

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: <input type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No.
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator		8. Lease Name and Well No.
3a. Address		9. API Well No. 30-045-38366
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)

- | | |
|---|---|
| <ul style="list-style-type: none"> 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). | <ul style="list-style-type: none"> 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 5. Operator certification. 6. Such other site specific information and/or plans as may be requested by the BLM. |
|---|---|

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

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

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



(Continued on page 2)

*(Instructions on page 2)

Additional Operator Remarks

Location of Well

0. SHL: NWNE / 941 FNL / 2042 FEL / TWSP: 23N / RANGE: 9W / SECTION: 9 / LAT: 36.246145 / LONG: -107.79228 (TVD: 0 feet, MD: 0 feet)

PPP: NWNE / 1286 FNL / 1549 FEL / TWSP: 23N / RANGE: 9W / SECTION: 9 / LAT: 36.245207 / LONG: -107.790604 (TVD: 4372 feet, MD: 4640 feet)

PPP: NWSW / 2249 FSL / 1 FWL / TWSP: 23N / RANGE: 9W / SECTION: 10 / LAT: 36.240433 / LONG: -107.785311 (TVD: 4372 feet, MD: 9657 feet)

BHL: SESW / 372 FSL / 1742 FWL / TWSP: 23N / RANGE: 9W / SECTION: 10 / LAT: 36.235062 / LONG: -107.779357 (TVD: 4372 feet, MD: 9657 feet)

BLM Point of Contact

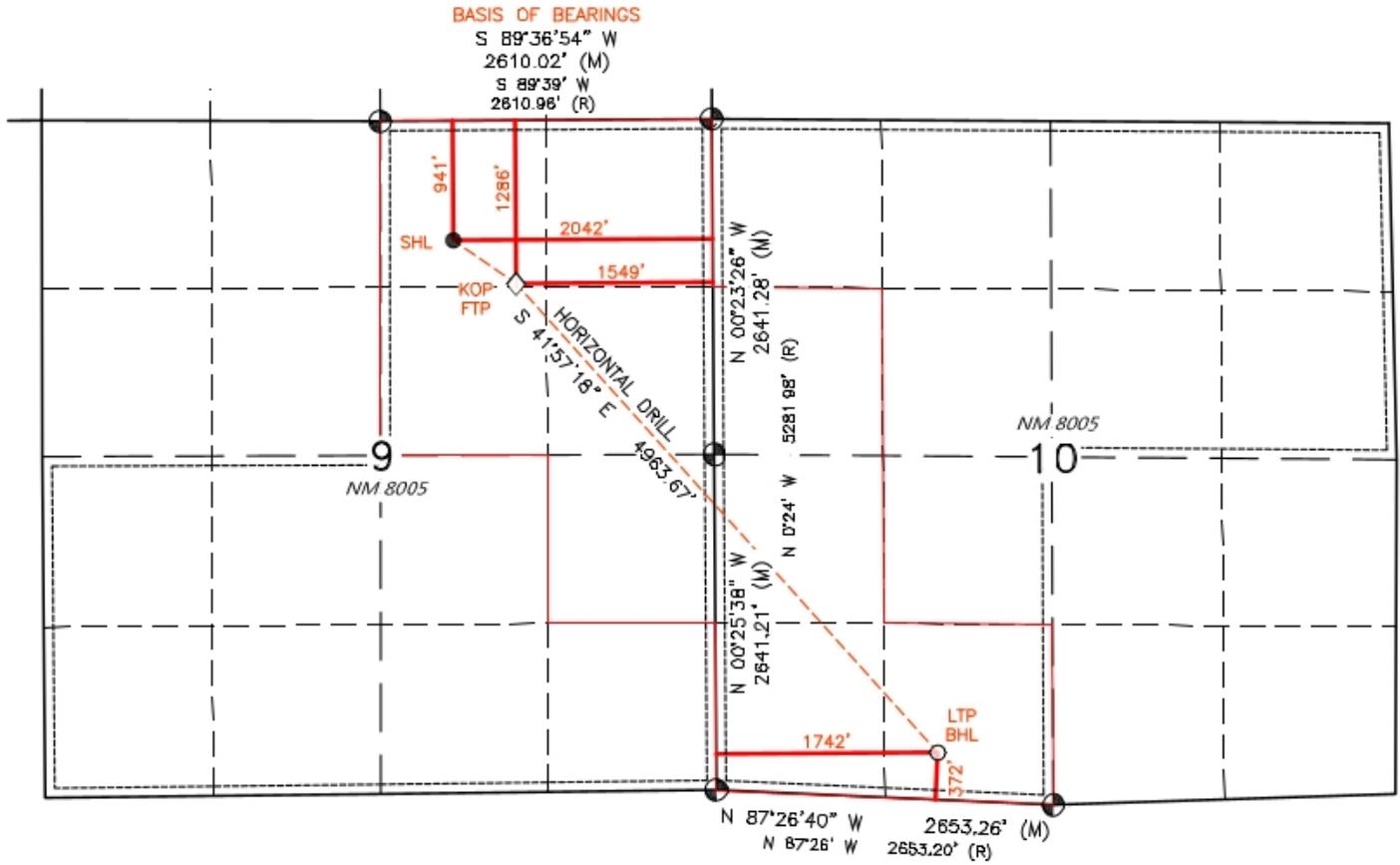
Name: JEFFREY J TAFOYA

Title: Assistant Field Manager

Phone: (505) 564-7672

Email: JTAFOYA@BLM.GOV

CONFIDENTIAL



SURFACE LOCATION (SHL) ●
 941' FNL 2042' FEL
 SEC. 9, T23N, R9W
 LAT. 36.246145' N (NAD83)
 LONG. 107.792280' W (NAD83)

FIRST TAKE POINT (FTP) ◇
 1286' FNL 1549' FEL
 SEC. 9, T23N, R9W
 LAT. 36.245207' N (NAD83)
 LONG. 107.790604' W (NAD83)

BOTTOM HOLE LOCATION (BHL) ○
 372' FSL 1742' FWL
 SEC. 10, T23N, R9W
 LAT. 36.235062' N (NAD83)
 LONG. 107.779357' W (NAD83)

KICK OFF POINT (KOP) ▲
 1286' FNL 1549' FEL
 SEC. 9, T23N, R9W
 LAT. 36.245207' N (NAD83)
 LONG. 107.790604' W (NAD83)

LAST TAKE POINT (LTP) □
 372' FSL 1742' FWL
 SEC. 10, T23N, R9W
 LAT. 36.235062' N (NAD83)
 LONG. 107.779357' 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 / 15 / 2024

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
NAGEEZI UNIT 702H	TBD	B-09-23N-09W	926 FNL x 2029 FEL	228	59	57
NAGEEZI UNIT 703H	TBD	B-09-23N-09W	941 FNL x 2042 DEL	162	42	41

IV. Central Delivery Point Name: Chaco Processing Plant [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
NAGEEZI UNIT 702H	TBD	12/6/2024	12/16/2024	2/3/2025	2/18/2025	2/20/2025
NAGEEZI UNIT 703H	TBD	12/14/2024	12/24/2024	2/3/2025	2/23/2025	2/25/2025

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

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

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

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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

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

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

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

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

Section 4 - Notices

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

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

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

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

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

Signature: <i>Shaw-Marie Ford</i>
Printed Name: Shaw-Marie Ford
Title: Regulatory Specialist
E-mail Address: sford@enduringresources.com
Date: 8/15/2024
Phone: 505-716-3297
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:



OGRID NO: 371838
NATURAL GAS MANAGEMENT PLAN
Nageezi Unit 702H and 703H
NWNE B-09-23N-09W

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.



