	-107.11	2518	-4663	666	410	255.92	2.603		
10,500	5371	11,024	5567	134	138	-107.13	2570	-4722	666	406	259.67	2.565		
10,521	5371	11,045	5567	135	139	-107.13	2584	-4738	666	405	260.69	2.555		
10,600	5371	11,124	5568	137	141	-107.14	2636	-4797	666	401	264.45	2.518		
10,621	5371	11,145	5568	137	141	-107.15	2650	-4813	666	400	265.47	2.508		
10,700	5372	11,224	5568	139	143	-107.16	2702	-4873	666	396	269.23	2.472		
10,721	5372	11,245	5568	140	144	-107.16	2716	-4889	665	395	270.25	2.462		
10,800	5372	11,324	5569	142	146	-107.18	2768	-4948	665	391	274.01	2.428		
10,821	5372	11,345	5569	142	146	-107.18	2782	-4964	665	390	275.03	2.419		
10,900	5373	11,424	5569	144	148	-107.19	2834	-5023	665	386	278.79	2.385		
10,921	5373	11,445	5569	145	149	-107.20	2848	-5039	665	385	279.81	2.376		
11,000	5373	11,524	5570	147	151	-107.21	2900	-5098	665	381	283.57	2.344		
11,021	5373	11,545	5570	147	151	-107.21	2914	-5114	665	380	284.60	2.335		
11,100	5373	11,624	5570	149	153	-107.23	2965	-5173	664	376	288.36	2.304		
11,121	5374	11,645	5570	150	154	-107.23	2980	-5189	664	375	289.38	2.296		
11,200	5374	11,724	5571	152	156	-107.24	3031	-5249	664	371	293.14	2.266		
11,221	5374	11,745	5571	152	156	-107.25	3045	-5265	664	370	294.16	2.258		
11,300	5374	11,824	5571	154	158	-107.26	3097	-5324	664	366	297.92	2.228		
11,321	5374	11,845	5571	155	159	-107.26	3111	-5340	664	365	298.95	2.220		
11,400	5375	11,924	5572	157	161	-107.28	3163	-5399	664	361	302.71	2.192		
11,421	5375	11,945	5572	157	161	-107.28	3177	-5415	664	360	303.73	2.185		
11,500	5375	12,024	5572	159	163	-107.29	3229	-5474	663	356	307.49	2.157		
11,521	5375	12,045	5573	160	164	-107.30	3243	-5490	663	355	308.52	2.150		
11,600	5376	12,124	5573	162	166	-107.31	3295	-5549	663	351	312.28	2.123		
11,621	5376	12,145	5573	162	166	-107.31	3309	-5565	663	350	313.30	2.116		
11,700	5376	12,224	5573	164	168	-107.33	3361	-5624	663	346	317.06	2.090		
11,721	5376	12,245	5574	165	169	-107.33	3375	-5641	663	345	318.09	2.083		
11,800	5377	12,324	5574	167	171	-107.34	3427	-5700	663	341	321.85	2.058		
11,823	5377	12,347	5574	167	171	-107.35	3442	-5717	662	339	322.97	2.051		
11,910	5377	12,434	5575	170	173	-107.36	3499	-5782	662	335	327.11	2.024 SF		

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Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 550H - Slot 4
Project:	North Alamito Unit	TVD Reference:	GL 7121' & RKB 14' @ 7135ft
Reference Site:	M24 2307 Pad	MD Reference:	GL 7121' & RKB 14' @ 7135ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 550H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 1	Offset TVD Reference:	Offset Datum

