

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 1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other 1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> 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. <b>30-045-38276</b>
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.<br>2. A Drilling Plan.<br>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).<br>5. Operator certification.<br>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)



Approval Date: 06/10/2022



**DISTRICT I**

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

**DISTRICT II**

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

**DISTRICT III**

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

**DISTRICT IV**

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

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised August 1, 2011

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

Submit one copy to appropriate  
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number <b>30-045-38276</b>	<sup>2</sup> Pool Code <b>98175</b>	<sup>3</sup> Pool Name <b>BETONNIE TSOSIE WASH UNIT MANCOS POOL</b>
<sup>4</sup> Property Code <b>325179</b>	<sup>5</sup> Property Name <b>BETONNIE TSOSIE WASH UNIT</b>	<sup>6</sup> Well Number <b>715H</b>
<sup>7</sup> OGRID No. <b>371838</b>	<sup>8</sup> Operator Name <b>DJR OPERATING, LLC</b>	<sup>9</sup> Elevation <b>6870'</b>

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	3	22N	8W		1692'	NORTH	460'	WEST	SAN JUAN

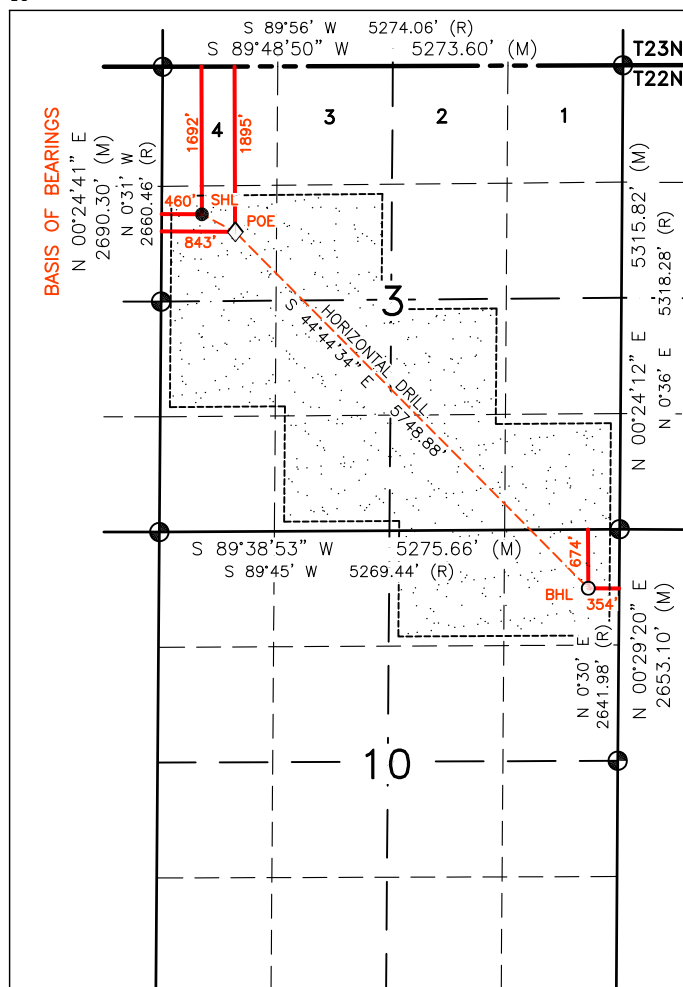
<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	10	22N	8W		674'	NORTH	354'	EAST	SAN JUAN

<sup>12</sup> Dedicated Acres PENETRATED SPACING UNIT; SEC 3: SW/NW, SE/NW, NW/SW, NE/SW, SE/SW, NW/SE, SW/SE & SE/SE (320 AC.); SEC 10: NW/NE & NE/NE (80 AC.) = 400 ACRES	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No. <b>R13930 R-13930A</b>
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16



**SURFACE LOCATION (SHL)**  
LAT. 36.171476° N (NAD83)  
LONG. 107.676329° W (NAD83)

**PPP/POE**  
LAT. 36.170920° N (NAD83)  
LONG. 107.675039° W (NAD83)

**BOTTOM HOLE LOCATION (BHL)**  
LAT. 36.159684° N (NAD83)  
LONG. 107.661353° W (NAD83)

FND 2 1/2" BC  
GLO 1947

18

**17 OPERATOR CERTIFICATION**

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

*Shaw-Marie Ford* 9/2/21

Signature Date

Shaw-Marie Ford

Printed Name

sford@djrlc.com

E-mail Address

**SURVEYOR CERTIFICATION**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

MARCH 30, 2021

Date of Survey

Signature and Seal of Professional Surveyor:



Certificate Number

11393



State of New Mexico  
Energy, Minerals and Natural Resources Department

Submit Electronically  
Via E-permitting

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

## NATURAL GAS MANAGEMENT PLAN

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

### Section 1 – Plan Description

Effective May 25, 2021

**I. Operator:** DJR Operating, LLC **OGRID:** 371838 **Date:** 07 / 15 / 2022

**II. Type:** ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: \_\_\_\_\_

**III. Well(s):** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Betonne Tsosie Wash Unit 602H	TBD	E-03-22N-08W	1709' FNL x 451' FWL	500	750	180
Betonne Tsosie Wash Unit 714H	TBD	E-03-22N-08W	1674' FNL x 470' FWL	300	460	110
Betonne Tsosie Wash Unit 715H	TBD	E-03-22N-08W	1692' FNL x 460' FWL	260	545	130

**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
Betonne Tsosie Wash Unit 602H	TBD	09/04/2022	09/14/2022	12/13/2022	12/21/2022	12/22/2022
Betonne Tsosie Wash Unit 714H	TBD	09/05/2022	09/15/2022	12/13/2022	12/21/2022	12/22/2022
Betonne Tsosie Wash Unit 715H	TBD	09/06/2022	09/16/2022	12/13/2022	12/21/2022	12/22/2022

**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: 07/15/2022
Phone: 505-716-3297
<b>OIL CONSERVATION DIVISION</b> <b>(Only applicable when submitted as a standalone form)</b>
Approved By:
Title:
Approval Date:
Conditions of Approval:





DJR OPERATING, LLC.  
OGRID NO: 371838  
NATURAL GAS MANAGEMENT PLAN  
BETONNIE TSOSIE WASH UNIT 602H, 714H and 715H  
SWNW E-03-22N-08W

### 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  
BETONNIE TSOSIE WASH UNIT 602H, 714H and 715H  
SWNW E-03-22N-08W

### **VENTING and FLARING**

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

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

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

DJR will only flare gas during the following times:

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





DJR OPERATING, LLC.  
OGRID NO: 371838  
NATURAL GAS MANAGEMENT PLAN  
BETONNIE TSOSIE WASH UNIT 602H, 714H and 715H  
SWNW E-03-22N-08W

## **OPERATIONAL PRACTICES**

### **19.15.27.8 A. Venting and Flaring of Natural Gas**

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

### **19.15.27.8 B. Venting and flaring during drilling operations**

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

### **19.15.27.8 E. Venting and flaring during completion or recompletion operations**

During Completion Operations, DJR utilizes the following:

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





#### **19.15.27.8 D. Venting and flaring during production operations**

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

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

#### **19.15.27.8 E. Performance standards**

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





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

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

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





DJR OPERATING, LLC.  
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NATURAL GAS MANAGEMENT PLAN  
BETONNIE TSOSIE WASH UNIT 602H, 714H and 715H  
SWNW E-03-22N-08W

### **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

### Bettonie Tsosie Wash #715H

### San Juan County, New Mexico

**Surface Location**

460-ft FWL & 1692-ft FNL  
 Sec 3 T22N R08W  
 Graded Elevation 6870' MSL  
 RKB Elevation 6884' (14' KB)

**SHL Geographical Coordinates (NAD-83)**

Latitude 36.1714760° N  
 Longitude 107.6763290° W

**Kick Off Point for Horizontal Build Curve**

4115-ft MD  
 4107-ft TVD

**Local Coordinates (from SHL)**

239-ft North  
 84-ft West

**Heel Location (Pay zone entry)**

843-ft FWL & 1895-ft FNL  
 Sec 3 T22N R08W

**Heel Geographical Coordinates (NAD-83)**

Latitude 36.1709202° N  
 Longitude 107.67503920° W

**Bottom Hole Location (TD)**

354-ft FEL & 674-ft FNL  
 Sec 10 T22N R08W

**BHL Geographical Coordinates (NAD-83)**

Latitude 36.1596841° N  
 Longitude 107.6613527° W

**Well objectives**

This well is planned as a 5750-ft lateral in the Gallup C sand.

**Bottom Hole temperature and pressure**

The temperature in the Gallup C horizontal objective is 134°F. Bottom hole pressure in the Gallup C is forecast to be 1985 psi.

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

Name	MD (ft)	TVD (ft)	Lithology	Pore fluid	Expected Pore Pressure (ppg)	Planned Mud Weight (ppg)
Ojo Alamo	484	484	Sd	W	8.3	8.4 – 8.8
Kirtland	607	607	Sh	-	8.3	8.4 – 8.8
Fruitland	898	897	C	G	8.3	9.0 - 9.5
Pictured Cliffs	1164	1162	Sd	W	8.3	9.0 - 9.5
Lewis	1312	1310	Sh	-		9.0 - 9.5
Chacra	1915	1912	Sd	-	8.3	9.0 - 9.5
Menefee	2626	2621	Sd, C	G	8.3	9.0 - 9.5
Point Lookout	3562	3555	Sd	-	8.3	9.0 - 9.5
Mancos	3708	3700	Sh	-		9.0 - 9.5
Mancos Silt	3996	3988	Slt	O/G	6.6	9.0 - 9.5
Gallup A	4540	4508	Slt	O/G	6.6	9.0 - 9.5
Gallup B	4598	4554	Sd	O/G	6.6	8.8 - 9.0
Gallup C	4736	4650	Sd	O/G	6.6	8.8 - 9.0
Target	5161	4783	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	5100	surf	4781	surface
4-1/2"	6-1/8"	11.6	P-110	BTC	4822	10910	4698	4733	4822

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 <sup>1</sup>	✓	✓	✓
	Cementing	✓	✓	✓
Burst	Pressure test	✓ <sup>2</sup>	✓ <sup>2</sup>	✓
	Gas kick		✓ <sup>3</sup>	
	Fracture at shoe, 1/3 BHP at surface		✓ <sup>4</sup>	
	Injection down casing			✓ <sup>5</sup>
Axial	Dynamic load on casing coupling <sup>6</sup>	✓	✓	✓
Axial	Overpull <sup>7</sup>	✓	✓	✓

## Note #

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

## Casing Design Factors

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

## Cement Design

## 9-5/8" Surface Casing

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

## 7" Intermediate Casing

	Lead	Tail
	BJ Services	BJ Services
Type	III	Poz/G
Planned top	Surface	3615-ft
Density (ppg)	12.30	13.50
Yield (cf/sx)	2.34	1.50
Mix water (gal/sx)	13.26	7.20
Volume (sx)	350	238
Volume (bbls)	146	63
Volume (cu.ft.)	819	355
Excess %	55	55





Rev 0

4-1/2" Production Liner

	BJ Services
Type	Poz/G
Planned top	4822-ft
Density (ppg)	13.3
Yield (cf/sx)	1.56
Mix water (gal/sx)	7.71
Volume (sx)	511
Volume (bbls)	142
Volume (cu.ft)	799
Excess %	40

**Wellhead & Pressure Control**

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

A PVT mud monitoring system and a trip tank will be rigged up and operational for all hole intervals. An electronic geolograph will be employed to monitor and record drilling data (ROP, WOB, SPM, Pressure, RPM and torque).

**Mud Program**

Surface hole will be drilled with a fresh water, native mud system. In intermediate hole, a low weight 7% KCl LSND drilling fluid will be used, with KCl providing chemical stability for the young shales and clays present in the interval. In production hole a LSND system with polymer and lubricant additives is programmed. Sufficient drill water and mud additives will be on hand to maintain adequate pit volumes and maintain well control.

Hole Section	Fluid type	Interval (MD)	Density (ppg)	Funnel Viscosity	Yield Point	Fluid Loss (cc/30 min)
Surface	Fresh water spud mud	0 – 350	8.4 – 8.8	32 – 44	2 – 12	NC
Intermediate	7% KCl Low solids, non-dispersed	350 – 5100	9.0 – 9.5	38 – 45	8 – 14	<20
Production	Low solids, non-dispersed	5100 – 10910	8.8 – 9.2	34 – 38	6 – 8	6 – 8

**Cores, tests and logs**

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

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

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

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

**Cuttings and drilling fluids management**

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

**Completion**

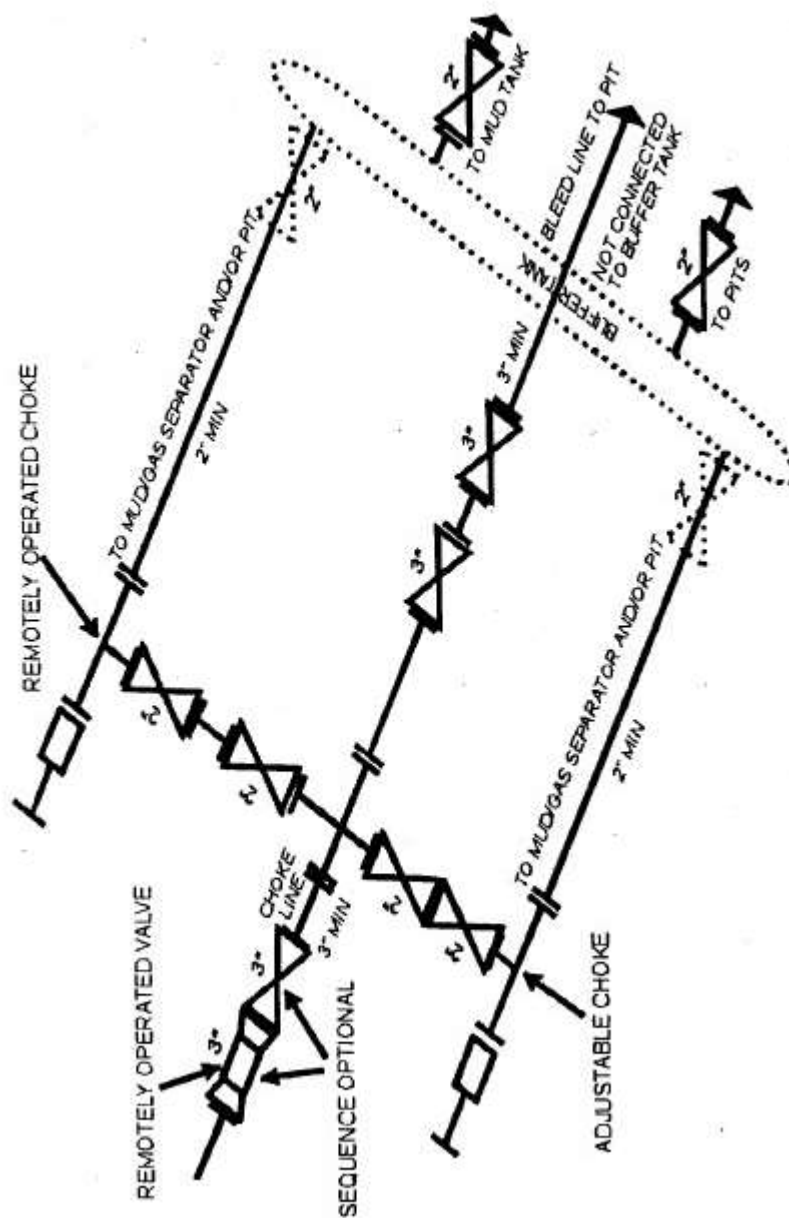
It is envisioned that this well will be completed with a multi-stage sand frac, using the plug and perf technique. After drilling out the plugs, the current plan is to install a 2-7/8" plunger-assisted gas lift tubing string. The stimulation and completion plan will be sundried at a later date.