OGRID NO: 371838
NATURAL GAS MANAGEMENT PLAN
Nageezi Unit 702H and 703H
NWNE B-09-23N-09W

VENTING and FLARING

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

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

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

DJR will only flare gas during the following times:

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



OGRID NO: 371838
NATURAL GAS MANAGEMENT PLAN
Nageezi Unit 702H and 703H
NWNE B-09-23N-09W

OPERATIONAL PRACTICES

19.15.27.8 A. Venting and Flaring of Natural Gas

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

19.15.27.8 B. Venting and flaring during drilling operations

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

19.15.27.8 E. Venting and flaring during completion or recompletion operations

During Completion Operations, DJR utilizes the following:

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



19.15.27.8 D. Venting and flaring during production operations

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

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

19.15.27.8 E. Performance standards

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



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

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

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



OGRID NO: 371838
NATURAL GAS MANAGEMENT PLAN
Nageezi Unit 702H and 703H
NWNE B-09-23N-09W

BEST MANAGEMENT PRACTICES

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

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

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

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

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

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

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

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

Rev 0



DRILLING PLAN Nageezi Unit #703H San Juan County, New Mexico

Surface Location

2042-ft FEL & 941-ft FNL
Sec 9 T23N R9W
Graded Elevation 6707' MSL
RKB Elevation 6721' (14' KB)

SHL Geographical Coordinates (NAD-83)

Latitude 36.2461450° N
Longitude 107.7922800° W

Kick Off Point for Horizontal Build Curve

3836-ft MD
3834-ft TVD

Local Coordinates (from SHL)

55-ft North
111-ft East

Heel Location (Pay zone entry)

1549-ft FEL & 1286-ft FNL
Sec 9 T23N R9W

Heel Geographical Coordinates (NAD-83)

Latitude 36.24520716° N
Longitude 107.79060367° W

Bottom Hole Location (TD)

1742-ft FWL & 372-ft FSL
Sec 10 T23N R9W

BHL Geographical Coordinates (NAD-83)

Latitude 36.2350622° N
Longitude 107.7793567° W

Well objectives

This well is planned as a 4960-ft lateral in the Mancos Silt sand.

Bottom Hole temperature and pressure

The temperature in the Mancos Silt horizontal objective is 128°F. Bottom hole pressure in the Mancos Silt is forecast to be 1985 psi.

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

Name	MD (ft)	TVD (ft)	Lithology	Pore fluid	Expected Pore Pressure (ppg)	Planned Mud Weight (ppg)
Ojo Alamo	398	398	Sd	W	8.3	8.4 – 8.8
Kirtland	530	530	Sh	-	8.3	8.4 – 8.8
Fruitland	840	840	C	G	8.3	9.0 - 9.5
Pictured Cliffs	1106	1106	Sd	W	8.3	9.0 - 9.5
Lewis	1209	1209	Sh	-		9.0 - 9.5
Chacra	1797	1796	Sd	-	8.3	9.0 - 9.5
Menefee	2540	2539	Sd, C	G	8.3	9.0 - 9.5
Point Lookout	3516	3514	Sd	-	8.3	9.0 - 9.5
Mancos	3665	3663	Sh	-		9.0 - 9.5
Mancos Silt	3990	3985	Slt	O/G	6.6	9.0 - 9.5
Gallup A	NP	NP	Slt	O/G	6.6	9.0 - 9.5
Gallup B	NP	NP	Sd	O/G	6.6	8.8 - 9.0
Gallup C	NP	NP	Sd	O/G	6.6	8.8 - 9.0
Target	4693	4374	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	380	surf	380	surface
7"	8-3/4"	26	K-55	LTC	surf	4640	surf	4372	surface
4-1/2"	6-1/8"	11.6	P-110	BTC	4402	9657	4301	4325	4402

Note: all casing will be new



Rev 0

Casing Design Load Cases

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

Note #

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

Casing Design Factors

Casing string	Casing OD	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>
Type	American	American
Planned top	I/II	Poz/G
Density (ppg)	Surface	3665-ft
Yield (cf/sx)	12.30	13.50
Mix water (gal/sx)	2.32	1.51
Volume (sx)	13.22	7.13
Volume (bbls)	406	103
Volume (cu.ft.)	168	28
Excess %	943	156
	78	0



Rev 0

4-1/2" Production Liner

	American
Type	Poz/G
Planned top	4402-ft
Density (ppg)	13.3
Yield (cf/sx)	1.52
Mix water (gal/sx)	7.52
Volume (sx)	454
Volume (bbls)	123
Volume (cu.ft)	690
Excess %	40

Wellhead & Pressure Control

The well head will be an 11" 5M multi-bowl system. A 3M BOPE conforming to Onshore Order #2 will be installed on the surface casing. The BOP and accumulator will meet API 16D and 16E respectively.

A PVT mud monitoring system and a trip tank will be rigged up and operational for all hole intervals. An electronic geograph 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 – 380	8.4 – 8.8	32 – 44	2 – 12	NC
Intermediate	7% KCl Low solids, non-dispersed	380 – 4640	9.0 – 9.5	38 – 45	8 – 14	<20
Production	Low solids, non-dispersed	4640 – 9657	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

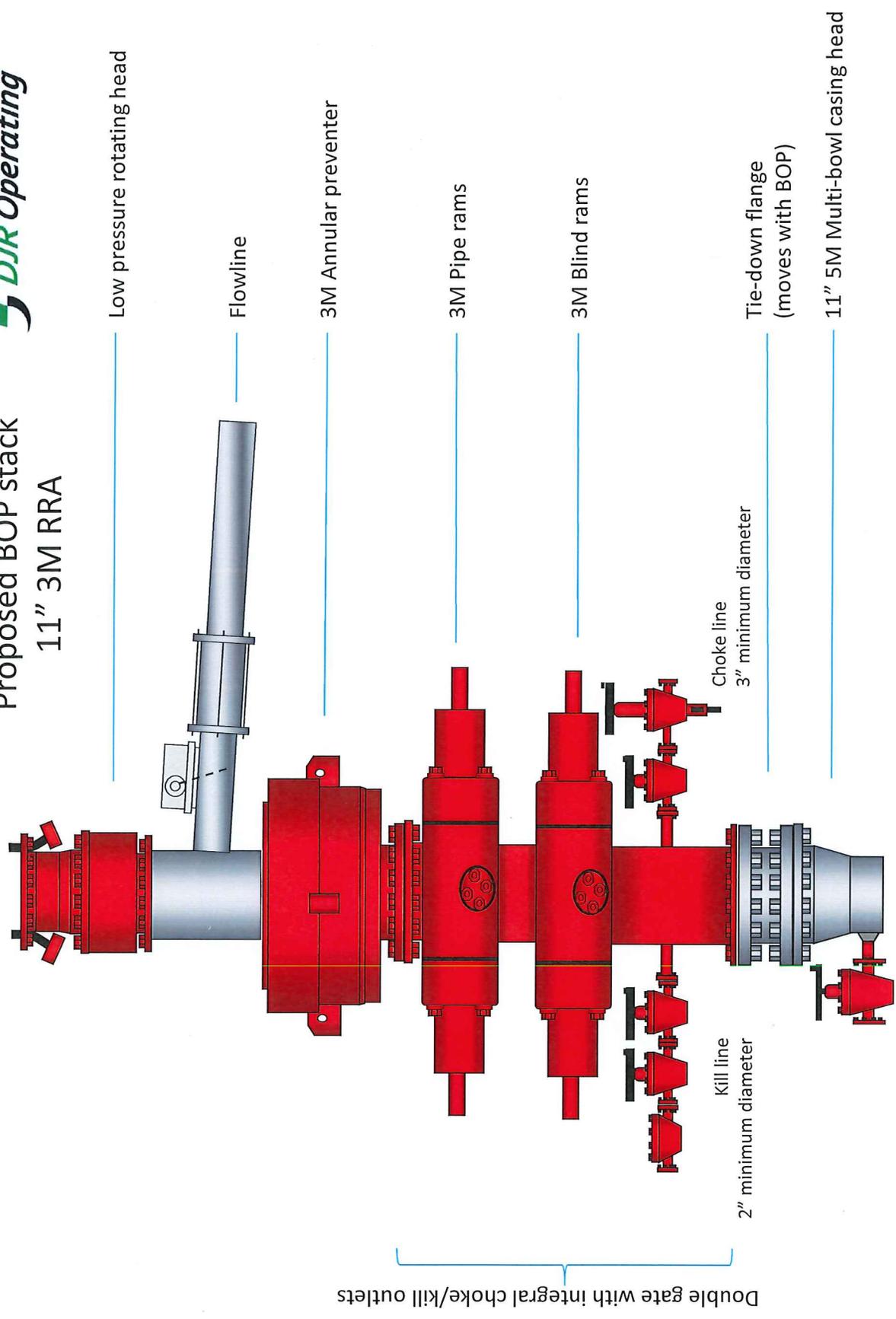
A closed loop, steel tank-based circulating system will be used. In addition to the rig solids control equipment, a dewatering centrifuge and chemical flocculation system will be operational to strip solids from the whole mud. All solids will be collected in 3-sided bins and will then be put into transports 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