Offset Design: M24 2307 Pad - # 540H - Original Drilling - APD Rev 1														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:		
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)				
0	0	0	0	0	0	138.35	-30	27	40						
100	100	100	100	0	0	138.35	-30	27	40	39	0.62	64.784			
200	200	200	200	1	1	138.35	-30	27	40	39	1.33	29.956			
300	300	300	300	1	1	138.35	-30	27	40	38	2.05	19.483			
350	350	350	350	1	1	138.35	-30	27	40	38	2.41	16.584 CC			
400	400	400	400	1	1	-69.87	-30	26	40	37	2.75	14.545			
500	500	499	499	2	2	-70.13	-33	25	40	37	3.42	11.814 ES			
600	600	598	598	2	2	-70.63	-40	23	41	37	4.11	9.998			
669	668	667	666	2	2	-71.09	-46	20	42	37	4.61	9.074			
700	699	698	697	2	2	-71.13	-49	19	42	37	4.84	8.735			
800	799	797	795	3	3	-68.62	-62	14	45	39	5.60	7.991			
900	898	896	893	3	3	-62.94	-78	8	49	43	6.37	7.715 SF			
1000	997	994	989	4	4	-55.53	-97	0	56	49	7.13	7.878			
1100	1097	1092	1084	4	4	-47.88	-119	-8	66	59	7.85	8.458			
1200	1196	1191	1179	4	5	-41.46	-143	-17	79	71	8.58	9.222			
1300	1295	1290	1275	5	5	-36.85	-166	-27	93	83	9.32	9.936			
1400	1395	1389	1370	5	6	-33.42	-190	-36	106	96	10.05	10.588			
1500	1494	1487	1466	6	6	-30.78	-214	-45	121	110	10.79	11.176			
1600	1594	1586	1561	6	7	-28.70	-238	-55	135	123	11.53	11.702			
1700	1693	1685	1657	6	8	-27.02	-262	-64	149	137	12.28	12.174			
1800	1792	1784	1752	7	8	-25.64	-285	-73	164	151	13.03	12.597			
1900	1892	1883	1848	7	9	-24.48	-309	-83	179	165	13.77	12.979			
2000	1991	1982	1943	8	9	-23.50	-333	-92	194	179	14.53	13.323			
2100	2090	2081	2039	8	10	-22.66	-357	-101	208	193	15.28	13.636			
2200	2190	2179	2134	9	10	-21.93	-380	-110	223	207	16.03	13.921			
2300	2289	2278	2230	9	11	-21.29	-404	-120	238	221	16.78	14.180			
2400	2389	2377	2325	9	12	-20.73	-428	-129	253	235	17.54	14.419			
2500	2488	2476	2421	10	12	-20.23	-452	-138	268	250	18.30	14.638			
2600	2587	2575	2516	10	13	-19.78	-476	-148	283	264	19.05	14.840			
2700	2687	2674	2612	11	13	-19.38	-499	-157	298	278	19.81	15.027			
2800	2786	2773	2707	11	14	-19.01	-523	-166	313	292	20.57	15.200			
2900	2886	2871	2803	11	15	-18.68	-547	-175	328	306	21.33	15.361			
3000	2985	2970	2898	12	15	-18.38	-571	-185	343	321	22.09	15.511			
3100	3084	3069	2994	12	16	-18.10	-595	-194	358	335	22.85	15.651			
3200	3184	3168	3089	13	16	-17.85	-618	-203	373	349	23.61	15.783			
3300	3283	3267	3185	13	17	-17.61	-642	-213	388	363	24.37	15.906			
3400	3382	3366	3280	14	18	-17.39	-666	-222	403	377	25.13	16.022			
3500	3482	3465	3376	14	18	-17.19	-690	-231	418	392	25.89	16.130			
3600	3581	3563	3471	14	19	-17.00	-713	-240	433	406	26.65	16.233			
3700	3681	3662	3567	15	19	-16.83	-737	-250	448	420	27.41	16.330			
3800	3780	3761	3662	15	20	-16.67	-761	-259	463	434	28.17	16.422			
3900	3879	3860	3758	16	21	-16.51	-785	-268	478	449	28.93	16.509			
4000	3979	3959	3853	16	21	-16.37	-809	-278	493	463	29.70	16.591			
4100	4078	4058	3949	16	22	-16.23	-832	-287	508	477	30.46	16.670			
4200	4178	4157	4044	17	22	-16.10	-856	-296	523	492	31.22	16.744			
4300	4277	4255	4140	17	23	-15.98	-880	-305	538	506	31.98	16.815			
4400	4376	4354	4235	18	24	-15.87	-904	-315	553	520	32.75	16.883			
4500	4476	4453	4331	18	24	-15.76	-928	-324	568	534	33.51	16.947			
4600	4575	4552	4426	19	25	-15.66	-951	-333	583	549	34.27	17.009			
4700	4674	4651	4522	19	25	-15.56	-975	-343	598	563	35.04	17.068			
4800	4774	4750	4617	19	26	-15.47	-999	-352	613	577	35.80	17.124			
4820	4794	4770	4637	19	26	-15.45	-1004	-354	616	580	35.96	17.135			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 550H - Slot 4
Project:	North Alamito Unit	TVD Reference:	GL 7121' & RKB 14' @ 7135ft
Reference Site:	M24 2307 Pad	MD Reference:	GL 7121' & RKB 14' @ 7135ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 550H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 1	Offset TVD Reference:	Offset Datum