## Choke Manifold

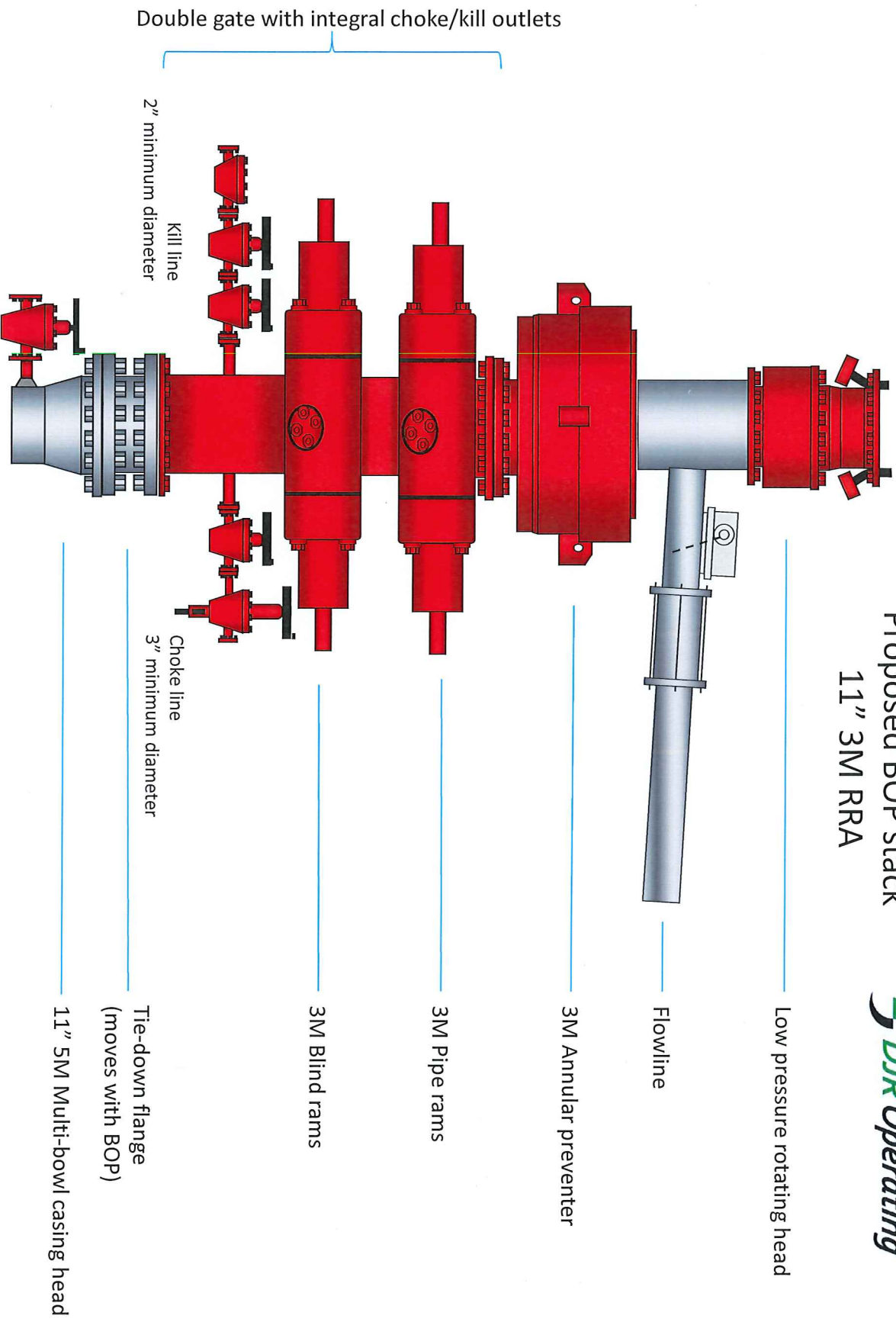
Actual system to conform with Onshore Order 2







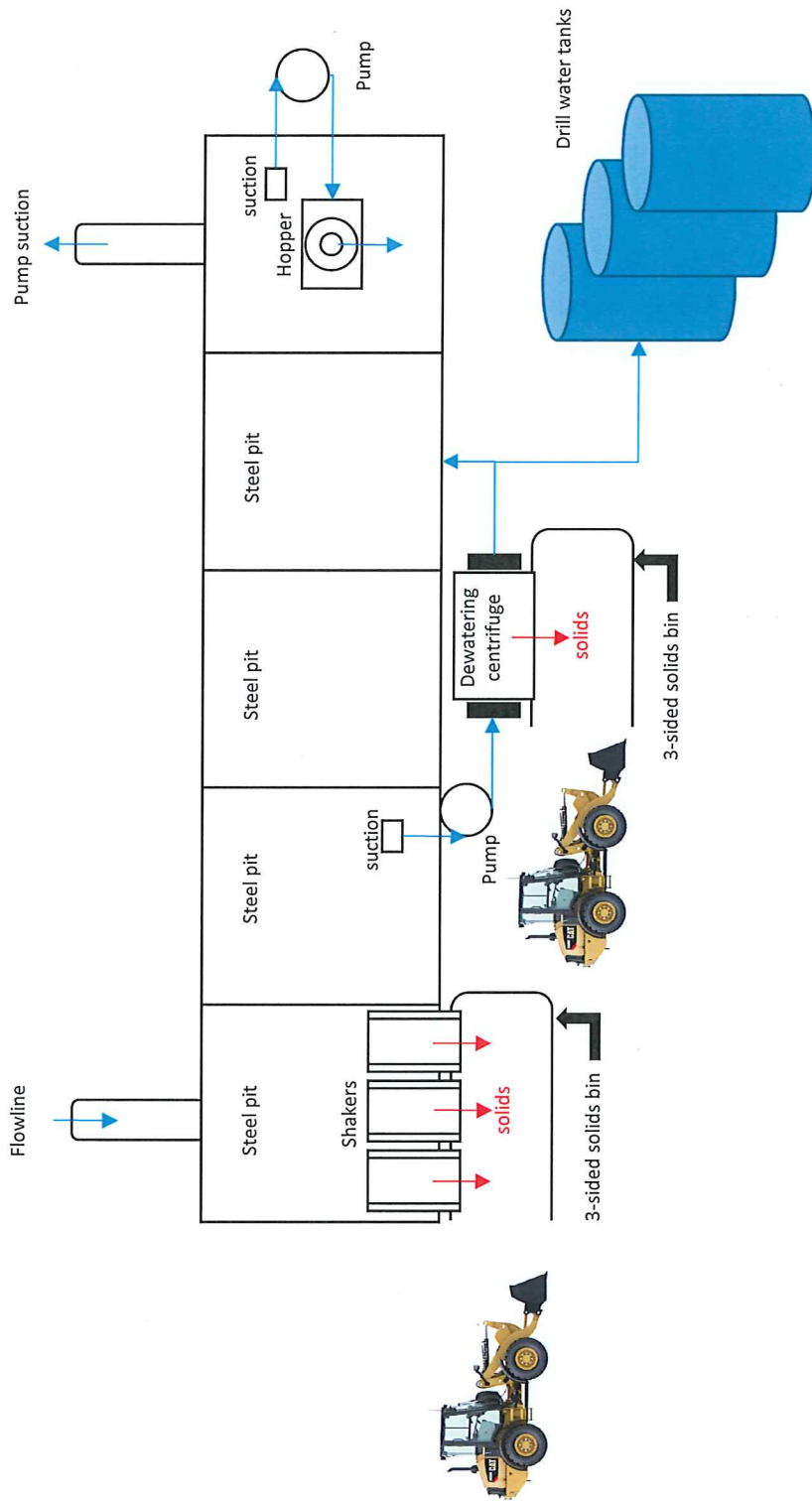
## Proposed BOP stack 11" 3M RRA







# Closed Loop Mud System







Company: DJR Operating  
Project: Bettonnie Tsosie Unit  
Site: E03 2208 Pad  
Well: # 715H  
Wellbore: Original drilling  
Design: APD

PROJECT DETAILS: Bettonnie Tsosie 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: # 715H

GL 6870' & RKB 14' @ 6884ft

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0	0	1881751.64	2769430.84	36.17147600	-107.67632900

Plan: APD (# 715H/Original drilling)

Created By: Janie Collins Date: 12:27, May 12 2021

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
715H heel	4783	-202	381	1881549.94	2769811.85	36.17092020	-107.67503920
715H toe	4733	-4292	4421	1877466.66	2773858.64	36.15968410	-107.66135270

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VFace	Target
0	0.00	0.00	0	0	0	0.00	0.00	0	
375	0.00	0.00	375	0	0	0.00	0.00	0	
575	4.00	340.62	575	7	-2	2.00	340.62	-6	
4115	4.00	340.62	4107	239	-84	0.00	0.00	-227	
5161	90.50	135.35	4783	-202	381	9.00	154.66	414	715H heel
10910	90.50	135.35	4733	-4292	4421	0.00	0.00	6162	715H toe



Azimuths to True North  
Magnetic North: 8

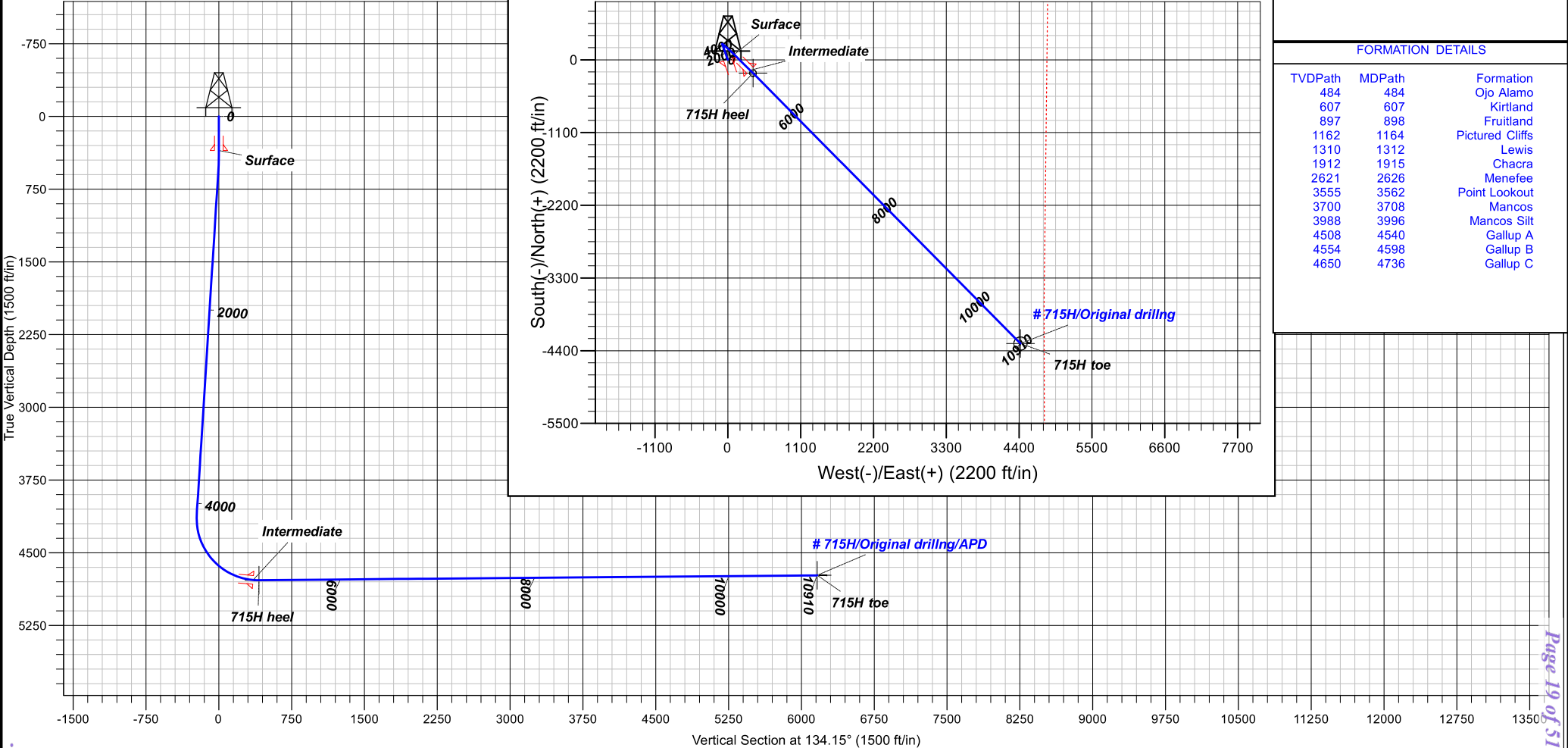
Magnetic Field  
Strength: 49183  
Dip Angle: 62.63  
Date: 3/11/2021  
Model: HDGM2021\_FLE

CASING DETAILS

TVD	MD	Name
350	350	Surface
4781	5100	Intermediate

FORMATION DETAILS

TVDPATH	MDPATH	FORMATION
484	484	Ojo Alamo
607	607	Kirtland
897	898	Fruitland
1162	1164	Pictured Cliffs
1310	1312	Lewis
1912	1915	Chacra
2621	2626	Menefee
3555	3562	Point Lookout
3700	3708	Mancos
3988	3996	Mancos Silt
4508	4540	Gallup A
4554	4598	Gallup B
4650	4736	Gallup C







## **DJR Operating**

**Betonneie Tsosie Unit**

**E03 2208 Pad**

**# 715H - Slot 4**

**Original drilling**

**Plan: APD**

## **Standard Planning Report**

**12 May, 2021**







**Lonestar Consulting, LLC**  
Planning Report



<b>Database:</b>	Grand Junction	<b>Local Co-ordinate Reference:</b>	Well # 715H - Slot 4
<b>Company:</b>	DJR Operating	<b>TVD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Project:</b>	Betonne Tsoie Unit	<b>MD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Site:</b>	E03 2208 Pad	<b>North Reference:</b>	True
<b>Well:</b>	# 715H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original drilling		
<b>Design:</b>	APD		

<b>Project</b>	Betonne Tsoie Unit		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	New Mexico Western Zone		

Site	E03 2208 Pad				
Site Position:		Northing:	1,881,698.81 usft	Latitude:	36.1713310
From:	Lat/Long	Easting:	2,769,402.00 usft	Longitude:	-107.6764270
Position Uncertainty:	0 ft	Slot Radius:	13.20 in	Grid Convergence:	0.09

Well	# 715H - Slot 4					
Well Position	+N/-S	53 ft	Northing:	1,881,751.64 usft	Latitude:	36.1714760
	+E/-W	29 ft	Easting:	2,769,430.84 usft	Longitude:	-107.6763290
Position Uncertainty		0 ft	Wellhead Elevation:		Ground Level:	6870

<b>Wellbore</b>	Original drilling				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	HDGM2021_FILE	3/11/2021	8.62	62.68	49,183.70000000

<b>Design</b>	APD			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0	0	0	134.15

<b>Plan Survey Tool Program</b>	<b>Date</b>	5/12/2021		
<b>Depth From (ft)</b>	<b>Depth To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0	10,909	APD (Original drilling)	MWD+IGRF
				OWSG MWD + IGRF or WMM