Low pressure rotating head

Flowline

3M Annular preventer

3M Pipe rams

3M Blind rams

Choke line
3" minimum diameter

Kill line
2" minimum diameter

Tie-down flange
(moves with BOP)

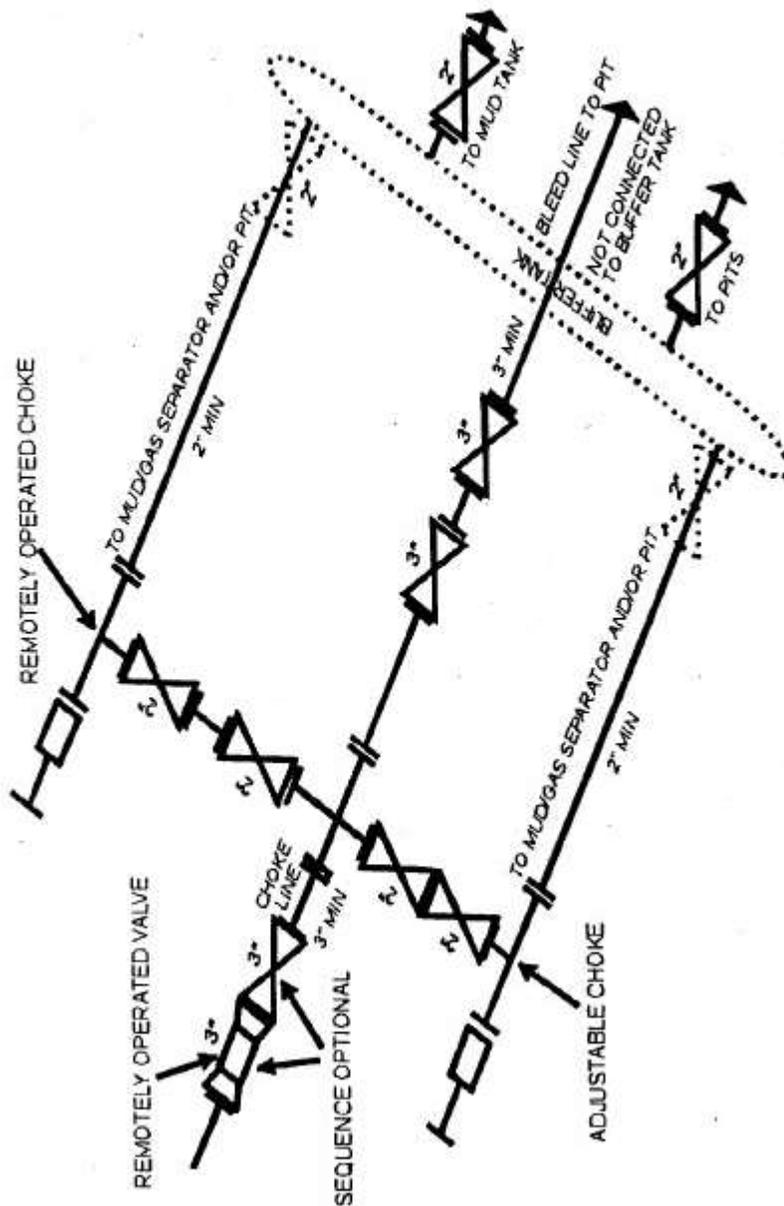
11" 5M Multi-bowl casing head

Double gate with integral choke/kill outlets

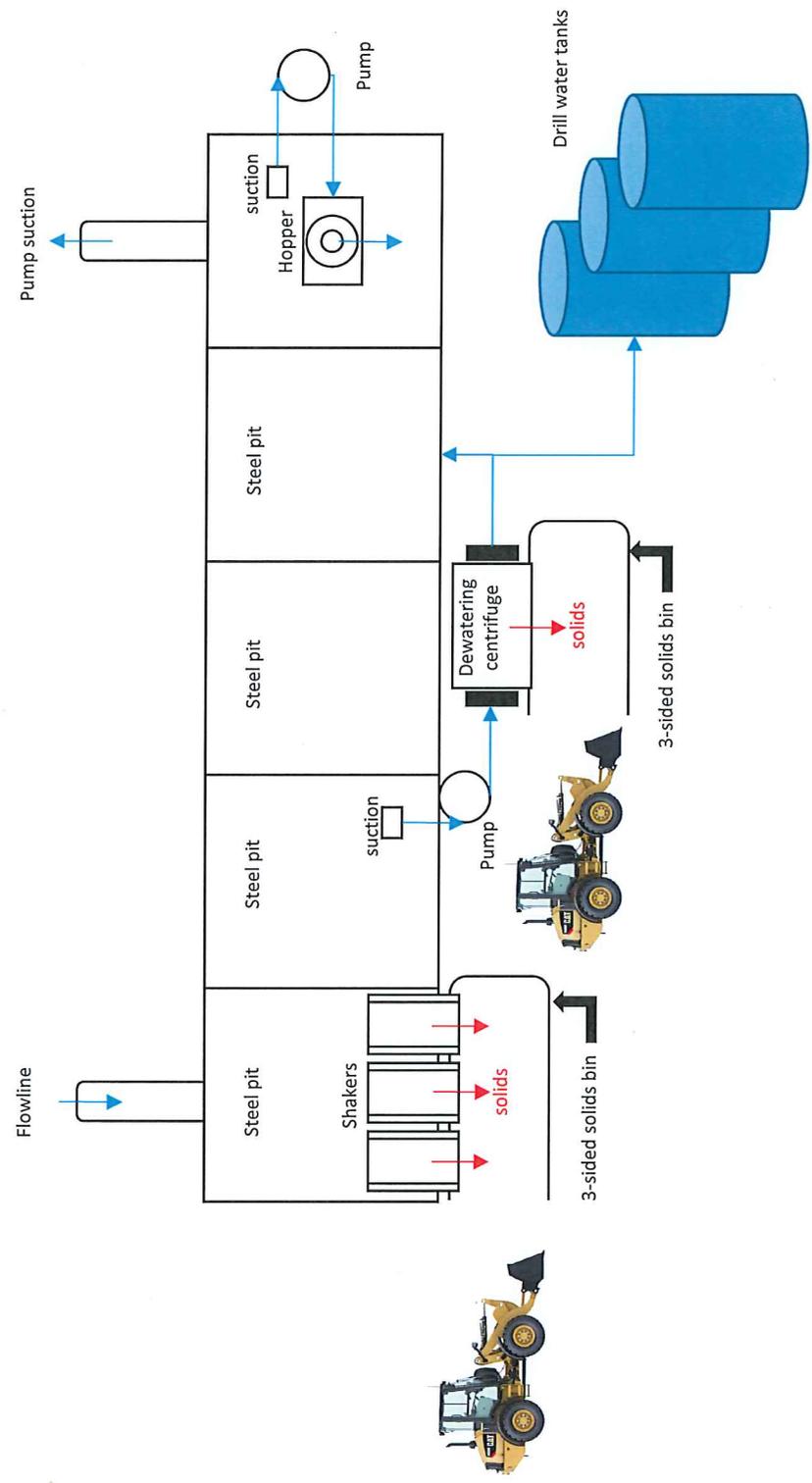


Choke Manifold

Actual system to conform with Onshore Order 2



Closed Loop Mud System





Company: DJR Operating
 Project: Nageezi Unit
 Site: B09 2309
 Well: 703H
 Wellbore: Original Drilling
 Design: APD