Offset Design: M24 2307 Pad - # 540H - Original Drilling - APD Rev 1												Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF												Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4850	4823	4799	4665	20	26	-42.97	-1011	-357	621	585	36.19	17.159	
4900	4873	4848	4712	20	27	-75.24	-1023	-361	631	594	36.60	17.235	
4950	4922	4896	4758	20	27	-89.55	-1034	-366	643	606	37.03	17.354	
5000	4970	4942	4803	20	27	-96.51	-1045	-370	657	619	37.50	17.514	
5050	5017	4987	4847	20	27	-100.38	-1056	-374	673	635	38.00	17.712	
5100	5062	5015	4873	20	28	-102.11	-1063	-377	692	654	38.41	18.020	
5150	5104	5036	4894	21	28	-102.54	-1069	-378	715	676	38.81	18.409	
5200	5145	5050	4907	21	28	-101.71	-1073	-378	740	701	39.19	18.887	
5250	5182	5070	4926	21	28	-100.49	-1079	-378	769	729	39.71	19.366	
5300	5217	5082	4937	21	28	-98.06	-1084	-378	800	760	40.19	19.916	
5350	5247	5100	4954	21	28	-95.37	-1090	-378	835	794	40.82	20.442	
5400	5275	5100	4954	21	28	-90.46	-1090	-378	870	829	41.26	21.098	
5450	5298	5100	4954	21	28	-84.81	-1090	-378	908	866	41.74	21.757	
5500	5317	5100	4954	22	28	-78.57	-1090	-378	947	905	42.26	22.408	
5550	5332	5100	4954	22	28	-71.99	-1090	-378	987	944	42.82	23.042	
5600	5342	5100	4954	23	28	-65.34	-1090	-378	1027	983	43.41	23.654	
5650	5348	5100	4954	23	28	-58.89	-1090	-378	1067	1023	44.01	24.242	
5689	5350	5100	4954	23	28	-54.16	-1090	-378	1098	1053	44.47	24.680	
5700	5350	5100	4954	24	28	-54.16	-1090	-378	1107	1062	44.61	24.806	
5800	5350	5100	4954	25	28	-54.16	-1090	-378	1188	1142	45.73	25.971	
5900	5351	5079	4935	26	28	-52.57	-1083	-378	1271	1225	46.44	27.366	
6000	5351	5072	4928	28	28	-52.03	-1080	-378	1357	1309	47.22	28.730	
6100	5352	5050	4907	30	28	-50.38	-1073	-378	1444	1397	47.71	30.270	
6200	5352	5050	4907	32	28	-50.38	-1073	-378	1533	1485	48.38	31.684	
6300	5353	5050	4907	34	28	-50.38	-1073	-378	1623	1574	48.97	33.142	
6400	5353	5050	4907	36	28	-50.38	-1073	-378	1714	1664	49.48	34.638	
6500	5354	5050	4907	38	28	-50.38	-1073	-378	1806	1756	49.94	36.165	
6600	5354	5050	4907	40	28	-50.38	-1073	-378	1899	1848	50.34	37.718	
6700	5354	5050	4907	42	28	-50.38	-1073	-378	1992	1942	50.70	39.294	
6800	5355	5050	4907	44	28	-50.38	-1073	-378	2086	2035	51.03	40.888	
6900	5355	5050	4907	47	28	-50.38	-1073	-378	2181	2130	51.32	42.499	
7000	5356	5028	4886	49	28	-48.78	-1067	-377	2276	2224	51.37	44.296	
7100	5356	5025	4884	51	28	-48.58	-1066	-377	2371	2319	51.59	45.957	
7200	5357	5023	4881	54	28	-48.40	-1065	-377	2467	2415	51.79	47.628	
7300	5357	5000	4859	56	28	-46.77	-1059	-375	2563	2511	51.78	49.504	
7400	5357	5000	4859	58	28	-46.77	-1059	-375	2659	2607	51.97	51.172	
7500	5358	5000	4859	61	28	-46.77	-1059	-375	2756	2704	52.15	52.847	
7600	5358	5000	4859	63	28	-46.77	-1059	-375	2853	2800	52.31	54.529	
7700	5359	5000	4859	65	28	-46.77	-1059	-375	2950	2897	52.47	56.216	
7800	5359	5000	4859	68	28	-46.77	-1059	-375	3047	2994	52.61	57.907	
7900	5360	5000	4859	70	28	-46.77	-1059	-375	3144	3091	52.75	59.603	
8000	5360	5000	4859	73	28	-46.77	-1059	-375	3242	3189	52.88	61.302	
8100	5360	5000	4859	75	28	-46.77	-1059	-375	3339	3286	53.00	63.004	
8200	5361	5000	4859	77	28	-46.77	-1059	-375	3437	3384	53.11	64.709	
8300	5361	5000	4859	80	28	-46.77	-1059	-375	3535	3482	53.22	66.415	
8400	5362	5000	4859	82	28	-46.77	-1059	-375	3633	3579	53.33	68.123	
8500	5362	5000	4859	85	28	-46.77	-1059	-375	3731	3678	53.43	69.833	
8600	5363	5000	4859	87	28	-46.77	-1059	-375	3829	3776	53.52	71.543	
8700	5363	5000	4859	90	28	-46.77	-1059	-375	3927	3874	53.61	73.253	
8800	5363	4997	4856	92	28	-46.57	-1058	-375	4026	3972	53.68	75.001	
8900	5364	4994	4854	95	28	-46.39	-1058	-375	4124	4071	53.74	76.745	
9000	5364	4994	4854	97	28	-46.39	-1058	-375	4223	4169	53.82	78.457	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 550H - Slot 4
Project:	North Alamito Unit	TVD Reference:	GL 7121' & RKB 14' @ 7135ft
Reference Site:	M24 2307 Pad	MD Reference:	GL 7121' & RKB 14' @ 7135ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 550H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 1	Offset TVD Reference:	Offset Datum