<b>Plan Sections</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	<b>TFO (°)</b>	<b>Target</b>
0	0.00	0.00	0	0	0	0.00	0.00	0.00	0.00	
375	0.00	0.00	375	0	0	0.00	0.00	0.00	0.00	
575	4.00	340.62	575	7	-2	2.00	2.00	0.00	340.62	
4115	4.00	340.62	4107	239	-84	0.00	0.00	0.00	0.00	
5161	90.50	135.35	4783	-202	381	9.00	8.27	14.80	154.66	715H heel
10,910	90.50	135.35	4733	-4292	4421	0.00	0.00	0.00	0.00	715H toe





## Lonestar Consulting, LLC

## Planning Report



<b>Database:</b>	Grand Junction	<b>Local Co-ordinate Reference:</b>	Well # 715H - Slot 4
<b>Company:</b>	DJR Operating	<b>TVD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Project:</b>	Betonneie Tsosie Unit	<b>MD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Site:</b>	E03 2208 Pad	<b>North Reference:</b>	True
<b>Well:</b>	# 715H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original drilling		
<b>Design:</b>	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
375	0.00	0.00	375	0	0	0	0.00	0.00	0.00
400	0.50	340.62	400	0	0	0	2.00	2.00	0.00
500	2.50	340.62	500	3	-1	-2	2.00	2.00	0.00
575	4.00	340.62	575	7	-2	-6	2.00	2.00	0.00
600	4.00	340.62	600	8	-3	-8	0.00	0.00	0.00
700	4.00	340.62	700	15	-5	-14	0.00	0.00	0.00
800	4.00	340.62	799	21	-8	-20	0.00	0.00	0.00
900	4.00	340.62	899	28	-10	-27	0.00	0.00	0.00
1000	4.00	340.62	999	35	-12	-33	0.00	0.00	0.00
1100	4.00	340.62	1099	41	-14	-39	0.00	0.00	0.00
1200	4.00	340.62	1198	48	-17	-45	0.00	0.00	0.00
1300	4.00	340.62	1298	54	-19	-51	0.00	0.00	0.00
1400	4.00	340.62	1398	61	-21	-58	0.00	0.00	0.00
1500	4.00	340.62	1498	67	-24	-64	0.00	0.00	0.00
1600	4.00	340.62	1597	74	-26	-70	0.00	0.00	0.00
1700	4.00	340.62	1697	81	-28	-76	0.00	0.00	0.00
1800	4.00	340.62	1797	87	-31	-83	0.00	0.00	0.00
1900	4.00	340.62	1897	94	-33	-89	0.00	0.00	0.00
2000	4.00	340.62	1996	100	-35	-95	0.00	0.00	0.00
2100	4.00	340.62	2096	107	-38	-101	0.00	0.00	0.00
2200	4.00	340.62	2196	113	-40	-108	0.00	0.00	0.00
2300	4.00	340.62	2296	120	-42	-114	0.00	0.00	0.00
2400	4.00	340.62	2395	127	-45	-120	0.00	0.00	0.00
2500	4.00	340.62	2495	133	-47	-126	0.00	0.00	0.00
2600	4.00	340.62	2595	140	-49	-133	0.00	0.00	0.00
2700	4.00	340.62	2695	146	-51	-139	0.00	0.00	0.00
2800	4.00	340.62	2794	153	-54	-145	0.00	0.00	0.00
2900	4.00	340.62	2894	159	-56	-151	0.00	0.00	0.00
3000	4.00	340.62	2994	166	-58	-158	0.00	0.00	0.00
3100	4.00	340.62	3094	173	-61	-164	0.00	0.00	0.00
3200	4.00	340.62	3193	179	-63	-170	0.00	0.00	0.00
3300	4.00	340.62	3293	186	-65	-176	0.00	0.00	0.00
3400	4.00	340.62	3393	192	-68	-182	0.00	0.00	0.00
3500	4.00	340.62	3493	199	-70	-189	0.00	0.00	0.00
3600	4.00	340.62	3592	205	-72	-195	0.00	0.00	0.00
3700	4.00	340.62	3692	212	-75	-201	0.00	0.00	0.00
3800	4.00	340.62	3792	219	-77	-207	0.00	0.00	0.00
3900	4.00	340.62	3892	225	-79	-214	0.00	0.00	0.00
4000	4.00	340.62	3992	232	-82	-220	0.00	0.00	0.00
4100	4.00	340.62	4091	238	-84	-226	0.00	0.00	0.00
4115	4.00	340.62	4107	239	-84	-227	0.00	0.00	0.00
4200	4.35	112.27	4191	241	-82	-227	9.00	0.42	155.51
4300	13.12	127.98	4290	232	-70	-212	9.00	8.76	15.71
4400	22.07	131.11	4385	213	-47	-182	9.00	8.95	3.14
4500	31.05	132.49	4474	183	-13	-137	9.00	8.98	1.38
4600	40.04	133.30	4556	144	29	-79	9.00	8.99	0.81
4700	49.03	133.85	4627	95	80	-9	9.00	8.99	0.55
4800	58.02	134.27	4686	39	138	71	9.00	8.99	0.42
4900	67.02	134.61	4732	-23	201	160	9.00	8.99	0.34
5000	76.01	134.91	4764	-89	268	255	9.00	9.00	0.30





## Lonestar Consulting, LLC

## Planning Report



<b>Database:</b>	Grand Junction	<b>Local Co-ordinate Reference:</b>	Well # 715H - Slot 4
<b>Company:</b>	DJR Operating	<b>TVD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Project:</b>	Betonnies Tsois Unit	<b>MD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Site:</b>	E03 2208 Pad	<b>North Reference:</b>	True
<b>Well:</b>	# 715H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original drilling		
<b>Design:</b>	APD		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5100	85.01	135.19	4781	-159	338	353	9.00	9.00	0.28	
5161	90.50	135.35	4783	-202	381	414	9.00	9.00	0.27	
5200	90.50	135.35	4783	-230	408	453	0.00	0.00	0.00	
5300	90.50	135.35	4782	-301	478	553	0.00	0.00	0.00	
5400	90.50	135.35	4781	-372	549	653	0.00	0.00	0.00	
5500	90.50	135.35	4780	-443	619	753	0.00	0.00	0.00	
5600	90.50	135.35	4779	-515	689	853	0.00	0.00	0.00	
5700	90.50	135.35	4778	-586	759	953	0.00	0.00	0.00	
5800	90.50	135.35	4777	-657	830	1053	0.00	0.00	0.00	
5900	90.50	135.35	4777	-728	900	1153	0.00	0.00	0.00	
6000	90.50	135.35	4776	-799	970	1253	0.00	0.00	0.00	
6100	90.50	135.35	4775	-870	1041	1353	0.00	0.00	0.00	
6200	90.50	135.35	4774	-941	1111	1453	0.00	0.00	0.00	
6300	90.50	135.35	4773	-1013	1181	1553	0.00	0.00	0.00	
6400	90.50	135.35	4772	-1084	1251	1653	0.00	0.00	0.00	
6500	90.50	135.35	4771	-1155	1322	1753	0.00	0.00	0.00	
6600	90.50	135.35	4770	-1226	1392	1853	0.00	0.00	0.00	
6700	90.50	135.35	4770	-1297	1462	1953	0.00	0.00	0.00	
6800	90.50	135.35	4769	-1368	1532	2053	0.00	0.00	0.00	
6900	90.50	135.35	4768	-1439	1603	2153	0.00	0.00	0.00	
7000	90.50	135.35	4767	-1511	1673	2253	0.00	0.00	0.00	
7100	90.50	135.35	4766	-1582	1743	2353	0.00	0.00	0.00	
7200	90.50	135.35	4765	-1653	1814	2453	0.00	0.00	0.00	
7300	90.50	135.35	4764	-1724	1884	2552	0.00	0.00	0.00	
7400	90.50	135.35	4764	-1795	1954	2652	0.00	0.00	0.00	
7500	90.50	135.35	4763	-1866	2024	2752	0.00	0.00	0.00	
7600	90.50	135.35	4762	-1937	2095	2852	0.00	0.00	0.00	
7700	90.50	135.35	4761	-2009	2165	2952	0.00	0.00	0.00	
7800	90.50	135.35	4760	-2080	2235	3052	0.00	0.00	0.00	
7900	90.50	135.35	4759	-2151	2306	3152	0.00	0.00	0.00	
8000	90.50	135.35	4758	-2222	2376	3252	0.00	0.00	0.00	
8100	90.50	135.35	4757	-2293	2446	3352	0.00	0.00	0.00	
8200	90.50	135.35	4757	-2364	2516	3452	0.00	0.00	0.00	
8300	90.50	135.35	4756	-2435	2587	3552	0.00	0.00	0.00	
8400	90.50	135.35	4755	-2506	2657	3652	0.00	0.00	0.00	
8500	90.50	135.35	4754	-2578	2727	3752	0.00	0.00	0.00	
8600	90.50	135.35	4753	-2649	2797	3852	0.00	0.00	0.00	
8700	90.50	135.35	4752	-2720	2868	3952	0.00	0.00	0.00	
8800	90.50	135.35	4751	-2791	2938	4052	0.00	0.00	0.00	
8900	90.50	135.35	4750	-2862	3008	4152	0.00	0.00	0.00	
9000	90.50	135.35	4750	-2933	3079	4252	0.00	0.00	0.00	
9100	90.50	135.35	4749	-3004	3149	4352	0.00	0.00	0.00	
9200	90.50	135.35	4748	-3076	3219	4452	0.00	0.00	0.00	
9300	90.50	135.35	4747	-3147	3289	4552	0.00	0.00	0.00	
9400	90.50	135.35	4746	-3218	3360	4652	0.00	0.00	0.00	
9500	90.50	135.35	4745	-3289	3430	4752	0.00	0.00	0.00	
9600	90.50	135.35	4744	-3360	3500	4852	0.00	0.00	0.00	
9700	90.50	135.35	4744	-3431	3570	4952	0.00	0.00	0.00	
9800	90.50	135.35	4743	-3502	3641	5052	0.00	0.00	0.00	
9900	90.50	135.35	4742	-3574	3711	5152	0.00	0.00	0.00	
10,000	90.50	135.35	4741	-3645	3781	5252	0.00	0.00	0.00	
10,100	90.50	135.35	4740	-3716	3852	5352	0.00	0.00	0.00	
10,200	90.50	135.35	4739	-3787	3922	5452	0.00	0.00	0.00	
10,300	90.50	135.35	4738	-3858	3992	5552	0.00	0.00	0.00	





**Lonestar Consulting, LLC**  
Planning Report



<b>Database:</b>	Grand Junction	<b>Local Co-ordinate Reference:</b>	Well # 715H - Slot 4
<b>Company:</b>	DJR Operating	<b>TVD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Project:</b>	Betonnies Tsosie Unit	<b>MD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Site:</b>	E03 2208 Pad	<b>North Reference:</b>	True
<b>Well:</b>	# 715H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original drilling		
<b>Design:</b>	APD		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,400	90.50	135.35	4737	-3929	4062	5652	0.00	0.00	0.00	
10,500	90.50	135.35	4737	-4000	4133	5752	0.00	0.00	0.00	
10,600	90.50	135.35	4736	-4072	4203	5852	0.00	0.00	0.00	
10,700	90.50	135.35	4735	-4143	4273	5952	0.00	0.00	0.00	
10,800	90.50	135.35	4734	-4214	4343	6052	0.00	0.00	0.00	
10,900	90.50	135.35	4733	-4285	4414	6152	0.00	0.00	0.00	
10,910	90.50	135.35	4733	-4292	4421	6162	0.00	0.00	0.00	

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
715H toe - plan hits target center - Circle (radius 100)	0.00	0.00	4733	-4292	4421	1,877,466.67	2,773,858.64	36.15968410	-107.66135270
715H heel - plan hits target center - Circle (radius 50)	0.00	0.00	4783	-202	381	1,881,549.94	2,769,811.85	36.17092020	-107.67503920

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
350	350	Surface	9.63	12.25	
5100	4781	Intermediate	7.00	8.75	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
484	484	Ojo Alamo		0.00	0.00	
607	607	Kirtland		0.00	0.00	
898	897	Fruitland		0.00	0.00	
1164	1162	Pictured Cliffs		0.00	0.00	
1312	1310	Lewis		0.00	0.00	
1915	1912	Chacra		0.00	0.00	
2626	2621	Menefee		0.00	0.00	
3562	3555	Point Lookout		0.00	0.00	
3708	3700	Mancos		0.00	0.00	
3996	3988	Mancos Silt		0.00	0.00	
4540	4508	Gallup A		0.00	0.00	
4598	4554	Gallup B		0.00	0.00	
4736	4650	Gallup C		0.00	0.00	





## **DJR Operating**

**Betonnies Tsosie Unit**

**E03 2208 Pad**

**# 715H**

**Original drilling**

**APD**

## **Anticollision Report**

**19 May, 2021**







# Lonestar Consulting, LLC

## Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well # 715H - Slot 4
<b>Project:</b>	Betonne Tsois Unit	<b>TVD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Reference Site:</b>	E03 2208 Pad	<b>MD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	# 715H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD	<b>Offset TVD Reference:</b>	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 10,000ft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	5/19/2021		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0	10,909	APD (Original drilling)	MWD+IGRF	OWSG MWD + IGRF or WMM	

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
E03 2208 Pad						
# 602H - Original drilling - APD Rev 1	550	551	19	16	5.428	CC
# 602H - Original drilling - APD Rev 1	600	601	19	16	4.991	ES
# 602H - Original drilling - APD Rev 1	700	701	21	16	4.542	SF
# 603H - Original drilling - APD	375	375	60	58	26.400	CC
# 603H - Original drilling - APD	400	400	60	58	24.506	ES
# 603H - Original drilling - APD	1600	1600	101	89	8.674	SF
# 714H - Original drilling - APD	534	533	18	15	5.396	CC
# 714H - Original drilling - APD	575	574	19	15	5.040	ES
# 714H - Original drilling - APD	9800	9892	1233	978	4.837	SF
# 716H - Original drilling - APD	300	300	40	38	22.960	CC
# 716H - Original drilling - APD	375	375	40	38	17.585	ES
# 716H - Original drilling - APD	700	697	59	55	12.849	SF

Offset Design: E03 2208 Pad - # 602H - 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		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	-150.86	-17	-10	20					
100	100	100	100	0	0	-150.86	-17	-10	20	20	0.31	64.888		
200	200	200	200	1	1	-150.86	-17	-10	20	19	1.03	19.512		
300	300	300	300	1	1	-150.86	-17	-10	20	18	1.74	11.482		
375	375	375	375	1	1	-150.86	-17	-10	20	18	2.28	8.774		
400	400	400	400	1	1	-131.80	-17	-10	20	18	2.46	8.122		
500	500	501	501	2	2	-139.83	-16	-8	19	16	3.17	6.103		
550	550	551	551	2	2	-148.11	-14	-6	19	16	3.53	5.428 CC		
575	575	576	576	2	2	-153.34	-12	-5	19	16	3.71	5.186		
600	600	601	601	2	2	-159.07	-11	-3	19	16	3.89	4.991 ES		
700	700	701	700	2	2	175.27	-4	3	21	16	4.63	4.542 SF		
800	799	800	799	3	3	148.78	5	13	26	21	5.39	4.833		
900	899	899	896	3	3	127.99	16	24	36	30	6.14	5.854		
1000	999	997	992	3	4	113.97	30	38	51	44	6.88	7.356		
1100	1099	1093	1085	4	4	104.65	46	54	69	62	7.60	9.134		
1200	1198	1188	1177	4	5	98.22	63	71	92	84	8.30	11.076		