PROJECT DETAILS: Nageezi Unit

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



WELL DETAILS: 703H

GL 6707' & RKB 14' @ 6721ft

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0	0	1908897.77	2735196.88	36.24614500	-107.79228000

Plan: APD (703H/Original Drilling)

Created By: Janie Collins Date: 17:10, June 03 2022



Azimuths to True North
 Magnetic North: 8

Magnetic Field
 Strength: 49225.51
 Dip Angle: 62.00
 Date: 5/18/2022
 Model: IGRF2015

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
703H Heel	4374	-341	494	1908556.59	2735691.32	36.24520716	-107.79060367
703H Toe	4325	-4034	3811	1904865.25	2739009.76	36.23506220	-107.77935670

SECTION DETAILS

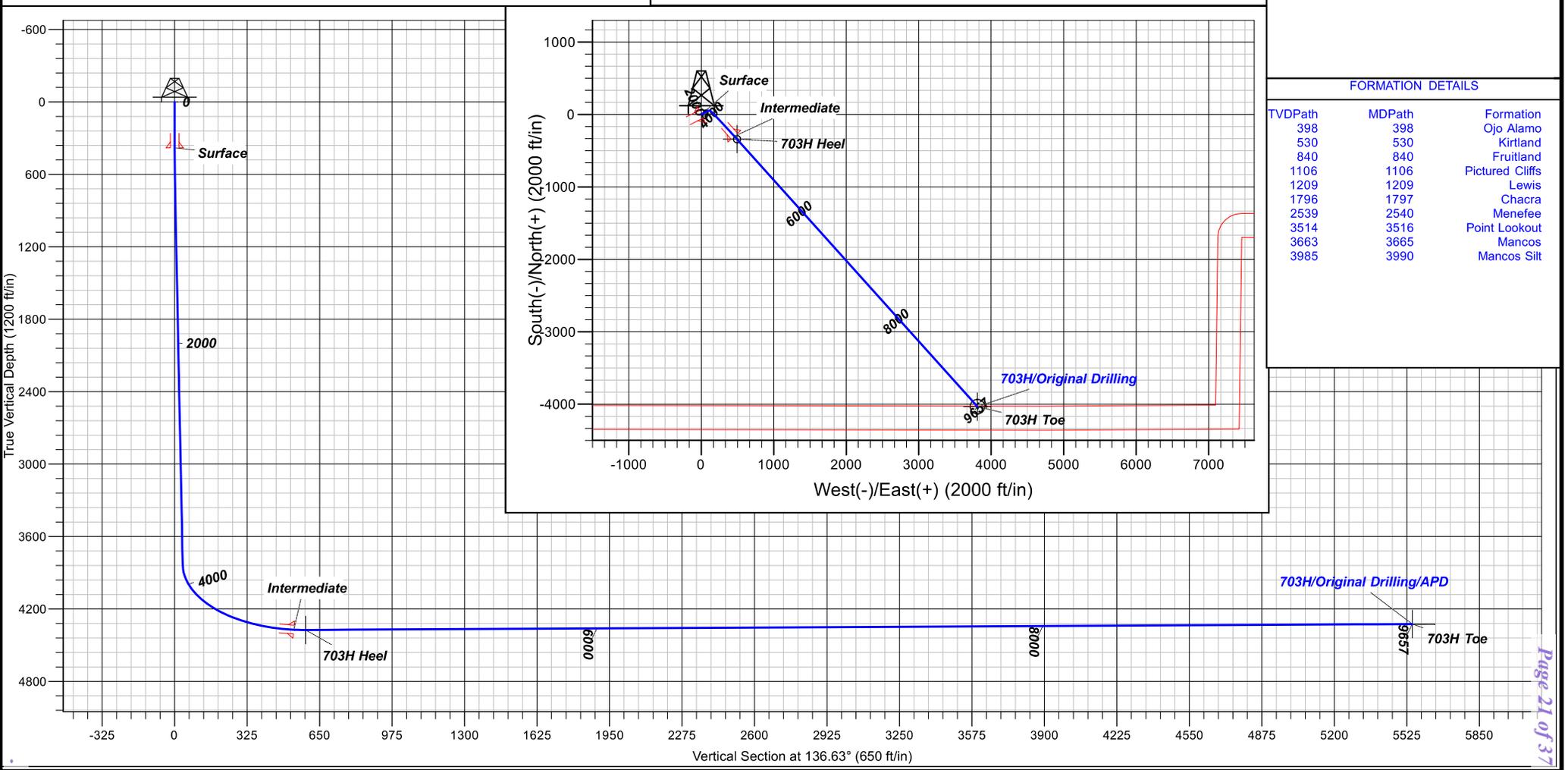
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
0	0.00	0.00	0	0	0	0.00	0.00	0
450	0.00	0.00	450	0	0	0.00	0.00	0
557	2.14	63.57	557	-1	2	2.00	63.57	1
3836	2.14	63.57	3834	55	111	0.00	0.00	36
4693	90.56	138.07	4374	-341	494	10.50	74.49	588
9657	90.56	138.07	4325	-4034	3811	0.00	0.00	5550

CASING DETAILS

TVD	MD	Name
380	380	Surface
4372	4640	Intermediate

FORMATION DETAILS

TVDPATH	MDPATH	FORMATION
398	398	Ojo Alamo
530	530	Kirtland
840	840	Fruitland
1106	1106	Pictured Cliffs
1209	1209	Lewis
1796	1797	Chacara
2539	2540	Menefee
3514	3516	Point Lookout
3663	3665	Mancos
3985	3990	Mancos Silt



Released to Imaging: 9/8/2024 8:55:20 AM

Received by OCD: 8/21/2024 10:29:54 AM

Page 21 of 37



DJR Operating

Nageezi Unit

B09 2309

703H - Slot 1

Original Drilling

Plan: APD

Standard Planning Report

03 June, 2022





Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well 703H - Slot 1
Company:	DJR Operating	TVD Reference:	GL 6707' & RKB 14' @ 6721ft
Project:	Nageezi Unit	MD Reference:	GL 6707' & RKB 14' @ 6721ft
Site:	B09 2309	North Reference:	True
Well:	703H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Project	Nageezi 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	B09 2309				
Site Position:		Northing:	1,908,897.77 usft	Latitude:	36.24614500
From:	Lat/Long	Easting:	2,735,196.88 usft	Longitude:	-107.79228000
Position Uncertainty:	0 ft	Slot Radius:	13.20 in		

Well	703H - Slot 1					
Well Position	+N/-S	0 ft	Northing:	1,908,897.77 usft	Latitude:	36.24614500
	+E/-W	0 ft	Easting:	2,735,196.88 usft	Longitude:	-107.79228000
Position Uncertainty		0 ft	Wellhead Elevation:	ft	Ground Level:	6707 ft
Grid Convergence:	0.02 °					

Wellbore	Original Drilling				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	5/18/2022	8.72	62.85	49,225.74090930

Design	APD			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0	0	0	136.63

Plan Survey Tool Program	Date	6/3/2022		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0	9657 APD (Original Drilling)	MWD+HDGM	
			OWSG MWD + HDGM	

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0	0.00	0.00	0	0	0	0.00	0.00	0.00	0.00	
450	0.00	0.00	450	0	0	0.00	0.00	0.00	0.00	
557	2.14	63.57	557	1	2	2.00	2.00	0.00	63.57	
3836	2.14	63.57	3834	55	111	0.00	0.00	0.00	0.00	
4693	90.56	138.07	4374	-341	494	10.50	10.32	8.69	74.49	703H Heel
9657	90.56	138.07	4325	-4034	3811	0.00	0.00	0.00	0.00	703H Toe



Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well 703H - Slot 1
Company:	DJR Operating	TVD Reference:	GL 6707' & RKB 14' @ 6721ft
Project:	Nageezi Unit	MD Reference:	GL 6707' & RKB 14' @ 6721ft
Site:	B09 2309	North Reference:	True
Well:	703H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0	0.00	0.00	0	0	0	0	0.00	0.00	0.00
100	0.00	0.00	100	0	0	0	0.00	0.00	0.00
200	0.00	0.00	200	0	0	0	0.00	0.00	0.00
300	0.00	0.00	300	0	0	0	0.00	0.00	0.00
400	0.00	0.00	400	0	0	0	0.00	0.00	0.00
450	0.00	0.00	450	0	0	0	0.00	0.00	0.00
500	1.00	63.57	500	0	0	0	2.00	2.00	0.00
557	2.14	63.57	557	1	2	1	2.00	2.00	0.00
600	2.14	63.57	600	2	3	1	0.00	0.00	0.00
700	2.14	63.57	700	3	7	2	0.00	0.00	0.00
800	2.14	63.57	800	5	10	3	0.00	0.00	0.00
900	2.14	63.57	900	7	13	4	0.00	0.00	0.00
1000	2.14	63.57	1000	8	17	5	0.00	0.00	0.00
1100	2.14	63.57	1100	10	20	6	0.00	0.00	0.00
1200	2.14	63.57	1200	12	23	8	0.00	0.00	0.00
1300	2.14	63.57	1299	13	27	9	0.00	0.00	0.00
1400	2.14	63.57	1399	15	30	10	0.00	0.00	0.00
1500	2.14	63.57	1499	17	33	11	0.00	0.00	0.00
1600	2.14	63.57	1599	18	37	12	0.00	0.00	0.00
1700	2.14	63.57	1699	20	40	13	0.00	0.00	0.00
1800	2.14	63.57	1799	22	43	14	0.00	0.00	0.00
1900	2.14	63.57	1899	23	47	15	0.00	0.00	0.00
2000	2.14	63.57	1999	25	50	16	0.00	0.00	0.00
2100	2.14	63.57	2099	27	53	17	0.00	0.00	0.00
2200	2.14	63.57	2199	28	57	18	0.00	0.00	0.00
2300	2.14	63.57	2299	30	60	20	0.00	0.00	0.00
2400	2.14	63.57	2399	32	63	21	0.00	0.00	0.00
2500	2.14	63.57	2499	33	67	22	0.00	0.00	0.00
2600	2.14	63.57	2599	35	70	23	0.00	0.00	0.00
2700	2.14	63.57	2698	37	73	24	0.00	0.00	0.00
2800	2.14	63.57	2798	38	77	25	0.00	0.00	0.00
2900	2.14	63.57	2898	40	80	26	0.00	0.00	0.00
3000	2.14	63.57	2998	42	84	27	0.00	0.00	0.00
3100	2.14	63.57	3098	43	87	28	0.00	0.00	0.00
3200	2.14	63.57	3198	45	90	29	0.00	0.00	0.00
3300	2.14	63.57	3298	46	94	30	0.00	0.00	0.00
3400	2.14	63.57	3398	48	97	32	0.00	0.00	0.00
3500	2.14	63.57	3498	50	100	33	0.00	0.00	0.00
3600	2.14	63.57	3598	51	104	34	0.00	0.00	0.00
3700	2.14	63.57	3698	53	107	35	0.00	0.00	0.00
3800	2.14	63.57	3798	55	110	36	0.00	0.00	0.00
3836	2.14	63.57	3834	55	111	36	0.00	0.00	0.00
3900	7.54	122.27	3897	54	116	41	10.50	8.49	92.20
4000	17.87	131.64	3995	40	133	62	10.50	10.33	9.37
4100	28.33	134.22	4087	13	162	101	10.50	10.45	2.58
4200	38.80	135.48	4170	-26	201	157	10.50	10.48	1.26
4300	49.29	136.27	4242	-76	249	226	10.50	10.49	0.79
4400	59.78	136.85	4300	-135	305	307	10.50	10.49	0.57
4500	70.27	137.31	4342	-201	367	398	10.50	10.49	0.46
4600	80.76	137.71	4367	-272	432	495	10.50	10.49	0.40
4693	90.56	138.07	4374	-341	494	588	10.50	10.49	0.38
4700	90.56	138.07	4374	-346	499	594	0.00	0.00	0.00
4800	90.56	138.07	4373	-421	566	694	0.00	0.00	0.00
4900	90.56	138.07	4372	-495	632	794	0.00	0.00	0.00



Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well 703H - Slot 1
Company:	DJR Operating	TVD Reference:	GL 6707' & RKB 14' @ 6721ft
Project:	Nageezi Unit	MD Reference:	GL 6707' & RKB 14' @ 6721ft
Site:	B09 2309	North Reference:	True
Well:	703H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5000	90.56	138.07	4371	-569	699	894	0.00	0.00	0.00	
5100	90.56	138.07	4370	-644	766	994	0.00	0.00	0.00	
5200	90.56	138.07	4369	-718	833	1094	0.00	0.00	0.00	
5300	90.56	138.07	4368	-793	900	1194	0.00	0.00	0.00	
5400	90.56	138.07	4367	-867	966	1294	0.00	0.00	0.00	
5500	90.56	138.07	4366	-941	1033	1394	0.00	0.00	0.00	
5600	90.56	138.07	4365	-1016	1100	1494	0.00	0.00	0.00	
5700	90.56	138.07	4364	-1090	1167	1594	0.00	0.00	0.00	
5800	90.56	138.07	4363	-1165	1234	1694	0.00	0.00	0.00	
5900	90.56	138.07	4362	-1239	1301	1794	0.00	0.00	0.00	
6000	90.56	138.07	4361	-1313	1367	1894	0.00	0.00	0.00	
6100	90.56	138.07	4360	-1388	1434	1994	0.00	0.00	0.00	
6200	90.56	138.07	4359	-1462	1501	2094	0.00	0.00	0.00	
6300	90.56	138.07	4358	-1537	1568	2194	0.00	0.00	0.00	
6400	90.56	138.07	4357	-1611	1635	2294	0.00	0.00	0.00	
6500	90.56	138.07	4356	-1685	1701	2394	0.00	0.00	0.00	
6600	90.56	138.07	4355	-1760	1768	2494	0.00	0.00	0.00	
6700	90.56	138.07	4354	-1834	1835	2593	0.00	0.00	0.00	
6800	90.56	138.07	4353	-1909	1902	2693	0.00	0.00	0.00	
6900	90.56	138.07	4352	-1983	1969	2793	0.00	0.00	0.00	
7000	90.56	138.07	4351	-2057	2036	2893	0.00	0.00	0.00	
7100	90.56	138.07	4350	-2132	2102	2993	0.00	0.00	0.00	
7200	90.56	138.07	4349	-2206	2169	3093	0.00	0.00	0.00	
7300	90.56	138.07	4348	-2280	2236	3193	0.00	0.00	0.00	
7400	90.56	138.07	4347	-2355	2303	3293	0.00	0.00	0.00	
7500	90.56	138.07	4346	-2429	2370	3393	0.00	0.00	0.00	
7600	90.56	138.07	4345	-2504	2436	3493	0.00	0.00	0.00	
7700	90.56	138.07	4344	-2578	2503	3593	0.00	0.00	0.00	
7800	90.56	138.07	4343	-2652	2570	3693	0.00	0.00	0.00	
7900	90.56	138.07	4342	-2727	2637	3793	0.00	0.00	0.00	
8000	90.56	138.07	4341	-2801	2704	3893	0.00	0.00	0.00	
8100	90.56	138.07	4340	-2876	2771	3993	0.00	0.00	0.00	
8200	90.56	138.07	4339	-2950	2837	4093	0.00	0.00	0.00	
8300	90.56	138.07	4338	-3024	2904	4193	0.00	0.00	0.00	
8400	90.56	138.07	4337	-3099	2971	4293	0.00	0.00	0.00	
8500	90.56	138.07	4336	-3173	3038	4393	0.00	0.00	0.00	
8600	90.56	138.07	4335	-3248	3105	4493	0.00	0.00	0.00	
8700	90.56	138.07	4334	-3322	3172	4593	0.00	0.00	0.00	
8800	90.56	138.07	4333	-3396	3238	4693	0.00	0.00	0.00	
8900	90.56	138.07	4332	-3471	3305	4793	0.00	0.00	0.00	
9000	90.56	138.07	4331	-3545	3372	4893	0.00	0.00	0.00	
9100	90.56	138.07	4330	-3620	3439	4993	0.00	0.00	0.00	
9200	90.56	138.07	4329	-3694	3506	5093	0.00	0.00	0.00	
9300	90.56	138.07	4329	-3768	3572	5193	0.00	0.00	0.00	
9400	90.56	138.07	4328	-3843	3639	5292	0.00	0.00	0.00	
9500	90.56	138.07	4327	-3917	3706	5392	0.00	0.00	0.00	
9600	90.56	138.07	4326	-3991	3773	5492	0.00	0.00	0.00	
9657	90.56	138.07	4325	-4034	3811	5550	0.00	0.00	0.00	