Offset Design: M24 2307 Pad - # 540H - Original Drilling - APD Rev 1													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		
9100	5365	4991	4851	100	27	-46.16	-1057	-375	4321	4268	53.87	80.212		
9200	5365	4983	4843	102	27	-45.58	-1055	-374	4420	4366	53.88	82.036		
9300	5366	4975	4835	105	27	-45.02	-1053	-373	4519	4465	53.88	83.862		
9400	5366	4966	4827	107	27	-44.46	-1051	-372	4617	4564	53.88	85.692		
9500	5367	4958	4819	109	27	-43.91	-1049	-372	4716	4662	53.89	87.524		
9600	5367	4950	4810	112	27	-43.36	-1047	-371	4815	4761	53.88	89.359		
9700	5367	4941	4802	114	27	-42.82	-1045	-370	4914	4860	53.88	91.196		
9800	5368	4933	4794	117	27	-42.29	-1043	-369	5013	4959	53.88	93.036		
9900	5368	4925	4786	119	27	-41.77	-1041	-368	5112	5058	53.88	94.878		
10,000	5369	4916	4778	122	27	-41.25	-1039	-368	5211	5157	53.87	96.722		
10,100	5369	4908	4770	124	27	-40.73	-1037	-367	5310	5256	53.87	98.569		
10,200	5370	4900	4762	127	27	-40.23	-1035	-366	5409	5355	53.86	100.417		
10,300	5370	4892	4754	129	27	-39.73	-1033	-365	5508	5454	53.85	102.267		
10,400	5370	4883	4746	132	27	-39.23	-1031	-364	5607	5553	53.85	104.118		
10,500	5371	4875	4738	134	27	-38.75	-1029	-364	5706	5652	53.84	105.971		
10,600	5371	4867	4730	137	27	-38.27	-1027	-363	5805	5751	53.83	107.825		
10,700	5372	4858	4722	139	27	-37.79	-1025	-362	5904	5850	53.83	109.681		
10,800	5372	4850	4714	142	27	-37.32	-1023	-361	6003	5949	53.82	111.538		
10,900	5373	4842	4706	144	27	-36.86	-1021	-361	6102	6048	53.81	113.395		
11,000	5373	4834	4698	147	27	-36.40	-1019	-360	6201	6147	53.80	115.254		
11,100	5373	4825	4690	149	26	-35.95	-1017	-359	6300	6247	53.80	117.114		
11,200	5374	4817	4682	152	26	-35.50	-1015	-358	6399	6346	53.79	118.974		
11,300	5374	4809	4674	154	26	-35.06	-1013	-357	6499	6445	53.78	120.835		
11,400	5375	4800	4666	157	26	-34.63	-1011	-357	6598	6544	53.77	122.696		
11,500	5375	4792	4658	159	26	-34.20	-1009	-356	6697	6643	53.77	124.558		
11,600	5376	4784	4650	162	26	-33.78	-1007	-355	6796	6743	53.76	126.420		
11,700	5376	4775	4642	164	26	-33.36	-1005	-354	6896	6842	53.75	128.283		
11,800	5377	4767	4634	167	26	-32.95	-1003	-354	6995	6941	53.75	130.145		
11,910	5377	4758	4625	170	26	-32.51	-1001	-353	7104	7050	53.74	132.191		