# Lonestar Consulting, LLC

## Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well # 715H - Slot 4
<b>Project:</b>	Betonnies Tsois Unit	<b>TVD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Reference Site:</b>	E03 2208 Pad	<b>MD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	# 715H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> E03 2208 Pad - # 602H - Original drilling - APD Rev 1													<b>Offset Site Error:</b>	0 ft
<b>Survey Program:</b> 0-MWD+IGRF													<b>Offset Well Error:</b>	0 ft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>			<b>Offset Wellbore Centre</b>		<b>Distance</b>				<b>Warning</b>	
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>	<b>Highside Toolface (°)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>		
1300	1298	1282	1267	5	5	93.59	83	91	118	109	9.02	13.059		
1400	1398	1379	1359	5	6	90.48	103	111	144	135	9.76	14.798		
1500	1498	1475	1451	5	6	88.33	124	131	171	161	10.51	16.308		
1600	1597	1571	1543	6	7	86.77	144	152	199	187	11.27	17.623		
1700	1697	1667	1634	6	7	85.59	164	172	226	214	12.03	18.776		
1800	1797	1763	1726	6	8	84.66	184	192	253	240	12.79	19.793		
1900	1897	1859	1818	7	9	83.91	205	212	281	267	13.56	20.696		
2000	1996	1955	1910	7	9	83.29	225	233	308	294	14.32	21.502		
2100	2096	2051	2001	8	10	82.78	245	253	335	320	15.09	22.225		
2200	2196	2148	2093	8	11	82.34	265	273	363	347	15.86	22.878		
2300	2296	2244	2185	8	11	81.96	286	293	390	374	16.63	23.470		
2400	2395	2340	2277	9	12	81.64	306	314	418	400	17.41	24.009		
2500	2495	2436	2368	9	12	81.35	326	334	445	427	18.18	24.501		
2600	2595	2532	2460	9	13	81.10	346	354	473	454	18.95	24.953		
2700	2695	2628	2552	10	14	80.87	367	375	500	481	19.73	25.369		
2800	2794	2724	2644	10	14	80.67	387	395	528	507	20.50	25.753		
2900	2894	2820	2735	11	15	80.49	407	415	555	534	21.28	26.109		
3000	2994	2916	2827	11	16	80.33	427	435	583	561	22.05	26.439		
3100	3094	3013	2919	11	16	80.18	448	456	611	588	22.83	26.747		
3200	3193	3109	3011	12	17	80.04	468	476	638	615	23.60	27.034		
3300	3293	3205	3102	12	18	79.92	488	496	666	641	24.38	27.302		
3400	3393	3301	3194	13	18	79.80	508	516	693	668	25.16	27.554		
3500	3493	3397	3286	13	19	79.69	529	537	721	695	25.94	27.790		
3600	3592	3493	3378	13	20	79.59	549	557	748	722	26.71	28.013		
3700	3692	3589	3469	14	20	79.50	569	577	776	748	27.49	28.222		
3800	3792	3685	3561	14	21	79.42	589	597	803	775	28.27	28.420		
3900	3892	3782	3653	14	21	79.34	610	618	831	802	29.05	28.607		
4000	3992	3878	3745	15	22	79.26	630	638	859	829	29.83	28.784		
4100	4091	3974	3836	15	23	79.19	650	658	886	856	30.61	28.952		
4115	4107	3989	3851	15	23	79.18	653	661	890	860	30.73	28.977		
4150	4141	4022	3882	15	23	31.41	660	668	900	869	30.99	29.035		
4200	4191	4070	3928	16	23	-50.79	670	679	912	881	31.32	29.126		
4250	4241	4118	3974	16	24	-62.03	681	689	924	892	31.62	29.221		
4300	4290	4165	4019	16	24	-65.69	691	699	935	903	31.88	29.316		
4350	4338	4212	4063	16	24	-67.65	700	708	944	912	32.11	29.409		
4400	4385	4257	4107	16	25	-69.06	710	718	953	921	32.31	29.500		
4450	4431	4301	4148	16	25	-70.27	719	727	962	929	32.50	29.586		
4500	4474	4343	4189	16	25	-71.40	728	736	970	937	32.68	29.664		
4550	4516	4388	4232	16	25	-72.72	738	745	977	944	32.91	29.685		
4600	4556	4429	4271	16	26	-74.03	749	751	984	951	33.14	29.706		
4650	4593	4462	4302	16	26	-75.08	759	755	992	959	33.36	29.745		
4700	4627	4487	4326	17	26	-75.78	768	757	1001	967	33.59	29.795		
4750	4658	4507	4344	17	26	-76.08	775	758	1010	976	33.85	29.847		
4800	4686	4521	4357	17	26	-75.97	781	758	1021	987	34.17	29.890		
4850	4711	4531	4366	17	26	-75.48	784	758	1033	999	34.54	29.919		
4900	4732	4536	4371	18	26	-74.63	787	758	1047	1012	34.99	29.927		
4950	4750	4538	4373	18	26	-73.45	787	759	1062	1026	35.50	29.914		
5000	4764	4538	4372	19	26	-71.98	787	759	1078	1042	36.08	29.880		
5050	4774	4535	4370	19	26	-70.29	786	758	1095	1058	36.72	29.829		
5100	4781	4530	4365	20	26	-68.40	784	758	1113	1076	37.40	29.765		
5150	4783	4523	4359	21	26	-66.36	781	758	1132	1094	38.11	29.694		
5161	4783	4522	4358	21	26	-65.90	781	758	1136	1098	38.27	29.679		





## Lonestar Consulting, LLC

## Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well # 715H - Slot 4
<b>Project:</b>	Betonnies Tsois Unit	<b>TVD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Reference Site:</b>	E03 2208 Pad	<b>MD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	# 715H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: E03 2208 Pad - # 602H - Original drilling - APD Rev 1													Offset Site Error:	0 ft	
Survey Program:		0-MWD+IGRF		Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned:				Offset Well Error:	0 ft
Measured Depth (ft)	Reference Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning		
5200	4783	4516	4352	21	26	-65.59	779	758	1151	1112	38.85	29.629			
5300	4782	4500	4337	23	26	-64.77	773	757	1195	1155	40.34	29.624			
5400	4781	4500	4337	25	26	-64.77	773	757	1245	1203	41.97	29.676			
5500	4780	4481	4320	26	26	-63.78	766	756	1301	1258	43.26	30.076			
5600	4779	4473	4312	28	26	-63.32	763	756	1362	1317	44.56	30.567			
5700	4778	4450	4291	30	26	-62.14	756	754	1427	1382	45.54	31.336			
5800	4777	4450	4291	32	26	-62.14	756	754	1496	1449	46.67	32.051			
5900	4777	4450	4291	35	26	-62.14	756	754	1568	1520	47.67	32.891			
6000	4776	4450	4291	37	26	-62.14	756	754	1643	1594	48.55	33.838			
6100	4775	4450	4291	39	26	-62.14	756	754	1720	1671	49.33	34.877			
6200	4774	4450	4291	41	26	-62.14	756	754	1800	1750	50.01	35.994			
6300	4773	4450	4291	43	26	-62.14	756	754	1882	1831	50.62	37.179			
6400	4772	4430	4272	46	26	-61.10	749	751	1965	1914	50.92	38.592			
6500	4771	4427	4269	48	26	-60.92	748	751	2050	1998	51.35	39.915			
6600	4770	4424	4266	50	26	-60.76	748	750	2136	2084	51.74	41.280			
6700	4770	4421	4263	53	26	-60.61	747	750	2223	2171	52.08	42.683			
6800	4769	4400	4243	55	26	-59.53	741	747	2311	2259	52.17	44.305			
6900	4768	4400	4243	57	26	-59.53	741	747	2400	2348	52.47	45.746			
7000	4767	4400	4243	60	26	-59.53	741	747	2490	2438	52.75	47.213			
7100	4766	4400	4243	62	26	-59.53	741	747	2581	2528	52.99	48.703			
7200	4765	4400	4243	65	26	-59.53	741	747	2672	2619	53.22	50.213			
7300	4764	4400	4243	67	26	-59.53	741	747	2764	2711	53.42	51.742			
7400	4764	4400	4243	69	26	-59.53	741	747	2857	2803	53.61	53.287			
7500	4763	4400	4243	72	26	-59.53	741	747	2950	2896	53.78	54.846			
7600	4762	4400	4243	74	26	-59.53	741	747	3043	2989	53.94	56.418			
7700	4761	4400	4243	77	26	-59.53	741	747	3137	3083	54.08	58.002			
7800	4760	4400	4243	79	26	-59.53	741	747	3231	3177	54.21	59.595			
7900	4759	4400	4243	82	26	-59.53	741	747	3325	3271	54.34	61.198			
8000	4758	4400	4243	84	26	-59.53	741	747	3420	3366	54.45	62.809			
8100	4757	4400	4243	86	26	-59.53	741	747	3515	3461	54.56	64.427			
8200	4757	4400	4243	89	26	-59.53	741	747	3611	3556	54.67	66.051			
8300	4756	4400	4243	91	26	-59.53	741	747	3706	3652	54.76	67.681			
8400	4755	4400	4243	94	26	-59.53	741	747	3802	3747	54.85	69.316			
8500	4754	4400	4243	96	26	-59.53	741	747	3898	3843	54.94	70.956			
8600	4753	4400	4243	99	26	-59.53	741	747	3994	3939	55.02	72.599			
8700	4752	4400	4243	101	26	-59.53	741	747	4091	4036	55.10	74.247			
8800	4751	4400	4243	104	26	-59.53	741	747	4187	4132	55.17	75.897			
8900	4750	4400	4243	106	26	-59.53	741	747	4284	4229	55.24	77.550			
9000	4750	4400	4243	108	26	-59.53	741	747	4381	4326	55.31	79.205			
9100	4749	4400	4243	111	26	-59.53	741	747	4478	4423	55.38	80.862			
9200	4748	4400	4243	113	26	-59.53	741	747	4575	4520	55.44	82.520			
9300	4747	4400	4243	116	26	-59.53	741	747	4673	4617	55.51	84.180			
9400	4746	4400	4243	118	26	-59.53	741	747	4770	4714	55.57	85.841			
9500	4745	4400	4243	121	26	-59.53	741	747	4867	4812	55.63	87.503			
9600	4744	4400	4243	123	26	-59.53	741	747	4965	4909	55.68	89.165			
9700	4744	4400	4243	126	26	-59.53	741	747	5063	5007	55.74	90.828			
9800	4743	4400	4243	128	26	-59.53	741	747	5161	5105	55.80	92.491			
9900	4742	4400	4243	131	26	-59.53	741	747	5258	5203	55.85	94.153			
10,000	4741	4400	4243	133	26	-59.53	741	747	5356	5300	55.90	95.815			
10,100	4740	4400	4243	135	26	-59.53	741	747	5454	5398	55.95	97.477			
10,200	4739	4380	4224	138	25	-58.48	736	743	5552	5496	55.77	99.547			
10,300	4738	4379	4223	140	25	-58.45	736	743	5650	5594	55.82	101.224			





**Lonestar Consulting, LLC**  
Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well # 715H - Slot 4
<b>Project:</b>	Betonnies Tsosie Unit	<b>TVD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Reference Site:</b>	E03 2208 Pad	<b>MD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	# 715H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> E03 2208 Pad - # 602H - Original drilling - APD Rev 1													<b>Offset Site Error:</b>	0 ft
<b>Survey Program:</b> 0-MWD+IGRF													<b>Offset Well Error:</b>	0 ft
<b>Reference</b>	<b>Offset</b>	<b>Semi Major Axis</b>		<b>Offset Wellbore Centre</b>		<b>Rule Assigned:</b>			<b>Distance</b>			<b>Warning</b>		
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>	<b>Highside Toolface (°)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>		
10,400	4737	4379	4223	143	25	-58.42	736	743	5748	5693	55.86	102.900		
10,500	4737	4378	4222	145	25	-58.40	736	743	5847	5791	55.91	104.575		
10,600	4736	4378	4222	148	25	-58.38	736	743	5945	5889	55.95	106.248		
10,700	4735	4377	4222	150	25	-58.36	736	743	6043	5987	56.00	107.920		
10,800	4734	4377	4221	153	25	-58.33	735	743	6142	6086	56.04	109.591		
10,900	4733	4376	4221	155	25	-58.31	735	743	6240	6184	56.09	111.260		
10,910	4733	4376	4221	155	25	-58.31	735	743	6250	6192	57.91	107.931		





## Lonestar Consulting, LLC

## Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well # 715H - Slot 4
<b>Project:</b>	Betonnies Tsois Unit	<b>TVD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Reference Site:</b>	E03 2208 Pad	<b>MD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	# 715H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> E03 2208 Pad - # 603H - Original drilling - APD													<b>Offset Site Error:</b>	0 ft
<b>Survey Program:</b> 0-MWD+IGRF													<b>Offset Well Error:</b>	0 ft
<b>Reference</b>	<b>Offset</b>	<b>Semi Major Axis</b>	<b>Reference</b>	<b>Offset</b>	<b>Highside</b>	<b>Offset Wellbore Centre</b>	<b>Distance</b>	<b>Rule Assigned:</b>						
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>	<b>Toolface (°)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>	<b>Warning</b>	
0	0	0	0	0	0	-151.28	-53	-29	60					
100	100	100	100	0	0	-151.28	-53	-29	60	60	0.31	195.236		
200	200	200	200	1	1	-151.28	-53	-29	60	59	1.03	58.707		
300	300	300	300	1	1	-151.28	-53	-29	60	58	1.74	34.548		
375	375	375	375	1	1	-151.28	-53	-29	60	58	2.28	26.400 CC		
400	400	400	400	1	1	-131.97	-53	-29	60	58	2.46	24.506 ES		
500	500	501	501	2	2	-132.23	-51	-30	61	58	3.18	19.334		
575	575	576	576	2	2	-131.97	-49	-33	63	59	3.72	16.956		
600	600	601	601	2	2	-131.74	-47	-34	64	60	3.90	16.319		
700	700	702	702	2	2	-129.02	-41	-40	65	61	4.64	14.112		
800	799	802	801	3	3	-123.53	-32	-48	67	61	5.40	12.341		
900	899	902	900	3	3	-116.38	-21	-57	68	62	6.18	11.028		
1000	999	1002	998	3	4	-109.60	-10	-67	71	64	6.97	10.140		
1100	1099	1101	1097	4	4	-103.37	1	-77	74	66	7.76	9.549		
1200	1198	1201	1195	4	4	-97.75	12	-86	78	70	8.55	9.164		
1300	1298	1301	1294	5	5	-92.75	23	-96	83	74	9.34	8.921		
1400	1398	1400	1393	5	5	-88.33	34	-106	89	79	10.12	8.778		
1500	1498	1500	1491	5	6	-84.45	44	-115	95	84	10.89	8.703		
1600	1597	1600	1590	6	6	-81.04	55	-125	101	89	11.66	8.674 SF		
1700	1697	1699	1688	6	7	-78.04	66	-135	108	95	12.42	8.678		
1800	1797	1799	1787	6	7	-75.39	77	-144	115	102	13.18	8.703		
1900	1897	1898	1885	7	7	-73.05	88	-154	122	108	13.93	8.743		
2000	1996	1998	1984	7	8	-70.97	99	-164	129	114	14.69	8.793		
2100	2096	2098	2082	8	8	-69.12	110	-173	137	121	15.44	8.849		
2200	2196	2197	2181	8	9	-67.46	120	-183	144	128	16.19	8.908		
2300	2296	2297	2280	8	9	-65.96	131	-193	152	135	16.94	8.969		
2400	2395	2397	2378	9	10	-64.61	142	-203	160	142	17.68	9.031		
2500	2495	2496	2477	9	10	-63.39	153	-212	168	149	18.43	9.092		
2600	2595	2596	2575	9	11	-62.28	164	-222	176	156	19.18	9.152		
2700	2695	2695	2674	10	11	-61.26	175	-232	184	164	19.92	9.211		
2800	2794	2795	2772	10	11	-60.33	186	-241	192	171	20.67	9.269		
2900	2894	2895	2871	11	12	-59.47	197	-251	200	178	21.41	9.324		
3000	2994	2994	2970	11	12	-58.68	207	-261	208	186	22.16	9.378		
3100	3094	3094	3068	11	13	-57.96	218	-270	216	193	22.90	9.430		
3200	3193	3194	3167	12	13	-57.28	229	-280	224	201	23.65	9.480		
3300	3293	3293	3265	12	14	-56.65	240	-290	232	208	24.39	9.529		
3400	3393	3393	3364	13	14	-56.07	251	-299	241	216	25.14	9.575		
3500	3493	3492	3462	13	15	-55.52	262	-309	249	223	25.88	9.620		
3600	3592	3592	3561	13	15	-55.01	273	-319	257	231	26.63	9.663		
3700	3692	3692	3659	14	15	-54.53	284	-328	266	238	27.37	9.704		
3800	3792	3791	3758	14	16	-54.08	294	-338	274	246	28.12	9.744		
3900	3892	3891	3857	14	16	-53.66	305	-348	282	253	28.86	9.782		
4000	3992	3991	3955	15	17	-53.26	316	-357	291	261	29.61	9.819		
4100	4091	4090	4054	15	17	-52.88	327	-367	299	269	30.35	9.855		
4115	4107	4106	4069	15	17	-52.82	329	-369	300	270	30.47	9.860		
4150	4141	4140	4103	15	18	-101.31	332	-372	304	273	30.72	9.901		
4200	4191	4189	4152	16	18	175.91	338	-377	313	281	31.05	10.064		
4250	4241	4238	4199	16	18	164.54	343	-381	324	293	31.35	10.344		
4300	4290	4283	4244	16	18	161.09	348	-386	340	308	31.61	10.742		
4350	4338	4314	4275	16	18	159.28	352	-389	359	328	31.73	11.326		
4400	4385	4350	4310	16	18	158.43	358	-395	384	353	31.87	12.063		
4450	4431	4366	4326	16	19	157.02	361	-398	414	382	31.75	13.038		