Database:	Grand Junction	Local Co-ordinate Reference:	Well 703H - Slot 1
Company:	DJR Operating	TVD Reference:	GL 6707' & RKB 14' @ 6721ft
Project:	Nageezi Unit	MD Reference:	GL 6707' & RKB 14' @ 6721ft
Site:	B09 2309	North Reference:	True
Well:	703H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
703H Toe - hit/miss target - Shape	0.00	0.00	4325	-4034	3811	1,904,865.25	2,739,009.76	36.23506220	-107.77935670
- plan hits target center - Circle (radius 100)									
703H Heel - plan hits target center - Circle (radius 50)	0.00	0.00	4374	-341	494	1,908,556.59	2,735,691.32	36.24520716	-107.79060367

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
380	380	Surface	9.63	12.25	
4640	4372	Intermediate	7.00	8.75	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
398	398	Ojo Alamo		0.00	0.00	
530	530	Kirtland		0.00	0.00	
840	840	Fruitland		0.00	0.00	
1106	1106	Pictured Cliffs		0.00	0.00	
1209	1209	Lewis		0.00	0.00	
1797	1796	Chacra		0.00	0.00	
2540	2539	Menefee		0.00	0.00	
3516	3514	Point Lookout		0.00	0.00	
3665	3663	Mancos		0.00	0.00	
3990	3985	Mancos Silt		0.00	0.00	



DJR Operating

Nageezi Unit

B09 2309

703H

Original Drilling

APD

Anticollision Report

03 June, 2022





Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well 703H - Slot 1
Project:	Nageezi Unit	TVD Reference:	GL 6707' & RKB 14' @ 6721ft
Reference Site:	B09 2309	MD Reference:	GL 6707' & RKB 14' @ 6721ft
Site Error:	0 ft	North Reference:	True
Reference Well:	703H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Reference	APD		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 2500ft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	6/3/2022		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0	9657	APD (Original Drilling)	MWD+HDGM	OWSG MWD + HDGM

Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Summary						
Offset Well - Wellbore - Design						
B09 2309						
702H - Original Drilling - APD	450	450	20	17	6.354	CC
702H - Original Drilling - APD	800	799	21	15	3.712	ES
702H - Original Drilling - APD	1600	1599	33	22	2.944	SF

Offset Design: B09 2309 - 702H - Original Drilling - APD														Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM														Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning		
							+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)					
0	0	0	0	0	0	39.67	15	13	20						
100	100	100	100	0	0	39.67	15	13	20	19	0.62	32.214			
200	200	200	200	1	1	39.67	15	13	20	19	1.33	14.895			
300	300	300	300	1	1	39.67	15	13	20	18	2.05	9.687			
400	400	400	400	1	1	39.67	15	13	20	17	2.77	7.177			
450	450	450	450	2	2	39.67	15	13	20	17	3.13	6.354	CC		
500	500	500	500	2	2	-24.81	16	13	20	16	3.48	5.711			
557	557	556	556	2	2	-28.02	17	13	20	16	3.88	5.139			
569	569	568	568	2	2	-28.89	17	14	20	16	3.96	5.032			
600	600	599	599	2	2	-31.23	18	14	20	16	4.19	4.768			
700	700	699	699	2	2	-38.62	22	15	20	15	4.90	4.131			
800	800	799	799	3	3	-45.69	25	16	21	15	5.61	3.712	ES		
900	900	899	899	3	3	-52.27	28	18	22	15	6.33	3.434			
1000	1000	999	999	4	4	-58.26	31	19	23	16	7.05	3.248			
1100	1100	1099	1099	4	4	-63.63	34	20	24	17	7.77	3.126			
1200	1200	1199	1199	4	4	-68.37	37	21	26	17	8.48	3.047			
1300	1299	1299	1299	5	5	-72.55	40	22	28	18	9.20	2.997			
1400	1399	1399	1399	5	5	-76.22	44	24	29	20	9.92	2.967			
1500	1499	1499	1498	5	5	-79.44	47	25	31	21	10.64	2.951			
1600	1599	1599	1598	6	6	-82.27	50	26	33	22	11.36	2.944	SF		
1700	1699	1699	1698	6	6	-84.78	53	27	36	23	12.08	2.945			
1800	1799	1799	1798	6	6	-86.99	56	28	38	25	12.80	2.950			
1900	1899	1899	1898	7	7	-88.96	59	30	40	26	13.52	2.958			
2000	1999	1999	1998	7	7	-90.72	62	31	42	28	14.24	2.968			



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well 703H - Slot 1
Project:	Nageezi Unit	TVD Reference:	GL 6707' & RKB 14' @ 6721ft
Reference Site:	B09 2309	MD Reference:	GL 6707' & RKB 14' @ 6721ft
Site Error:	0 ft	North Reference:	True
Reference Well:	703H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: B09 2309 - 702H - Original Drilling - APD													Offset Site Error:	0 ft		
Survey Program: 0-MWD+HDGM													Rule Assigned:		Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning			
		Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)						
2100	2099	2099	2098	7	7	-92.30	66	32	45	30	14.96	2.980				
2200	2199	2199	2198	8	8	-93.73	69	33	47	31	15.68	2.993				
2300	2299	2299	2298	8	8	-95.01	72	34	49	33	16.40	3.006				
2400	2399	2399	2398	9	9	-96.18	75	36	52	35	17.12	3.019				
2500	2499	2499	2498	9	9	-97.24	78	37	54	36	17.84	3.032				
2600	2599	2599	2597	9	9	-98.22	81	38	57	38	18.56	3.046				
2700	2698	2699	2697	10	10	-99.11	84	39	59	40	19.28	3.059				
2800	2798	2799	2797	10	10	-99.93	88	40	61	41	20.00	3.071				
2900	2898	2899	2897	10	10	-100.69	91	42	64	43	20.72	3.084				
3000	2998	2999	2997	11	11	-101.39	94	43	66	45	21.44	3.096				
3100	3098	3098	3097	11	11	-102.04	97	44	69	47	22.17	3.107				
3200	3198	3198	3197	11	11	-102.65	100	45	71	48	22.89	3.119				
3300	3298	3298	3297	12	12	-103.21	103	46	74	50	23.61	3.129				
3400	3398	3398	3397	12	12	-103.74	106	48	76	52	24.33	3.140				
3500	3498	3498	3497	13	13	-104.24	110	49	79	54	25.05	3.150				
3600	3598	3598	3597	13	13	-104.70	113	50	81	56	25.77	3.160				
3700	3698	3698	3696	13	13	-105.13	116	51	84	57	26.49	3.169				
3800	3798	3798	3796	14	14	-105.54	119	52	86	59	27.21	3.179				
3836	3834	3835	3833	14	14	-105.69	120	53	87	60	27.47	3.182				
3850	3848	3848	3846	14	14	-134.44	121	53	88	60	27.57	3.189				
3900	3897	3890	3888	14	14	-164.46	123	52	95	67	27.80	3.409				
3950	3947	3931	3928	14	14	-171.04	128	50	110	82	27.89	3.935				
4000	3995	3967	3964	14	14	-173.80	134	46	132	104	27.87	4.745				
4050	4042	4000	3996	15	14	-175.31	141	41	161	134	27.80	5.803				
4100	4087	4026	4021	15	14	-176.26	148	36	196	168	27.62	7.097				
4150	4130	4050	4043	15	15	-176.93	155	30	235	208	27.53	8.547				
4200	4170	4066	4057	15	15	-177.44	160	27	278	251	27.32	10.183				
4250	4207	4079	4069	15	15	-177.88	164	23	324	297	27.20	11.906				
4300	4242	4088	4078	16	15	-178.36	167	21	371	344	27.11	13.702				
4350	4273	4100	4088	16	15	-178.98	171	17	421	393	27.23	15.440				
4400	4300	4100	4088	16	15	178.73	171	17	470	443	27.12	17.335				
4450	4323	4100	4088	17	15	8.43	171	17	520	493	27.13	19.175				
4500	4342	4100	4088	17	15	3.76	171	17	570	543	27.21	20.944				
4550	4357	4100	4088	18	15	3.00	171	17	619	592	27.37	22.632				
4600	4367	4085	4075	19	15	2.61	166	21	668	640	27.27	24.485				
4650	4373	4078	4069	19	15	2.45	164	23	715	688	27.39	26.106				
4693	4374	4071	4062	20	15	2.36	161	25	755	727	27.50	27.448				
4700	4374	4070	4061	20	15	2.36	161	26	761	733	27.52	27.651				
4800	4373	4050	4043	22	15	2.32	155	30	852	824	27.74	30.722				
4900	4372	4050	4043	24	15	2.32	155	30	945	917	28.17	33.539				
5000	4371	4026	4021	25	14	2.29	148	36	1038	1010	28.22	36.790				
5100	4370	4000	3996	27	14	2.25	141	41	1133	1104	28.21	40.144				
5200	4369	4000	3996	30	14	2.25	141	41	1227	1199	28.47	43.100				
5300	4368	4000	3996	32	14	2.25	141	41	1322	1294	28.68	46.109				
5400	4367	4000	3996	34	14	2.25	141	41	1418	1389	28.85	49.158				
5500	4366	3980	3977	36	14	2.23	137	44	1514	1486	28.85	52.498				
5600	4365	3974	3970	38	14	2.22	135	45	1611	1582	28.93	55.679				
5700	4364	3950	3947	41	14	2.19	131	48	1708	1679	28.89	59.129				
5800	4363	3950	3947	43	14	2.19	131	48	1805	1776	29.00	62.235				
5900	4362	3950	3947	45	14	2.19	131	48	1902	1873	29.11	65.356				
6000	4361	3950	3947	48	14	2.19	131	48	2000	1971	29.20	68.489				
6100	4360	3950	3947	50	14	2.19	131	48	2097	2068	29.28	71.631				