Lonestar Consulting, LLC

Anticollision Report

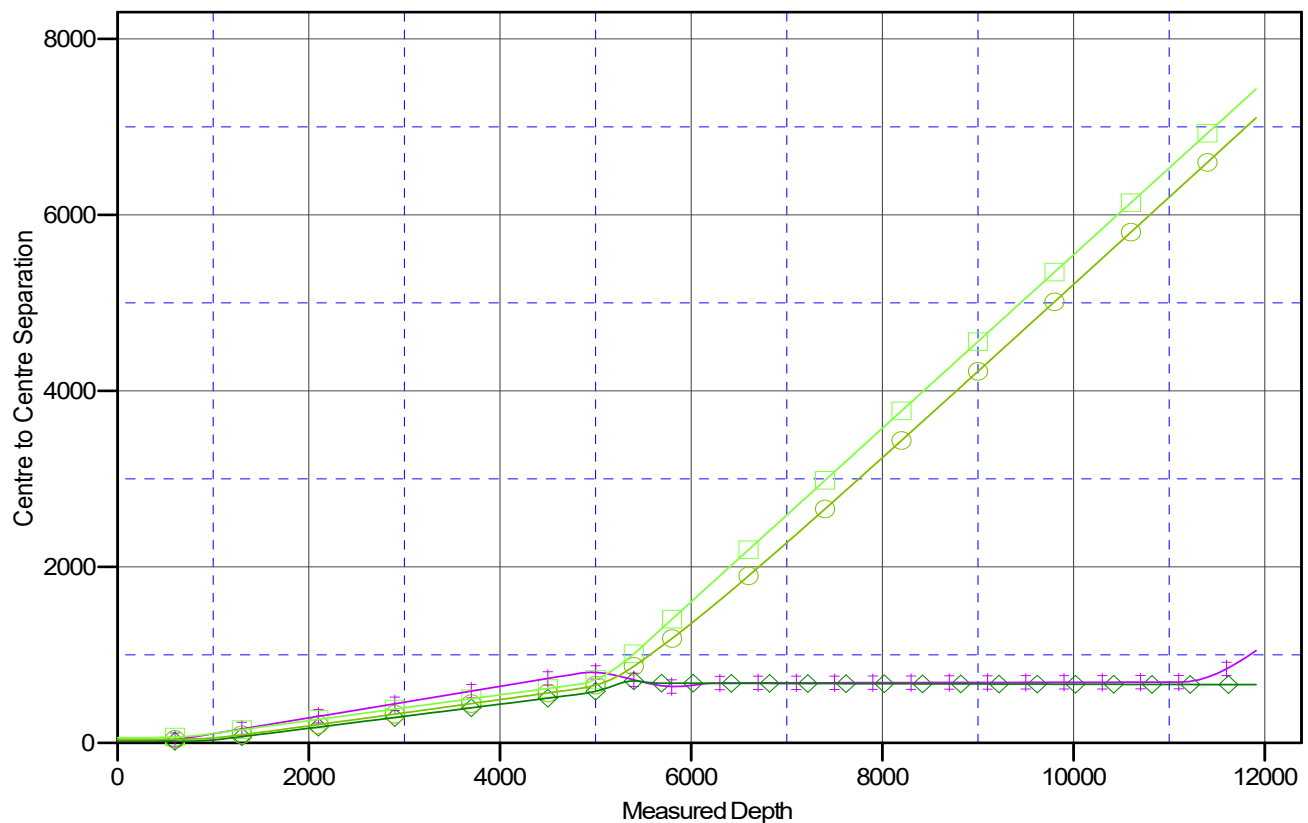


Company:	DJR Operating	Local Co-ordinate Reference:	Well # 550H - Slot 4
Project:	North Alamito Unit	TVD Reference:	GL 7121' & RKB 14' @ 7135ft
Reference Site:	M24 2307 Pad	MD Reference:	GL 7121' & RKB 14' @ 7135ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 550H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to GL 7121' & RKB 14' @ 7135ft
 Offset Depths are relative to Offset Datum
 Central Meridian is -107.83333333