# Lonestar Consulting, LLC

## Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well # 715H - Slot 4
<b>Project:</b>	Betonnies Tsois Unit	<b>TVD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Reference Site:</b>	E03 2208 Pad	<b>MD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	# 715H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> E03 2208 Pad - # 603H - Original drilling - APD												<b>Offset Site Error:</b>	0 ft
<b>Survey Program:</b> 0-MWD+IGRF												<b>Offset Well Error:</b>	0 ft
<b>Reference</b>	<b>Offset</b>	<b>Semi Major Axis</b>		<b>Distance</b>		<b>Rule Assigned:</b>		<b>Warning</b>					
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>	<b>Highside Toolface (°)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>	
4500	4474	4388	4346	16	19	155.81	366	-402	448	416	31.70	14.129	
4550	4516	4400	4358	16	19	153.77	368	-404	486	454	31.52	15.405	
4600	4556	4421	4378	16	19	151.98	374	-409	526	495	31.54	16.681	
4650	4593	4433	4389	16	19	148.77	377	-412	569	538	31.46	18.101	
4700	4627	4450	4404	17	19	145.03	382	-417	615	583	31.51	19.514	
4750	4658	4450	4404	17	19	136.92	382	-417	662	630	31.33	21.123	
4800	4686	4450	4404	17	19	124.50	382	-417	710	679	31.20	22.750	
4850	4711	4450	4404	17	19	105.94	382	-417	759	727	31.13	24.369	
4900	4732	4450	4404	18	19	82.43	382	-417	808	777	31.11	25.965	
4950	4750	4450	4404	18	19	60.52	382	-417	857	826	31.13	27.524	
5000	4764	4450	4404	19	19	44.76	382	-417	906	874	31.19	29.037	
5050	4774	4450	4404	19	19	34.43	382	-417	954	923	31.28	30.500	
5100	4781	4450	4404	20	19	27.60	382	-417	1002	970	31.39	31.906	
5150	4783	4450	4404	21	19	22.92	382	-417	1048	1017	31.52	33.254	
5161	4783	4450	4404	21	19	22.08	382	-417	1058	1027	31.55	33.547	
5200	4783	4430	4386	21	19	21.18	376	-411	1094	1062	31.43	34.801	
5300	4782	4416	4373	23	19	20.62	372	-408	1186	1154	31.56	37.575	
5400	4781	4400	4358	25	19	19.96	368	-404	1279	1247	31.64	40.426	
5500	4780	4400	4358	26	19	19.96	368	-404	1373	1341	31.84	43.115	
5600	4779	4400	4358	28	19	19.96	368	-404	1467	1435	32.01	45.845	
5700	4778	4375	4334	30	19	19.03	363	-399	1562	1530	31.97	48.858	
5800	4777	4350	4310	32	18	18.17	358	-395	1658	1626	31.93	51.906	
5900	4777	4350	4310	35	18	18.17	358	-395	1753	1721	32.06	54.681	
6000	4776	4350	4310	37	18	18.17	358	-395	1849	1817	32.17	57.478	
6100	4775	4350	4310	39	18	18.17	358	-395	1945	1913	32.26	60.293	
6200	4774	4350	4310	41	18	18.17	358	-395	2042	2010	32.35	63.123	
6300	4773	4350	4310	43	18	18.17	358	-395	2139	2107	32.43	65.965	
6400	4772	4329	4290	46	18	17.49	354	-391	2236	2204	32.40	69.007	
6500	4771	4324	4285	48	18	17.34	354	-391	2333	2301	32.45	71.904	
6600	4770	4300	4261	50	18	16.63	350	-388	2431	2399	32.41	75.006	
6700	4770	4300	4261	53	18	16.63	350	-388	2529	2496	32.48	77.858	
6800	4769	4300	4261	55	18	16.63	350	-388	2626	2594	32.54	80.714	
6900	4768	4300	4261	57	18	16.63	350	-388	2724	2691	32.59	83.574	
7000	4767	4300	4261	60	18	16.63	350	-388	2822	2789	32.65	86.435	
7100	4766	4300	4261	62	18	16.63	350	-388	2920	2887	32.70	89.298	
7200	4765	4300	4261	65	18	16.63	350	-388	3018	2986	32.75	92.160	
7300	4764	4300	4261	67	18	16.63	350	-388	3117	3084	32.80	95.021	
7400	4764	4292	4253	69	18	16.40	349	-387	3215	3182	32.82	97.956	
7500	4763	4283	4244	72	18	16.16	348	-386	3314	3281	32.84	100.894	
7600	4762	4283	4244	74	18	16.16	348	-386	3412	3379	32.89	103.745	
7700	4761	4283	4244	77	18	16.16	348	-386	3511	3478	32.94	106.593	
7800	4760	4274	4235	79	18	15.91	347	-385	3610	3577	32.96	109.524	
7900	4759	4258	4220	82	18	15.52	345	-383	3708	3675	32.96	112.507	
8000	4758	4243	4205	84	18	15.14	344	-382	3807	3774	32.97	115.484	
8100	4757	4227	4189	86	18	14.79	342	-380	3906	3873	32.97	118.455	
8200	4757	4212	4174	89	18	14.45	340	-379	4004	3971	32.98	121.419	
8300	4756	4196	4159	91	18	14.12	339	-377	4103	4070	32.99	124.375	
8400	4755	4181	4143	94	18	13.81	337	-376	4202	4169	33.00	127.325	
8500	4754	4165	4128	96	18	13.52	335	-374	4301	4268	33.01	130.266	
8600	4753	4150	4113	99	18	13.23	334	-373	4399	4366	33.03	133.199	
8700	4752	4135	4098	101	17	12.96	332	-371	4498	4465	33.04	136.124	
8800	4751	4119	4082	104	17	12.70	330	-370	4597	4564	33.06	139.040	





## Lonestar Consulting, LLC

## Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well # 715H - Slot 4
<b>Project:</b>	Betonnies Tsosie Unit	<b>TVD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Reference Site:</b>	E03 2208 Pad	<b>MD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	# 715H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> E03 2208 Pad - # 603H - Original drilling - APD													<b>Offset Site Error:</b>	0 ft
<b>Survey Program:</b> 0-MWD+IGRF													<b>Offset Well Error:</b>	0 ft
<b>Reference</b>	<b>Offset</b>	<b>Semi Major Axis</b>		<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Rule Assigned:</b>		<b>Warning</b>				
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>	<b>Highside Toolface (°)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>		
8900	4750	4104	4067	106	17	12.45	329	-368	4696	4663	33.08	141.947		
9000	4750	4088	4052	108	17	12.21	327	-367	4794	4761	33.10	144.844		
9100	4749	4073	4036	111	17	11.98	325	-365	4893	4860	33.12	147.732		
9200	4748	4057	4021	113	17	11.75	323	-364	4992	4959	33.14	150.610		
9300	4747	4042	4006	116	17	11.54	322	-362	5091	5057	33.17	153.478		
9400	4746	4026	3991	118	17	11.33	320	-361	5189	5156	33.19	156.335		
9500	4745	4011	3975	121	17	11.13	318	-359	5288	5255	33.22	159.182		
9600	4744	3996	3960	123	17	10.94	317	-358	5387	5354	33.25	162.018		
9700	4744	3980	3945	126	17	10.76	315	-356	5486	5452	33.28	164.843		
9800	4743	3965	3929	128	17	10.58	313	-355	5584	5551	33.31	167.656		
9900	4742	3949	3914	131	17	10.41	312	-353	5683	5650	33.34	170.458		
10,000	4741	3934	3899	133	17	10.24	310	-352	5782	5749	33.37	173.248		
10,100	4740	3918	3884	135	17	10.08	308	-350	5881	5847	33.41	176.026		
10,200	4739	3903	3868	138	16	9.92	307	-349	5979	5946	33.44	178.793		
10,300	4738	3887	3853	140	16	9.77	305	-347	6078	6045	33.48	181.547		
10,400	4737	3872	3838	143	16	9.62	303	-346	6177	6143	33.52	184.288		
10,500	4737	3856	3822	145	16	9.48	302	-344	6276	6242	33.56	187.017		
10,600	4736	3841	3807	148	16	9.34	300	-343	6375	6341	33.60	189.734		
10,700	4735	3826	3792	150	16	9.21	298	-341	6473	6440	33.64	192.437		
10,800	4734	3810	3777	153	16	9.08	296	-340	6572	6538	33.68	195.128		
10,900	4733	3795	3761	155	16	8.95	295	-338	6671	6637	33.72	197.805		
10,910	4733	3793	3760	155	16	8.94	295	-338	6681	6645	36.27	184.219		





# Lonestar Consulting, LLC

## Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well # 715H - Slot 4
<b>Project:</b>	Betonnies Tsois Unit	<b>TVD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Reference Site:</b>	E03 2208 Pad	<b>MD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	# 715H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> E03 2208 Pad - # 714H - Original drilling - APD													<b>Offset Site Error:</b>	0 ft
<b>Survey Program:</b> 0-MWD+IGRF													<b>Offset Well Error:</b>	0 ft
<b>Reference</b>	<b>Offset</b>	<b>Semi Major Axis</b>		<b>Distance</b>		<b>Rule Assigned:</b>		<b>Warning</b>						
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>	<b>Highside Toolface (°)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>		
0	0	0	0	0	0	28.39	17	9	20					
100	100	100	100	0	0	28.39	17	9	20	20	0.31	64.428		
200	200	200	200	1	1	28.39	17	9	20	19	1.03	19.373		
300	300	300	300	1	1	28.39	17	9	20	18	1.74	11.401		
375	375	375	375	1	1	28.39	17	9	20	18	2.28	8.712		
400	400	400	400	1	1	48.01	17	9	20	17	2.46	8.048		
500	500	500	500	2	2	54.19	18	10	19	15	3.17	5.853		
534	534	533	533	2	2	58.44	18	10	18	15	3.42	5.396 CC		
575	575	574	574	2	2	64.86	20	11	19	15	3.71	5.040 ES		
600	600	599	599	2	2	69.00	21	12	19	15	3.89	4.933		
700	700	698	698	2	2	80.69	26	16	24	19	4.61	5.190		
800	799	797	796	3	3	85.00	34	22	32	27	5.33	6.052		
900	899	895	893	3	3	85.13	45	30	44	38	6.05	7.210		
1000	999	992	989	3	3	83.55	59	40	58	51	6.77	8.562		
1100	1099	1089	1084	4	4	81.44	75	51	75	68	7.49	10.065		
1200	1198	1184	1176	4	4	79.29	93	65	96	88	8.19	11.693		
1300	1298	1278	1267	5	5	77.32	114	79	119	110	8.88	13.425		
1400	1398	1370	1355	5	5	75.55	136	96	146	136	9.56	15.244		
1500	1498	1463	1442	5	6	74.01	161	114	175	165	10.26	17.067		
1600	1597	1558	1532	6	7	72.81	186	133	205	194	11.00	18.628		
1700	1697	1654	1622	6	7	71.92	212	151	235	223	11.76	19.987		
1800	1797	1749	1712	6	8	71.24	238	170	265	253	12.51	21.179		
1900	1897	1844	1802	7	9	70.69	264	189	295	282	13.28	22.231		
2000	1996	1940	1891	7	9	70.24	289	208	325	311	14.04	23.166		
2100	2096	2035	1981	8	10	69.87	315	226	355	341	14.80	24.002		
2200	2196	2130	2071	8	11	69.56	341	245	385	370	15.57	24.753		
2300	2296	2226	2161	8	11	69.29	367	264	416	399	16.34	25.431		
2400	2395	2321	2251	9	12	69.06	392	283	446	429	17.11	26.047		
2500	2495	2416	2341	9	13	68.86	418	302	476	458	17.88	26.608		
2600	2595	2512	2430	9	13	68.68	444	320	506	487	18.66	27.122		
2700	2695	2607	2520	10	14	68.52	470	339	536	517	19.43	27.593		
2800	2794	2702	2610	10	15	68.38	495	358	566	546	20.21	28.027		
2900	2894	2798	2700	11	15	68.25	521	377	596	576	20.98	28.429		
3000	2994	2893	2790	11	16	68.14	547	395	627	605	21.76	28.800		
3100	3094	2988	2880	11	17	68.03	573	414	657	634	22.54	29.146		
3200	3193	3084	2970	12	17	67.94	598	433	687	664	23.31	29.468		
3300	3293	3179	3059	12	18	67.85	624	452	717	693	24.09	29.768		
3400	3393	3274	3149	13	19	67.77	650	470	747	722	24.87	30.049		
3500	3493	3370	3239	13	19	67.70	676	489	777	752	25.65	30.313		
3600	3592	3465	3329	13	20	67.63	702	508	808	781	26.43	30.561		
3700	3692	3560	3419	14	21	67.57	727	527	838	811	27.21	30.794		
3800	3792	3656	3509	14	21	67.51	753	546	868	840	27.99	31.013		
3900	3892	3751	3599	14	22	67.45	779	564	898	869	28.77	31.221		
4000	3992	3846	3688	15	23	67.40	805	583	928	899	29.55	31.417		
4100	4091	3942	3778	15	23	67.35	830	602	959	928	30.33	31.603		
4115	4107	3956	3792	15	24	67.35	834	605	963	933	30.45	31.631		
4150	4141	3989	3823	15	24	19.72	843	611	974	943	30.71	31.701		
4200	4191	4037	3868	16	24	-62.19	856	621	988	957	31.05	31.832		
4250	4241	4084	3912	16	25	-73.07	869	630	1003	972	31.35	31.993		
4300	4290	4130	3956	16	25	-76.29	881	639	1017	986	31.62	32.176		
4350	4338	4175	3998	16	25	-77.74	893	648	1031	1000	31.85	32.378		
4400	4385	4219	4040	16	25	-78.57	905	657	1045	1013	32.07	32.596		