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well 703H - Slot 1
Project:	Nageezi Unit	TVD Reference:	GL 6707' & RKB 14' @ 6721ft
Reference Site:	B09 2309	MD Reference:	GL 6707' & RKB 14' @ 6721ft
Site Error:	0 ft	North Reference:	True
Reference Well:	703H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

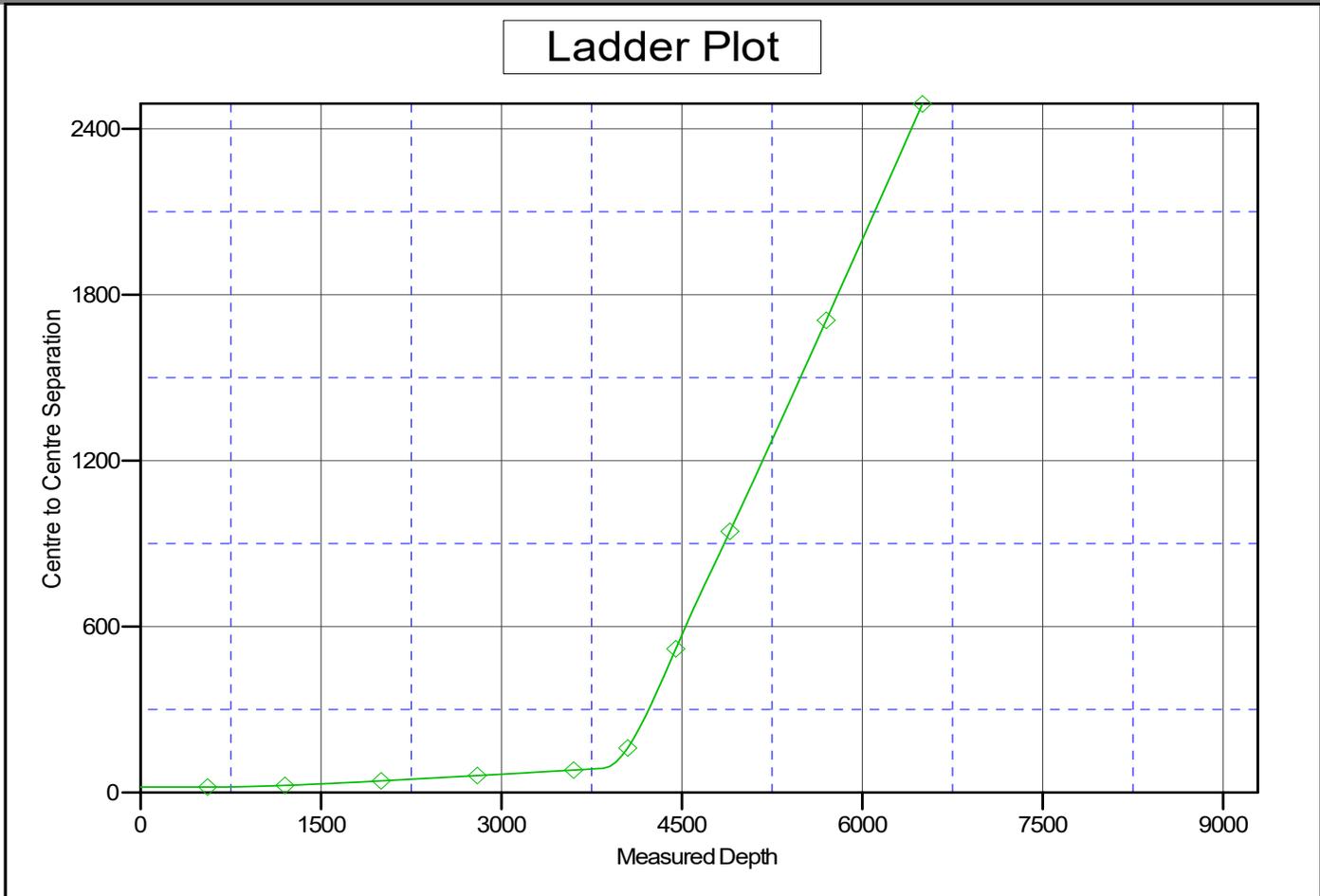
Offset Design: B09 2309 - 702H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Rule Assigned:		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
6200	4359	3950	3947	53	14	2.19	131	48	2195	2166	29.36	74.779		
6300	4358	3950	3947	55	14	2.19	131	48	2294	2264	29.43	77.932		
6400	4357	3950	3947	58	14	2.19	131	48	2392	2362	29.50	81.087		
6500	4356	3950	3947	60	14	2.19	131	48	2490	2461	29.56	84.243		



Company:	DJR Operating	Local Co-ordinate Reference:	Well 703H - Slot 1
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Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Reference Depths are relative to GL 6707' & RKB 14' @ 6721ft
 Offset Depths are relative to Offset Datum
 Central Meridian is -107.8333333

Coordinates are relative to: 703H - Slot 1
 Coordinate System is US State Plane 1983, New Mexico Western Zone
 Grid Convergence at Surface is: 0.02°