Coordinates are relative to: # 550H - Slot 4
 Coordinate System is US State Plane 1983, New Mexico Western Zone
 Grid Convergence at Surface is: 0.18°

Ladder Plot



LEGEND

■ # 203H Original Drilling, APD Rev 1 V0
◆ # 205H Original Drilling, APD Rev 1 V0
■ # 201H Original Drilling, APD Rev 1 V0
○ # 540H Original Drilling, APD Rev 1 V0



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 550H - Slot 4
Project:	North Alamito Unit	TVD Reference:	GL 7121' & RKB 14' @ 7135ft
Reference Site:	M24 2307 Pad	MD Reference:	GL 7121' & RKB 14' @ 7135ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 550H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD Rev 1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to GL 7121' & RKB 14' @ 7135ft

Coordinates are relative to: # 550H - Slot 4

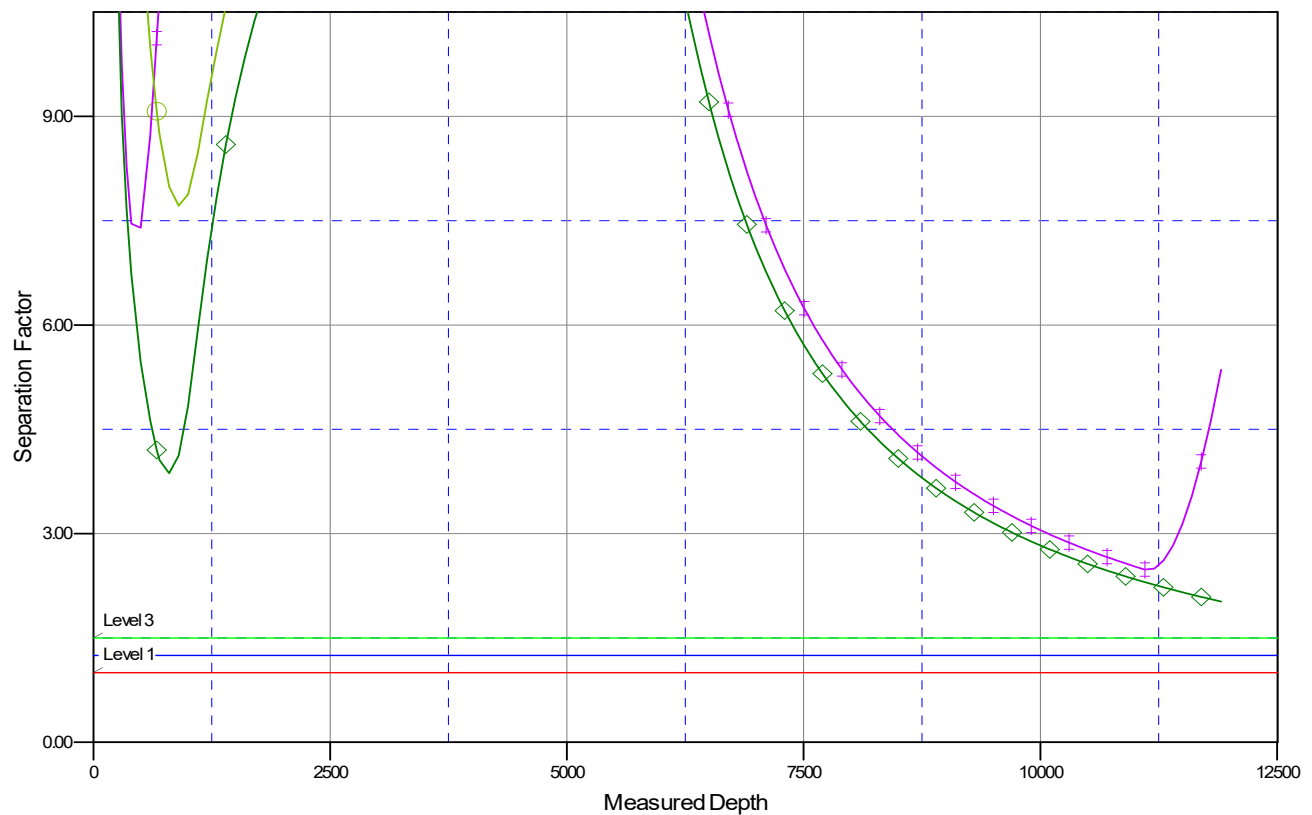
Offset Depths are relative to Offset Datum