# Lonestar Consulting, LLC

## Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well # 715H - Slot 4
<b>Project:</b>	Betonnies Tsois Unit	<b>TVD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Reference Site:</b>	E03 2208 Pad	<b>MD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	# 715H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: E03 2208 Pad - # 714H - Original drilling - APD													Offset Site Error: 0 ft	
Survey Program: 0-MWD+IGRF													Offset Well Error: 0 ft	
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		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		
4450	4431	4262	4080	16	26	-79.13	917	665	1059	1027	32.28	32.823		
4500	4474	4302	4118	16	26	-79.55	928	673	1073	1041	32.48	33.054		
4550	4516	4340	4154	16	26	-79.86	938	680	1088	1055	32.69	33.280		
4600	4556	4381	4193	16	27	-80.24	949	689	1102	1069	32.96	33.445		
4650	4593	4427	4235	16	27	-80.66	958	701	1117	1084	33.32	33.525		
4700	4627	4475	4280	17	27	-81.12	966	715	1132	1098	33.77	33.523		
4750	4658	4527	4329	17	28	-81.64	971	734	1147	1113	34.31	33.430		
4800	4686	4583	4380	17	28	-82.26	973	757	1162	1127	34.94	33.242		
4850	4711	4646	4435	17	28	-83.00	971	787	1176	1140	35.68	32.961		
4900	4732	4716	4495	18	29	-83.90	963	823	1190	1153	36.51	32.586		
4950	4750	4796	4557	18	29	-84.98	947	870	1203	1165	37.44	32.126		
5000	4764	4888	4623	19	30	-86.22	921	928	1215	1176	38.48	31.571		
5050	4774	4993	4687	19	30	-87.58	879	1001	1225	1185	39.63	30.914		
5100	4781	5089	4733	20	31	-88.53	832	1071	1233	1192	40.86	30.180		
5150	4783	5251	4784	21	32	-90.07	736	1190	1238	1196	42.46	29.166		
5161	4783	5283	4789	21	32	-90.26	715	1213	1239	1196	42.83	28.929		
5200	4783	5398	4797	21	33	-90.66	635	1296	1240	1196	44.19	28.058		
5300	4782	5493	4796	23	33	-90.67	568	1363	1240	1193	47.19	26.273		
5400	4781	5593	4795	25	34	-90.67	496	1433	1240	1189	50.50	24.543		
5500	4780	5693	4795	26	36	-90.68	425	1503	1239	1185	54.07	22.918		
5600	4779	5793	4794	28	37	-90.68	354	1573	1239	1181	57.86	21.414		
5700	4778	5893	4793	30	38	-90.69	282	1643	1239	1177	61.73	20.067		
5800	4777	5993	4792	32	40	-90.70	211	1713	1239	1173	65.85	18.807		
5900	4777	6093	4792	35	42	-90.70	140	1783	1238	1168	70.06	17.674		
6000	4776	6193	4791	37	43	-90.71	69	1853	1238	1164	74.36	16.649		
6100	4775	6293	4790	39	45	-90.71	-3	1923	1238	1159	78.73	15.721		
6200	4774	6393	4789	41	47	-90.72	-74	1993	1238	1154	83.17	14.879		
6300	4773	6493	4789	43	49	-90.72	-145	2063	1237	1150	87.67	14.112		
6400	4772	6593	4788	46	51	-90.73	-217	2134	1237	1145	92.22	13.414		
6500	4771	6693	4787	48	53	-90.73	-288	2204	1237	1140	96.81	12.775		
6600	4770	6793	4786	50	55	-90.74	-359	2274	1237	1135	101.43	12.191		
6700	4770	6893	4786	53	57	-90.74	-431	2344	1236	1130	106.09	11.653		
6800	4769	6993	4785	55	59	-90.75	-502	2414	1236	1125	110.77	11.158		
6900	4768	7093	4784	57	62	-90.76	-573	2484	1236	1120	115.48	10.701		
7000	4767	7193	4783	60	64	-90.76	-645	2554	1236	1115	120.21	10.278		
7100	4766	7293	4783	62	66	-90.77	-716	2624	1235	1110	124.96	9.886		
7200	4765	7393	4782	65	68	-90.77	-787	2694	1235	1105	129.72	9.521		
7300	4764	7493	4781	67	71	-90.78	-859	2764	1235	1100	134.50	9.180		
7400	4764	7593	4780	69	73	-90.78	-930	2835	1235	1095	139.29	8.863		
7500	4763	7693	4780	72	75	-90.79	-1001	2905	1234	1090	144.10	8.566		
7600	4762	7793	4779	74	78	-90.79	-1073	2975	1234	1085	148.91	8.287		
7700	4761	7893	4778	77	80	-90.80	-1144	3045	1234	1080	153.74	8.025		
7800	4760	7993	4777	79	82	-90.80	-1215	3115	1234	1075	158.57	7.779		
7900	4759	8093	4777	82	85	-90.81	-1286	3185	1233	1070	163.42	7.547		
8000	4758	8193	4776	84	87	-90.82	-1358	3255	1233	1065	168.27	7.328		
8100	4757	8293	4775	86	89	-90.82	-1429	3325	1233	1060	173.12	7.121		
8200	4757	8393	4774	89	92	-90.83	-1500	3395	1233	1055	177.99	6.925		
8300	4756	8493	4774	91	94	-90.83	-1572	3465	1232	1049	182.86	6.739		
8400	4755	8593	4773	94	96	-90.84	-1643	3536	1232	1044	187.73	6.563		
8500	4754	8693	4772	96	99	-90.84	-1714	3606	1232	1039	192.61	6.395		
8600	4753	8793	4771	99	101	-90.85	-1786	3676	1232	1034	197.50	6.236		
8700	4752	8893	4771	101	103	-90.85	-1857	3746	1231	1029	202.38	6.084		





## Lonestar Consulting, LLC

## Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well # 715H - Slot 4
<b>Project:</b>	Betonnies Tsoie Unit	<b>TVD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Reference Site:</b>	E03 2208 Pad	<b>MD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	# 715H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: E03 2208 Pad - # 714H - Original drilling - APD													Offset Site Error:	0 ft	
Survey Program:		0-MWD+IGRF						Rule Assigned:						Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre			Distance				Warning				
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor			
8800	4751	8993	4770	104	106	-90.86	-1928	3816	1231	1024	207.28	5.939			
8900	4750	9093	4769	106	108	-90.86	-2000	3886	1231	1019	212.17	5.801			
9000	4750	9193	4768	108	111	-90.87	-2071	3956	1231	1013	217.07	5.669			
9100	4749	9293	4768	111	113	-90.88	-2142	4026	1230	1008	221.98	5.542			
9200	4748	9393	4767	113	115	-90.88	-2214	4096	1230	1003	226.88	5.421			
9300	4747	9493	4766	116	118	-90.89	-2285	4166	1230	998	231.79	5.305			
9400	4746	9593	4765	118	120	-90.89	-2356	4236	1230	993	236.70	5.194			
9500	4745	9693	4764	121	123	-90.90	-2428	4307	1229	988	241.61	5.088			
9600	4744	9793	4764	123	125	-90.90	-2499	4377	1229	982	246.53	4.985			
9700	4744	9892	4763	126	128	-90.91	-2569	4446	1229	977	251.44	4.887			
9702	4744	9892	4763	126	128	-90.91	-2569	4446	1229	977	251.52	4.885			
9800	4743	9892	4763	128	128	-90.91	-2569	4446	1233	978	254.85	4.837 SF			
9900	4742	9892	4763	131	128	-90.91	-2569	4446	1245	988	256.62	4.850			
10,000	4741	9892	4763	133	128	-90.91	-2569	4446	1264	1008	256.80	4.924			
10,100	4740	9892	4763	135	128	-90.91	-2569	4446	1292	1036	255.53	5.055			
10,200	4739	9892	4763	138	128	-90.91	-2569	4446	1326	1073	253.02	5.240			
10,300	4738	9892	4763	140	128	-90.91	-2569	4446	1367	1117	249.47	5.478			
10,400	4737	9892	4763	143	128	-90.91	-2569	4446	1413	1168	245.14	5.765			
10,500	4737	9892	4763	145	128	-90.91	-2569	4446	1465	1225	240.24	6.099			
10,600	4736	9892	4763	148	128	-90.91	-2569	4446	1522	1287	234.95	6.478			
10,700	4735	9892	4763	150	128	-90.91	-2569	4446	1583	1354	229.45	6.900			
10,800	4734	9892	4763	153	128	-90.91	-2569	4446	1648	1424	223.87	7.361			
10,900	4733	9892	4763	155	128	-90.91	-2569	4446	1716	1498	218.30	7.862			
10,910	4733	9892	4763	155	128	-90.91	-2569	4446	1723	1505	217.99	7.905			





# Lonestar Consulting, LLC

## Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well # 715H - Slot 4
<b>Project:</b>	Betonne Tsois Unit	<b>TVD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Reference Site:</b>	E03 2208 Pad	<b>MD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	# 715H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> E03 2208 Pad - # 716H - Original drilling - APD													<b>Offset Site Error:</b>	0 ft
<b>Survey Program:</b> 0-MWD+IGRF													<b>Offset Well Error:</b>	0 ft
<b>Reference</b>	<b>Offset</b>	<b>Semi Major Axis</b>		<b>Distance</b>		<b>Rule Assigned:</b>		<b>Warning</b>						
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>	<b>Highside Toolface (°)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>		
0	0	0	0	0	0	-150.86	-35	-19	40					
100	100	100	100	0	0	-150.86	-35	-19	40	40	0.31	129.777		
200	200	200	200	1	1	-150.86	-35	-19	40	39	1.03	39.024		
300	300	300	300	1	1	-150.86	-35	-19	40	38	1.74	22.965		
300	300	300	300	1	1	-150.86	-35	-19	40	38	1.74	22.960 CC		
375	375	375	375	1	1	-150.72	-35	-20	40	38	2.28	17.585 ES		
400	400	400	400	1	1	-131.03	-35	-20	40	38	2.45	16.400		
500	500	499	499	2	2	-129.40	-35	-23	43	40	3.16	13.722		
575	575	573	573	2	2	-128.01	-34	-28	48	44	3.70	13.013		
600	600	598	598	2	2	-127.48	-34	-30	50	46	3.88	12.921		
700	700	697	696	2	2	-123.93	-33	-40	59	55	4.61	12.849 SF		
800	799	795	793	3	3	-119.09	-31	-54	70	65	5.35	13.150		
900	899	894	891	3	3	-115.05	-30	-68	82	76	6.11	13.509		
1000	999	993	989	3	4	-112.05	-28	-82	95	88	6.86	13.827		
1100	1099	1092	1087	4	4	-109.75	-27	-97	107	100	7.62	14.105		
1200	1198	1192	1186	4	4	-107.93	-26	-111	120	112	8.38	14.345		
1300	1298	1291	1284	5	5	-106.46	-24	-126	133	124	9.14	14.555		
1400	1398	1390	1382	5	5	-105.25	-23	-140	146	136	9.90	14.738		
1500	1498	1489	1480	5	6	-104.23	-21	-154	159	148	10.66	14.900		
1600	1597	1588	1578	6	6	-103.37	-20	-169	172	160	11.42	15.044		
1700	1697	1687	1676	6	7	-102.63	-18	-183	185	173	12.19	15.172		
1800	1797	1786	1774	6	7	-101.99	-17	-198	198	185	12.95	15.286		
1900	1897	1885	1872	7	7	-101.43	-15	-212	211	197	13.71	15.389		
2000	1996	1985	1970	7	8	-100.93	-14	-226	224	210	14.47	15.483		
2100	2096	2084	2068	8	8	-100.49	-12	-241	237	222	15.24	15.567		
2200	2196	2183	2166	8	9	-100.09	-11	-255	250	234	16.00	15.645		
2300	2296	2282	2264	8	9	-99.74	-9	-270	263	247	16.76	15.715		
2400	2395	2381	2362	9	10	-99.41	-8	-284	277	259	17.53	15.780		
2500	2495	2480	2460	9	10	-99.12	-6	-298	290	271	18.29	15.840		
2600	2595	2579	2558	9	11	-98.85	-5	-313	303	284	19.05	15.896		
2700	2695	2678	2656	10	11	-98.61	-3	-327	316	296	19.82	15.947		
2800	2794	2778	2755	10	12	-98.38	-2	-342	329	309	20.58	15.995		
2900	2894	2877	2853	11	12	-98.17	0	-356	342	321	21.34	16.040		
3000	2994	2976	2951	11	12	-97.98	1	-370	356	333	22.11	16.081		
3100	3094	3075	3049	11	13	-97.80	3	-385	369	346	22.87	16.120		
3200	3193	3174	3147	12	13	-97.63	4	-399	382	358	23.64	16.157		
3300	3293	3273	3245	12	14	-97.47	5	-414	395	371	24.40	16.191		
3400	3393	3372	3343	13	14	-97.33	7	-428	408	383	25.16	16.224		
3500	3493	3471	3441	13	15	-97.19	8	-442	421	396	25.93	16.254		
3600	3592	3570	3539	13	15	-97.06	10	-457	435	408	26.69	16.283		
3700	3692	3670	3637	14	16	-96.94	11	-471	448	420	27.46	16.310		
3800	3792	3769	3735	14	16	-96.83	13	-486	461	433	28.22	16.336		
3900	3892	3868	3833	14	16	-96.72	14	-500	474	445	28.98	16.361		
4000	3992	3967	3931	15	17	-96.62	16	-514	487	458	29.75	16.384		
4100	4091	4066	4029	15	17	-96.52	17	-529	501	470	30.51	16.406		
4115	4107	4081	4044	15	17	-96.51	18	-531	503	472	30.63	16.409		
4150	4141	4116	4078	15	18	-145.33	18	-536	507	477	30.88	16.432		
4200	4191	4165	4127	16	18	131.51	19	-543	516	484	31.21	16.518		
4250	4241	4213	4175	16	18	119.89	19	-550	525	493	31.50	16.666		
4300	4290	4260	4222	16	18	116.35	20	-557	536	504	31.75	16.875		
4350	4338	4293	4253	16	18	114.43	21	-562	549	517	31.86	17.223		
4400	4385	4319	4279	16	19	113.04	22	-567	565	533	31.88	17.713		