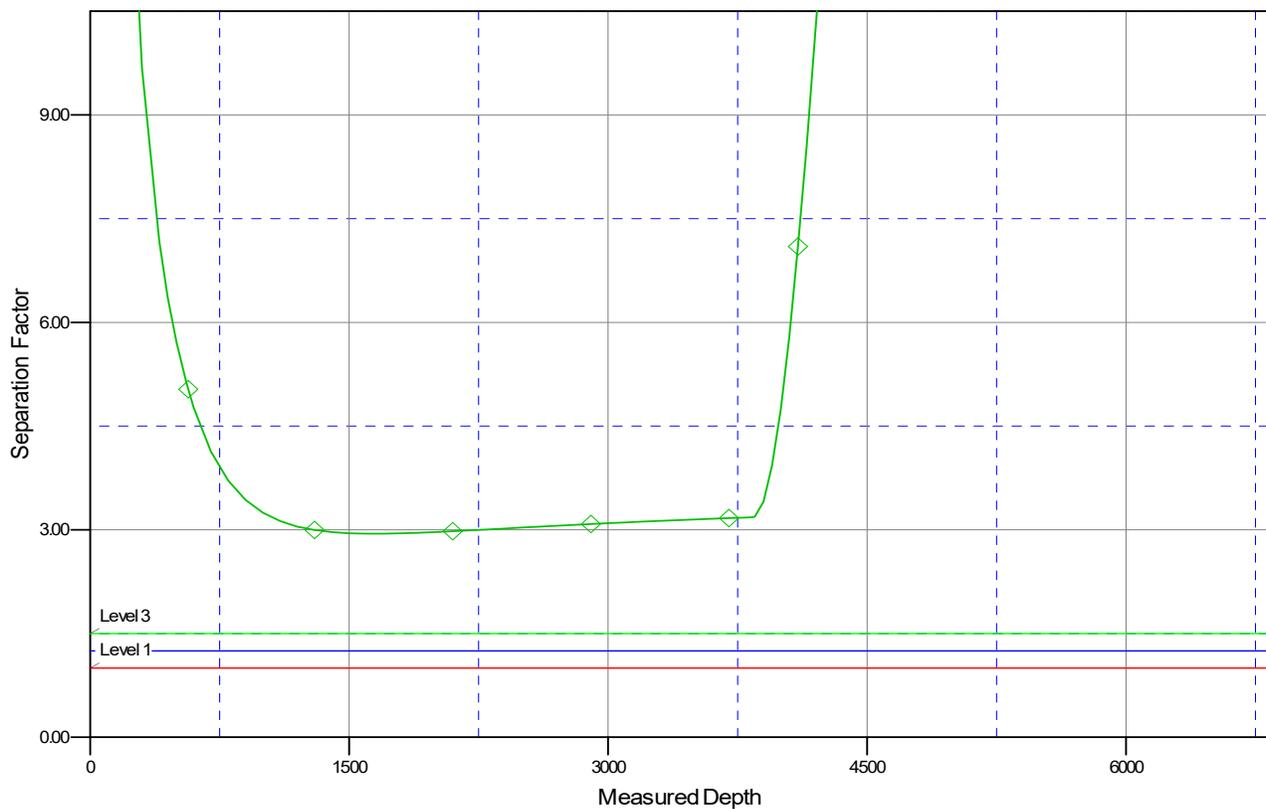


Company:	DJR Operating	Local Co-ordinate Reference:	Well 703H - Slot 1
Project:	Nageezi Unit	TVD Reference:	GL 6707' & RKB 14' @ 6721ft
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Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Reference Depths are relative to GL 6707' & RKB 14' @ 6721ft
 Offset Depths are relative to Offset Datum
 Central Meridian is -107.83333333

Coordinates are relative to: 703H - Slot 1
 Coordinate System is US State Plane 1983, New Mexico Western Zone
 Grid Convergence at Surface is: 0.02°

Separation Factor Plot



LEGEND

702HOriginalDrilling, APDV0



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)

* ENDURING RESOURCES LLC
#703H NAGEEZI UNIT
Lease: NMNM8005 Agreement: NMNM132981A
SH: NWNE Section 9, T. 23 N., R. 9 W.
San Juan County, New Mexico
BH: SESW Section 10, T. 23 N., R. 9 W.
San Juan County, New Mexico
***Above Data Required on Well Sign**

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

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

- A. Note all surface/drilling conditions of approval attached.
- B. The required wait on cement (WOC) time will be a minimum of 500 psi compressive strength at 60 degrees. Blowout preventor (BOP) nipple-up operations may then be initiated
- C. Test the surface casing to a minimum of _____ psi for 30 minutes.
- D. Test all casing strings below the surface casing to .22 psi/ft. of casing string length or 1500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield burst) for a minimum of 30 minutes.
- E. Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the Bureau of Land Management, New Mexico State Office, Reservoir Management Group, 301 Dinosaur Trail, Santa Fe, New Mexico 87508.
The effective date of the agreement must be **prior** to any sales.
- F. The use of co-flex hose is authorized contingent upon the following:
 - 1. From the BOP to the choke manifold: the co-flex hose must be hobbled on both ends and saddle to prevent whip.
 - 2. From the choke manifold to the discharge tank: the co-flex hoses must be as straight as practical, hobbled on both ends and anchored to prevent whip.
 - 3. The co-flex hose pressure rating must be at least commensurate with approved BOPE.

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 (Form 3160-4) 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. Prior approval by the BLM-Authorized Office (Drilling and Production Section) is required for variance from the approved drilling program and before commencing plugging operations, plug back work casing repair work, corrective cementing operations, or suspending drilling operations indefinitely. Emergency approval may be obtained orally, but such approval is contingent upon filing of a notice of intent (on a Sundry Notice, Form 3160-5) within three business days (original and three copies of Federal leases and an original and four copies on Indian leases). **Any changes to the approved plan or any questions regarding drilling operations should be directed to BLM during regular business hours at 505-564-7600. Emergency program changes after hours should be directed to at Virgil Lucero at 505-793-1836.**
- G. **The Inspection and Enforcement Section (I&E), phone number (505-564-7750) is to be notified at least 24 hours in advance of BOP test, spudding, cementing, or plugging operations so that a BLM representative may witness the operations.**
- H. Unless drilling operations are commenced within two years, approval of the Application for Permit to Drill will expire. A written request for a two years extension may be granted if submitted prior to expiration.
- I. From the time drilling operations are initiated and until drilling operations are completed, a member of the drilling crew or the tool pusher shall maintain rig surveillance at all time, unless the well is secured with blowout preventers or cement plugs.
- J. If for any reason, drilling operations are suspended for more than 90 days, a written notice must be provided to this office outlining your plans for this well.

II. REPORTING REQUIREMENTS

A. For reporting purposes, all well Sundry notices, well completion and other well actions shall be referenced by the appropriate lease, communitization agreement and/or unit agreement numbers.

B. The following reports shall be filed with the BLM-Authorized Officer within 30 days after the work is completed.

1. Original and three copies on Federal and an Original and five copies on Indian leases of Sundry Notice (Form 3150-5), giving complete information concerning.

- a. Setting of each string of casing. Show size and depth of hole, grade and weight of casing, depth set, depth of any and all cementing tools that are used, amount (in cubic feet) and types of cement used, whether cement circulated to surface and all cement tops in the casing annulus, casing test method and results, and the date work was done. Show spud date on first report submitted.
- b. Intervals tested, perforated (include; size, number and location of perforations), acidized, or fractured; and results obtained. Provide date work was done on well completion report and completion sundry notice.
- c. Subsequent Report of Abandonment, show the manner in which the well was plugged, including depths where casing was cut and pulled, intervals (by depths) where cement plugs were replaced, and dates of the operations.

2. Well Completion Report (Form 3160-4) will be submitted with 30 days after well has been completed.

- a. Initial Bottom Hole Pressure (BHP) for the producing formations. Show the BHP on the completion report. The pressure may be: 1) measured with a bottom hole bomb, or; 2) calculated based on shut in surface pressures (minimum seven day buildup) and fluid level shot.

3. Submit a cement evaluation log, if cement is not circulated to surface.

III. DRILLER'S LOG

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

IV. GAS FLARING

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

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

V. SAFETY

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

VI. CHANGE OF PLANS OR ABANDONMENT

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

VII. PHONE NUMBERS

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

District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720
District II
 811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720
District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
 1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 374657

CONDITIONS

Operator: DJR OPERATING, LLC 200 Energy Court Farmington, NM 87401	OGRID:	371838
	Action Number:	374657
	Action Type:	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Notify OCD 24 hours prior to casing & cement	9/8/2024
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104	9/8/2024
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	9/8/2024
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing	9/8/2024
ward.rikala	If cement does not circulate on any string, a CBL is required for that string of casing	9/8/2024
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	9/8/2024