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

Central Meridian is -107.8333333

Grid Convergence at Surface is: 0.18°

Separation Factor Plot



LEGEND

◆ # 203HOriginalDrilling.APDRev1 V0
 ◆ # 205HOriginalDrilling.APDRev1 V0
 ◆ # 201HOriginalDrilling.APDRev1 V0
 ◆ # 540HOriginalDrilling.APDRev1 V0



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

#550H NORTH ALAMITO UNIT

Lease: NMNM 010087 Agreement: NMNM 135229A

SH: SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 24, T. 23N., R. 7W.

Sandoval County, New Mexico

BH: NW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 23, T. 23N., R. 7W.

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

II. REPORTING REQUIREMENTS

- A. For reporting purposes, all well Sundry notices, well completion and other well actions shall be referenced by the appropriate lease, communitization agreement and/or unit agreement numbers.
- B. The following reports shall be filed with the BLM-Authorized Officer online through AFMSS 2 within 30 days after the work is completed.
 - 1. Provide complete information concerning.
 - a. Setting of each string of casing. Show size and depth of hole, grade and weight of casing, depth set, depth of all cementing tools that are used, amount (in cubic feet) and types of cement used, whether cement circulated to surface and all cement tops in the casing annulus, casing test method and results, and the date work was done. Show spud date on first report submitted.
 - b. Intervals tested, perforated (include size, number and location of perforations), acidized, or fractured; and results obtained. Provide date work was done on well completion report and completion sundry notice.
 - c. Subsequent Report of Abandonment, show the way the well was plugged, including depths where casing was cut and pulled, intervals (by depths) where cement plugs were replaced, and dates of the operations.
 - 2. Well Completion Report will be submitted with 30 days after well has been completed.
 - a. Initial Bottom Hole Pressure (BHP) for the producing formations. Show the BHP on the completion report. The pressure may be: 1) measured with a bottom hole bomb, or; 2) calculated based on shut in surface pressures (minimum seven day buildup) and fluid level shot.
 - 3. Submit a cement evaluation log if cement is not circulated to surface.
- C. Production Startup Notification is required no later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site or resumes production in the case of a well which has been off production for more than 90 days. The operator shall notify the Authorized Officer by letter or Sundry Notice, Form 3160-5, or orally to be followed by a letter or Sundry Notice, of the date on which such production has begun or resumed. CFR 43 3162.4-1(c).

III. DRILLER'S LOG

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

IV. GAS FLARING

Gas produced from this well may not be vented or flared beyond an initial, authorized test period of * Days, 20 MMCF following its (completion)(recompletion), or flowback has been routed to the production separator, whichever first occurs, without the prior, written approval of the authorized officer in accordance with 43 CFR 3179.81. Should gas be vented or flared without approval beyond the test period authorized above, you may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted. You shall be required to compensate the lessor for the portion of the gas vented or flared without approval which is determined to have been avoidably lost.

*30 days, unless a longer test period is specifically approved by the authorized officer. The 30-day period will commence upon the beginning of flowback following completion or recompletion.

V. SAFETY

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

VI. CHANGE OF PLANS OR ABANDONMENT

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

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

General Information
Phone: (505) 629-6116

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

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

ACKNOWLEDGMENTS

Action 496096

ACKNOWLEDGMENTS

Operator: ENDURING RESOURCES, LLC 6300 S Syracuse Way Centennial, CO 80111	OGRID: 372286
	Action Number: 496096
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

ACKNOWLEDGMENTS

☒	I hereby certify that no additives containing PFAS chemicals will be added to the completion or recompletion of this well.
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CONDITIONS

Action 496096

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	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
sford	Cement is required to circulate on both surface and intermediate1 strings of casing.	8/14/2025
sford	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	8/14/2025
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	9/9/2025
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	9/9/2025
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.	9/9/2025
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.	9/9/2025
ward.rikala	This well can not be produced until the operator is in compliance with Rule 5.9.	9/9/2025