# Lonestar Consulting, LLC

## Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well # 715H - Slot 4
<b>Project:</b>	Betonnies Tsois Unit	<b>TVD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Reference Site:</b>	E03 2208 Pad	<b>MD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	# 715H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> E03 2208 Pad - # 716H - Original drilling - APD												<b>Offset Site Error:</b>	0 ft
<b>Survey Program:</b> 0-MWD+IGRF												<b>Offset Well Error:</b>	0 ft
<b>Reference</b>	<b>Offset</b>	<b>Semi Major Axis</b>		<b>Distance</b>		<b>Rule Assigned:</b>		<b>Warning</b>					
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>	<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre +N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>	
4450	4431	4350	4309	16	19	112.26	23	-574	584	552	31.93	18.286	
4500	4474	4363	4322	16	19	110.46	24	-578	606	574	31.78	19.075	
4550	4516	4382	4339	16	19	108.81	26	-583	632	600	31.69	19.933	
4600	4556	4400	4357	16	19	106.98	27	-589	660	628	31.63	20.867	
4650	4593	4400	4357	16	19	103.26	27	-589	691	660	31.34	22.051	
4700	4627	4420	4375	17	19	100.91	29	-596	724	693	31.40	23.064	
4750	4658	4428	4383	17	19	97.07	30	-599	760	728	31.34	24.237	
4800	4686	4433	4388	17	19	92.58	30	-601	797	765	31.31	25.443	
4850	4711	4450	4403	17	19	88.90	32	-607	835	804	31.50	26.512	
4900	4732	4450	4403	18	19	83.15	32	-607	874	843	31.51	27.752	
4950	4750	4450	4403	18	19	77.24	32	-607	914	883	31.57	28.963	
5000	4764	4450	4403	19	19	71.34	32	-607	955	923	31.68	30.134	
5050	4774	4434	4389	19	19	64.16	30	-601	995	963	31.63	31.454	
5100	4781	4430	4385	20	19	58.55	30	-600	1035	1003	31.77	32.575	
5150	4783	4424	4380	21	19	53.37	29	-598	1075	1043	31.93	33.652	
5161	4783	4423	4378	21	19	52.30	29	-597	1083	1051	31.97	33.887	
5200	4783	4418	4374	21	19	51.96	29	-595	1114	1082	32.10	34.699	
5300	4782	4400	4357	23	19	50.66	27	-589	1195	1163	32.38	36.907	
5400	4781	4400	4357	25	19	50.66	27	-589	1278	1245	32.82	38.946	
5500	4780	4400	4357	26	19	50.66	27	-589	1364	1331	33.22	41.058	
5600	4779	4379	4337	28	19	49.18	25	-582	1451	1417	33.38	43.461	
5700	4778	4371	4329	30	19	48.64	25	-580	1539	1505	33.63	45.759	
5800	4777	4350	4309	32	19	47.28	23	-574	1629	1595	33.76	48.250	
5900	4777	4350	4309	35	19	47.28	23	-574	1720	1686	34.03	50.529	
6000	4776	4350	4309	37	19	47.28	23	-574	1811	1777	34.27	52.844	
6100	4775	4350	4309	39	19	47.28	23	-574	1904	1869	34.49	55.191	
6200	4774	4350	4309	41	19	47.28	23	-574	1997	1962	34.69	57.563	
6300	4773	4350	4309	43	19	47.28	23	-574	2091	2056	34.87	59.958	
6400	4772	4329	4289	46	19	45.93	22	-569	2184	2150	34.90	62.590	
6500	4771	4324	4284	48	19	45.65	22	-568	2279	2244	35.03	65.064	
6600	4770	4320	4280	50	19	45.39	22	-567	2374	2339	35.15	67.549	
6700	4770	4300	4261	53	18	44.18	21	-563	2470	2435	35.17	70.231	
6800	4769	4300	4261	55	18	44.18	21	-563	2565	2530	35.29	72.688	
6900	4768	4300	4261	57	18	44.18	21	-563	2661	2626	35.41	75.155	
7000	4767	4300	4261	60	18	44.18	21	-563	2757	2722	35.52	77.629	
7100	4766	4300	4261	62	18	44.18	21	-563	2854	2818	35.62	80.110	
7200	4765	4300	4261	65	18	44.18	21	-563	2951	2915	35.72	82.596	
7300	4764	4300	4261	67	18	44.18	21	-563	3048	3012	35.82	85.086	
7400	4764	4300	4261	69	18	44.18	21	-563	3145	3109	35.91	87.579	
7500	4763	4300	4261	72	18	44.18	21	-563	3242	3206	35.99	90.074	
7600	4762	4300	4261	74	18	44.18	21	-563	3339	3303	36.07	92.570	
7700	4761	4286	4247	77	18	43.37	21	-561	3437	3401	36.09	95.227	
7800	4760	4284	4245	79	18	43.24	21	-560	3534	3498	36.16	97.751	
7900	4759	4270	4231	82	18	42.48	20	-558	3632	3596	36.17	100.414	
8000	4758	4270	4231	84	18	42.48	20	-558	3730	3694	36.25	102.911	
8100	4757	4270	4231	86	18	42.48	20	-558	3828	3792	36.32	105.406	
8200	4757	4270	4231	89	18	42.48	20	-558	3926	3890	36.39	107.900	
8300	4756	4270	4231	91	18	42.48	20	-558	4024	3988	36.46	110.391	
8400	4755	4270	4231	94	18	42.48	20	-558	4123	4086	36.52	112.879	
8500	4754	4270	4231	96	18	42.48	20	-558	4221	4184	36.59	115.364	
8600	4753	4259	4221	99	18	41.87	20	-557	4319	4283	36.61	117.986	
8700	4752	4247	4209	101	18	41.22	20	-555	4418	4381	36.63	120.621	





**Lonestar Consulting, LLC**  
Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well # 715H - Slot 4
<b>Project:</b>	Betonnies Tsosie Unit	<b>TVD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Reference Site:</b>	E03 2208 Pad	<b>MD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	# 715H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> E03 2208 Pad - # 716H - Original drilling - APD											<b>Offset Site Error:</b>	0 ft
<b>Survey Program:</b> 0-MWD+IGRF											<b>Offset Well Error:</b>	0 ft
<b>Reference</b>	<b>Offset</b>	<b>Semi Major Axis</b>		<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Rule Assigned:</b>		<b>Warning</b>		
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>	<b>Highside Toolface (°)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>
8800	4751	4235	4197	104	18	40.58	20	-553	4516	4480	36.64	123.254
8900	4750	4223	4185	106	18	39.95	20	-551	4615	4578	36.66	125.886
9000	4750	4211	4173	108	18	39.33	19	-550	4713	4677	36.68	128.515
9100	4749	4199	4161	111	18	38.73	19	-548	4812	4775	36.69	131.142
9200	4748	4187	4149	113	18	38.15	19	-546	4911	4874	36.71	133.767
9300	4747	4175	4137	116	18	37.57	19	-544	5009	4972	36.73	136.388
9400	4746	4162	4125	118	18	37.01	19	-543	5108	5071	36.75	139.007
9500	4745	4150	4113	121	18	36.45	19	-541	5206	5170	36.76	141.622
9600	4744	4138	4101	123	18	35.91	18	-539	5305	5268	36.78	144.233
9700	4744	4126	4089	126	18	35.38	18	-537	5404	5367	36.80	146.841
9800	4743	4114	4077	128	18	34.87	18	-536	5503	5466	36.82	149.444
9900	4742	4102	4065	131	18	34.36	18	-534	5601	5565	36.84	152.044
10,000	4741	4090	4053	133	17	33.86	18	-532	5700	5663	36.86	154.638
10,100	4740	4078	4041	135	17	33.38	17	-530	5799	5762	36.88	157.228
10,200	4739	4065	4029	138	17	32.90	17	-529	5898	5861	36.90	159.813
10,300	4738	4053	4017	140	17	32.44	17	-527	5997	5960	36.93	162.393
10,400	4737	4041	4005	143	17	31.98	17	-525	6095	6058	36.95	164.967
10,500	4737	4029	3993	145	17	31.53	17	-523	6194	6157	36.97	167.536
10,600	4736	4017	3981	148	17	31.09	17	-522	6293	6256	37.00	170.099
10,700	4735	4005	3969	150	17	30.66	16	-520	6392	6355	37.02	172.656
10,800	4734	3993	3957	153	17	30.24	16	-518	6491	6454	37.05	175.207
10,900	4733	3981	3945	155	17	29.83	16	-516	6590	6553	37.07	177.751
10,910	4733	3979	3943	155	17	29.79	16	-516	6600	6560	39.50	167.067





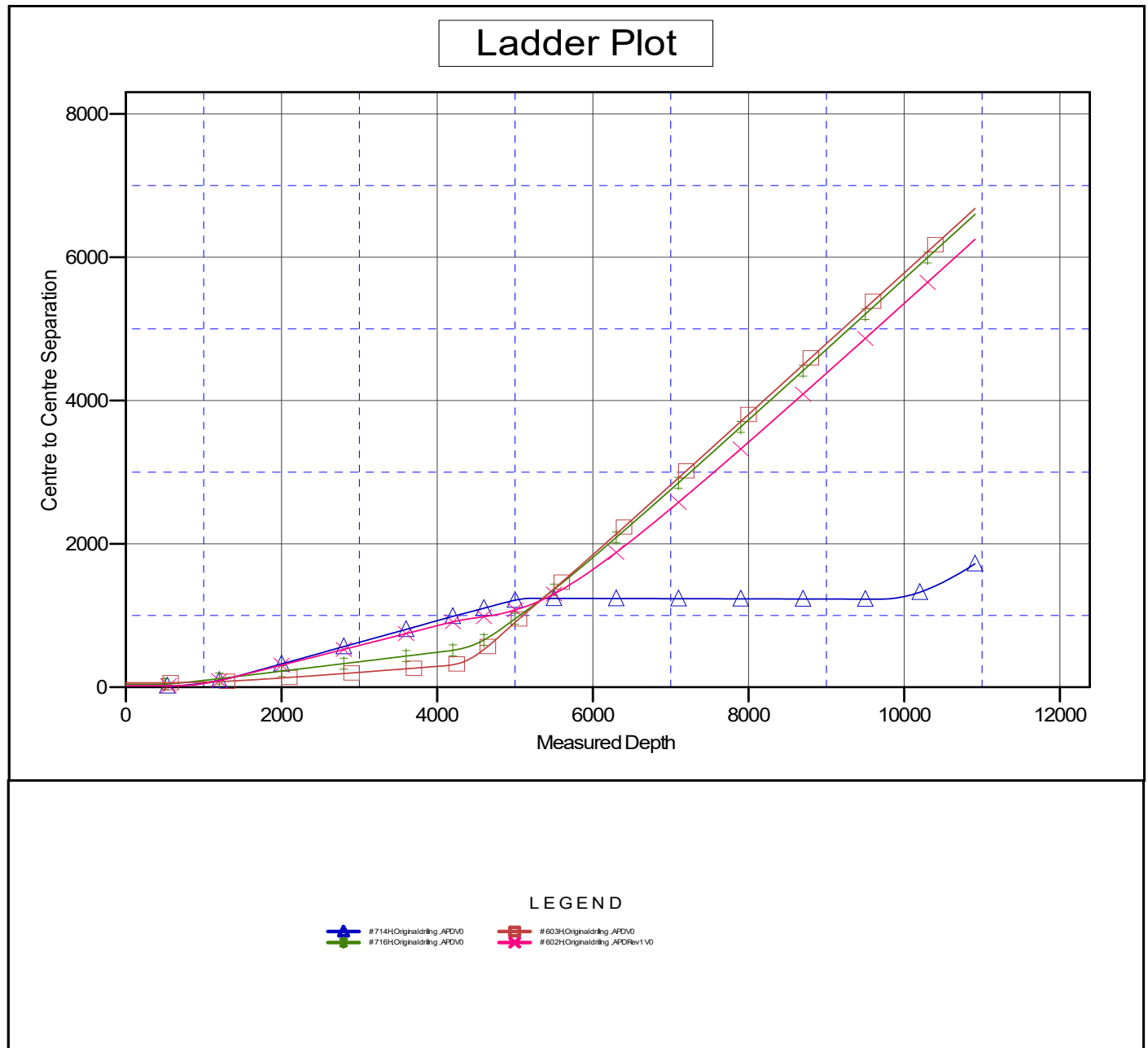
**Lonestar Consulting, LLC**  
Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well # 715H - Slot 4
<b>Project:</b>	Betonne Tsoie Unit	<b>TVD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Reference Site:</b>	E03 2208 Pad	<b>MD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	# 715H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to GL 6870' & RKB 14' @ 6884ft  
Offset Depths are relative to Offset Datum  
Central Meridian is -107.8333333

Coordinates are relative to: # 715H - Slot 4  
Coordinate System is US State Plane 1983, New Mexico Western Zone  
Grid Convergence at Surface is: 0.09°







**Lonestar Consulting, LLC**  
Anticollision Report



<b>Company:</b>	DJR Operating	<b>Local Co-ordinate Reference:</b>	Well # 715H - Slot 4
<b>Project:</b>	Betonne Tsoie Unit	<b>TVD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Reference Site:</b>	E03 2208 Pad	<b>MD Reference:</b>	GL 6870' & RKB 14' @ 6884ft
<b>Site Error:</b>	0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	# 715H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Original drilling	<b>Database:</b>	Grand Junction
<b>Reference Design:</b>	APD	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to GL 6870' &amp; RKB 14' @ 6884ft

Offset Depths are relative to Offset Datum

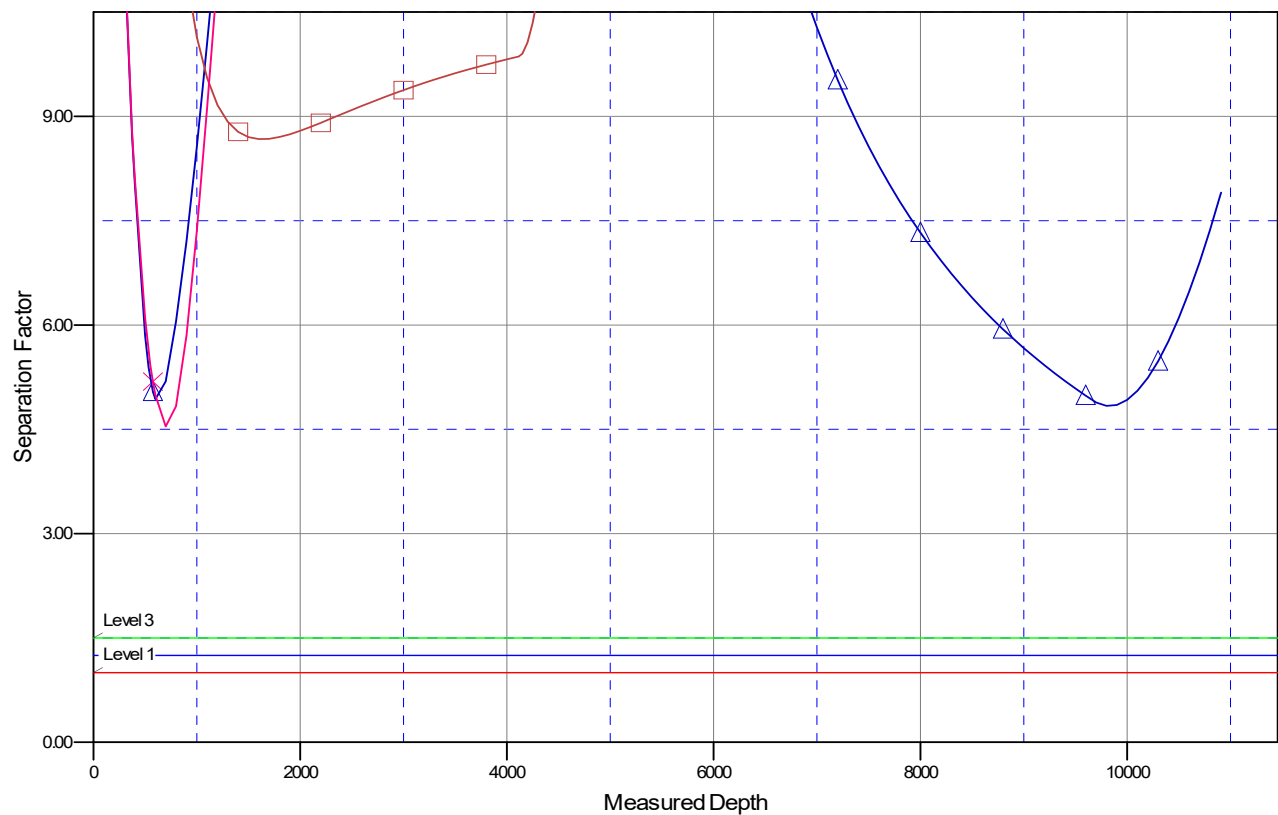
Central Meridian is -107.8333333

Coordinates are relative to: # 715H - Slot 4

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

Grid Convergence at Surface is: 0.09°

## Separation Factor Plot



### LEGEND

#714HOriginaldrilling APD V0  
 #716HOriginaldrilling APD V0  
 #603HOriginaldrilling APD V0  
 #602HOriginaldrilling APD Rev1 V0



## **DJR Operating, LLC. Betonnie Tsosie Wash Unit E03-2208 Nos. 602H, 714H, and 715H Oil and Natural Gas Wells Project**

### **DOI-BLM-NM-F010-2022-0005-EA**

## **Conditions of Approval (COA), Design Features, and Best Management Practices**

DJR would adhere to any conditions required by the BLM FFO. Additional project-specific design features will be included as determined during the BLM on-site meeting. DJR has also committed to the following design features and BMPs to lessen impacts to resources. Where applicable, additional details related to the design features may be found in the APDs on file at the BLM-FFO.

#### *Air Resources*

- Areas not required for facilities would be revegetated during interim reclamation.
- Dirt roads would be watered during periods of high use (magnesium chloride, organic-based compounds, and/or polymer compounds could also be used on dirt roads upon approval of the BLM).
- BMPs provided in The Gold Book would be implemented for proposed and existing roads (BLM and U.S. Forest Service 2007).
- Compressor engines 300 horsepower or less used during well production must be rated by the manufacturer as emitting NO<sub>x</sub> at 2 grams per horsepower hour or less to comply with the NMED, Air Quality Bureau's guidance.

#### *Water Resources*

- To prevent erosion, the certain areas surrounding the proposed site would be recontoured during interim reclamation.
- Culverts and silt traps would be installed as appropriate and locations to be determined during the BLM on-site and facility on-site.

#### *Wildlife, Migratory Birds, and Special Status Species*

- Any wildlife encountered within the proposed project area would be avoided and allowed to move out of the proposed project area. No wildlife would be intentionally harmed or harassed.
- Wildlife hazards, such as storage tanks, associated with the proposed project would be fenced or covered, as necessary.
- Because the proposed project would disturb more than 4.0 acres of vegetation, migratory breeding bird nesting surveys would be required if construction activities are scheduled to occur during the migratory bird nesting season (May 15 – July 31). If an active nest is encountered, it would be avoided (avoidance buffer to be determined by BLM FFO) and left undisturbed until the nest has failed, or nestlings have fledged. If present, an inactive nest could be cleared by a BLM FFO-approved wildlife biologist.
- DJR would notify the BLM and USFWS upon discovery of a dead or injured migratory bird, bald eagle, or golden eagle within or adjacent to the proposed project area. If the BLM becomes aware of such mortality or injury, the BLM will inform DJR. If DJR fails to notify the USFWS of the mortality or injury, the BLM would notify the USFWS. The BLM and the USFWS would then attempt to determine the cause of mortality and identify appropriate mitigation measures to avoid future occurrences.



- Should other special status species be observed within the proposed project area prior to or during the proposed project, construction would cease, and the BLM FFO would be immediately contacted. The BLM FFO would then evaluate the resource. Should a discovery be evaluated as significant (protected under the Endangered Species Act, etc.), it would be protected in place until mitigation could be developed and implemented according to guidelines set by the BLM FFO.
- Per BLM FFO Instruction Memorandum No. NM-200-2008-001 (BLM 2008b), an updated pre-construction biological survey could be required for the proposed project if vegetation removal would occur more than 1 year following the previous biological survey.

#### Soil, Upland Vegetation, and Noxious Weeds and Invasive Species

- Reclamation would follow the guidance provided in the *Farmington Field Office Bare Soil Reclamation Procedures* (BLM 2013). These procedures are referenced in DJR's Surface Reclamation Plan.
- During the pre-disturbance on-site meeting with BLM, a suitable vegetation community from the *Farmington Field Office Bare Soil Reclamation Procedures* (BLM 2013) will be selected by BLM. Plant species will be chosen from the BLM FFO's seed pick list for the selected community.
- A noxious weed inventory utilizing the New Mexico Noxious Weed List (New Mexico Department of Agriculture 2009, 2020) and the U.S. Department of Agriculture's (USDA's) Federal Noxious Weed List (Natural Resources Conservation Service 2017; USDA 2010, 2012) will be conducted during the pre-disturbance on-site meeting.
- Identified noxious weeds would be treated prior to new surface disturbance, as determined by the BLM FFO Noxious Weed Specialist (505-564-7600). A Pesticide Use Proposal (PUP) would be submitted to and approved by the BLM FFO Noxious Weed Specialist prior to application of any pesticide.
- See the above water resources section for erosion-control features.

#### Cultural Resources

- All cultural resources stipulations would be followed as indicated in the BLM Cultural Resource Records of Review and the Conditions of Approvals. These stipulations may include, but are not limited to, temporary or permanent fencing or other physical barriers, monitoring of earth-disturbing construction, project area reduction and/or specific construction avoidance zones, and employee education.
- All employees, contractors, and subcontractors would be informed by the project proponent that cultural sites are to be avoided by all personnel, personal vehicles, and company equipment, and that it is illegal to collect, damage, or disturb cultural resources, and that such activities on federal and tribal lands are punishable by criminal and or administrative penalties under the provisions of Archaeological Resources Protection Act (ARPA) (16 USC 470aa-mm).
- In the event of a cultural resource's discovery during construction, construction activities would immediately cease in the immediate vicinity of the discovery, and DJR would immediately notify the archaeological monitor, if present, or the BLM. The BLM would then ensure the site is evaluated. Should a discovery be evaluated as significant (e.g., National Register of Historic Places, Native American Graves Protection and Repatriation Act of 1990, ARPA), it would be protected in place until mitigating measures can be developed and implemented according to guidelines set by the BLM.
- Known sites and sites identified during the pre-construction cultural resources inventory surveys would be avoided.



### Paleontological Resources

If any paleontological resources are discovered during activities associated with the proposed project:

- DJR would immediately inform the BLM Authorized Officer.
- Activities in the vicinity of the discovery would be immediately suspended until written authorization to proceed is issued by the BLM Authorized Officer.
- The discovery would be protected from damage or looting.
- The Authorized Officer would ensure evaluation of the discovery as soon as possible.
- Appropriate measures to mitigate adverse effects to significant paleontological resources would be determined by the Authorized Officer after consulting with the operator.

### Visual Resources and Dark Skies

- Equipment not subject to safety requirements would be painted a BLM Standard Environmental Color (Covert Green) to minimize contrast with the surrounding landscape.
- If applicable, during reclamation, stockpiled rocks, if available, would be placed within the reclaimed area for erosion control and/or to discourage off-highway vehicle traffic (if requested by the BLM FFO). Rocks would be placed in a manner that visually blends with the adjacent, undisturbed landscape.
- Lights would be limited to those needed for safety during construction and operations.
- Lighting would be downward-facing or shielded where possible.

### Livestock Grazing and Rangeland Health Standards

- Livestock grazing operators in the vicinity of the proposed project area would be contacted prior to construction.
- Safety meetings would be conducted prior to construction to increase awareness of livestock, such as the presence of open range and driving speed to avoid livestock collisions.
- To the extent feasible, construction activities would not be conducted when livestock are present within the proposed project area.
- If livestock are present during construction, barriers would be placed to ensure that livestock do not come in contact with potential hazards. Barrier examples could include fencing of exposed ditch-type holes, covering of holes when personnel are not present on site, and containing contaminants, fluid leaks, or hazards that could cause injury to livestock.

### Public Health and Safety

- The hauling of equipment and materials on public roads would comply with New Mexico Department of Transportation regulations. Any accidents involving persons or property would be reported to the BLM FFO. DJR would notify the public of potential hazards by posting signage, having flaggers, or using lighted signs, as necessary.
- Worker safety incidents would be reported to the BLM FFO as required under NTL-3A (U.S. Geological Survey 1979). DJR would adhere to company safety policies and Occupational Safety and Health Administration (OSHA) regulations.
- Vehicles would be restricted to proposed and existing disturbance areas.
- The proposed site would have an informational sign, delineating Operator, Legal Description, etc.
- Oil and gas industry traffic is expected to adhere to all posted speed limits and signs. Drivers would be appropriately licensed and inspected.



Lay-Flat Pipeline BMP's

- Time construction activities at perennial, intermittent, and ephemeral drainage crossings (e.g., buried pipelines, culverts) to avoid high-flow conditions. When construction disturbs a flowing stream, utilize either a piped stream diversion or a cofferdam and pump to divert flow around the disturbed area.
- Design and construct surface pipelines at drainage crossings at an adequate height above possible flood levels. Bore/bury pipeline crossings below the surface deep enough to remain undisturbed by scour and fill processes typically associated with peak flows. Complete a hydraulic analysis during the pipeline design phase to avoid repeated maintenance of such a crossing and eliminate costly repairs and potential environmental degradation associated with pipeline breaks at stream crossings. Utilize horizontal directional boring techniques below perennial water bodies and/or wetland complexes when environmental circumstances allow.
- X-ray pipeline welds within 100 feet of a perennial stream to prevent leakage into the stream. Where pipelines cross streams that support Federal or State-listed threatened or endangered species or BLM-listed sensitive species, utilize additional safeguards (such as double-walled pipe, and remotely actuated block or check valves) on both sides of the stream.
- Avoid water courses when locating pipelines and flowlines; utilize road corridors wherever possible to minimize surface disturbance and provide better leak detection and access for installation and repair activities.
- Reclamation, including seeding, of temporarily disturbed areas along roads and pipelines, and of topsoil piles and berms, shall be completed within 30 days following completion of construction. Any such area on which construction is completed prior to December 1 shall be seeded during the remainder of the early winter season instead of during the following spring unless BLM approves otherwise based on weather. If road or pipeline construction occurs discontinuously (e.g., new segments installed as new pads are built) or continuously but with a total duration greater than 30 days, reclamation, including seeding, shall be phased such that no portion of the temporarily disturbed area remains in an un-reclaimed condition for longer than 30 days. BLM may authorize deviation from this requirement based on the season and the amount of work remaining on the entirety of the road or pipeline when the 30-day period has expired.
- To the extent practical, existing vegetation shall be preserved when clearing and grading for pads, roads, and pipelines. Cleared trees and rocks may be salvaged for redistribution over reshaped cut and-fill slopes or along linear features.



## Weeds

### *Farmington Field Office Standard Noxious/Invasive Weeds Design Features and Best Management Practices*

**Noxious/Invasive Weeds:** DJR will inventory the proposed site for the presence of noxious and invasive weeds. Noxious weeds are those listed on the New Mexico Noxious Weed List and USDA's Federal Noxious Weed List. The New Mexico Noxious Weed List or USDA's Noxious Weed List can be updated at any time and should be regularly checked for any changes. Invasive species may or may not be listed as a noxious weed but have been identified to likely cause economic or environmental harm or harm to human health. The following noxious weeds have been identified as occurring on lands within the boundaries of the Farmington Field Office (FFO). There are numerous invasive species on the FFO such as Russian thistle (*Salsola spp.*) and field bindweed (*Convolvulus arvensis*).

African rue ( <i>Peganum harmala</i> )	Leafy spurge ( <i>Euphorbia esula</i> )
Bull thistle ( <i>Cirsium vulgare</i> )	Musk thistle ( <i>Carduus nutans</i> )
Camelthorn ( <i>Alhagi pseudalhagi</i> )	Perennial pepperweed ( <i>Lepidium latifolium</i> )
Canada thistle ( <i>Cirsium arvense</i> )	Russian knapweed ( <i>Centaurea repens</i> )
Dalmation toadflax ( <i>Linaria genistifolia</i> )	Saltcedar ( <i>Tamarix spp.</i> )
Diffuse knapweed ( <i>Centaurea diffusa</i> )	Scotch thistle ( <i>Onopordum acanthium</i> )
Halogeton ( <i>Halogeton glomeratus</i> )	Spotted knapweed ( <i>Centaurea maculosa</i> )
Hoary cress ( <i>Cardaria draba</i> )	Yellow toadflax ( <i>Linaria vulgaris</i> )

- a. Any identified weeds will be treated prior to new surface disturbance if determined by the BLM FFO Noxious Weed Specialist. If a Weed Management Plan is not on file, a Weed Management Plan will be created. A Pesticide Use Proposal (PUP) will be submitted to and approved by the FFO Noxious Weed Specialist prior to application of pesticide. The FFO Noxious Weed Specialist (505-564-7600) can provide assistance in the development of the PUP.
- b. Vehicles and equipment should be inspected and cleaned prior to coming onto the site. This is especially important on vehicles from out of state or if coming from a weed- infested site.
- c. Fill dirt or gravel may be needed for excavation, road construction/repair, or as a surfacing material. If fill dirt or gravel will be required, the source shall be noxious weed free and approved by the BLM FFO Noxious Weed Specialist.
- d. The site shall be monitored for the life of the project for the presence of noxious weeds (includes maintenance and construction activities). If weeds are found the FFO Specialist shall be notified at (505) 564-7600 and provided with a Weed Management Plan and if necessary, a PUP. The BLM FFO can provide assistance developing the



Weed Management Plan and/or the PUP.

- e. Only pesticides authorized for use on BLM lands would be used and applied by a licensed pesticide applicator. The use of pesticides would comply with federal and state laws and used only in accordance with their registered use and limitations. DJR's weed-control contractor would contact the BLM-FFO prior to using these chemicals.

Noxious/invasive weed treatments must be reported to the BLM FFO Noxious Weed Specialist. A Pesticide Use Report (PUR) is required to report any mechanical, chemical, biological or cultural treatments used to eradicate, and/or control noxious or invasive species. Reporting will be required quarterly and annually or per request from the FFO Noxious Weed Specialist.

**Bare ground vegetation trim-out:**

Facility/ Structure	Required Trim-Out Buffer Distance	Pesticide Use for Vegetation Control	Pesticide Use Plan On file with BLM
Well Head	10'	Yes	Yes
Tanks/Containment	10'	Yes	Yes
Gas Lift Compressors	10'	Yes	Yes
Metering Equipment	10'	Yes	Yes
SCC (Smokeless Combustion Chamber	10'	Yes	Yes



**DJR OPERATING, LLC**

**BARE GROUND VEGETATION TRIM-OUT DESIGN**

**ATTACHED TO**

**SURFACE PLAN OF OPERATIONS**

Pesticide use for trim-out will require a PUP submitted for approval by the FFO Noxious Weed Specialist. A PUP is required *prior* to any treatment. Only pesticides authorized for use on BLM lands would be used and applied by a licensed pesticide applicator. The use of pesticides would comply with federal and state laws and used only in accordance with their registered use and limitations. DJR's weed-control contractor would contact the BLM-FFO prior to using these chemicals and provide PUR post treatment.

A PUR is required to report any mechanical, chemical, biological or cultural treatments used to eradicate, or control vegetation on site. Reporting will be required quarterly and annually or per request from the FFO Noxious Weed Specialist.





# 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  
#715H BETONNIE TSOSIE WASH UNIT  
Lease: NMNM116055  
SH: SW $\frac{1}{4}$ NW $\frac{1}{4}$  Section 3, T.22 N., R.8W.  
San Juan County, New Mexico  
BH: NE $\frac{1}{4}$ NE $\frac{1}{4}$  Section 10 T.22 N., R8 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, Farmington District Office, Branch of Reservoir Management, 6251 College Blvd. Suite A, Farmington, New Mexico 87402. 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, regulations, and Onshore Orders, 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.**
- B. Emergency program changes after hours contact:

**Virgil Lucero (505) 793-1836**  
**Joe Killins (505) 564-7736**



**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 125862

**CONDITIONS**

Operator: DJR OPERATING, LLC 1 Road 3263 Aztec, NM 87410	OGRID: 371838
	Action Number: 125862
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

**CONDITIONS**

Created By	Condition	Condition Date
kpickford	Notify OCD 24 hours prior to casing & cement	7/19/2022
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104	7/19/2022
kpickford	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	7/19/2022
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing	7/19/2022
kpickford	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	7/19/2022