

Form 3160-3
(June 2015)FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☐ DRILL ☐ REENTER 1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other 1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone		5. Lease Serial No. 6. If Indian, Allottee or Tribe Name 7. If Unit or CA Agreement, Name and No. 8. Lease Name and Well No.
2. Name of Operator		9. API Well No. 30-045-38459
3a. Address	3b. Phone No. (include area code)	10. Field and Pool, or Exploratory
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		11. Sec., T. R. M. or Blk. and Survey or Area
14. Distance in miles and direction from nearest town or post office*		12. County or Parish
13. State		
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
24. Attachments		

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

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

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

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

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



(Continued on page 2)

*(Instructions on page 2)

Additional Operator Remarks

Location of Well

0. SHL: NWSW / 2413 FSL / 51 FWL / TWSP: 24N / RANGE: 8W / SECTION: 16 / LAT: 36.313567 / LONG: -107.695857 (TVD: 0 feet, MD: 0 feet)

PPP: NWSE / 2402 FSL / 1472 FEL / TWSP: 24N / RANGE: 8W / SECTION: 17 / LAT: 36.31363 / LONG: -107.701023 (TVD: 5532 feet, MD: 5980 feet)

BHL: SWSW / 620 FSL / 334 FWL / TWSP: 24N / RANGE: 8W / SECTION: 8 / LAT: 36.323156 / LONG: -107.712746 (TVD: 5573 feet, MD: 10926 feet)

BLM Point of Contact

Name: JEFFREY J TAFOYA

Title: Assistant Field Manager

Phone: (505) 564-7672

Email: JTAFOYA@BLM.GOV

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

WELL LOCATION INFORMATION

API Number 30-045-38459	Pool Code 98194	Pool Name CROW CANYON MANCOS OIL POOL
Property Code 325183	Property Name CROW CANYON UNIT	Well Number 130H
OGRID No. 371838	Operator Name DJR OPERATING, LLC	Ground Level Elevation 6794'
Surface Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal		Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Surface Location (SHL)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
L	16	24N	8W		2413' SOUTH	51' WEST	36.313567° N	107.695857° W	SAN JUAN

Bottom Hole Location (BHL)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
M	8	24N	8W		620' SOUTH	334' WEST	36.323156° N	107.712746° W	SAN JUAN

Dedicated Acres SEC 17: NW/SE, NE/SE, SE/NE, SW/NE, NW/NE, SE/NW, NE/NW & NW/NW (320 AC.); SEC 8: SW/SW & SE/SW (80 AC.) = 400 ACRES	PENETRATED SPACING UNIT: Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N) N	Consolidation Code UNIT
Order Numbers: R-14090 R-14090A		Well Setbacks are under Common Ownership: ☒ Yes ☐ No		

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
L	16	24N	8W		2413' SOUTH	51' WEST	36.313567° N	107.695857° W	SAN JUAN

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
J	17	24N	8W		2402' SOUTH	1472' EAST	36.313630° N	107.701023° W	SAN JUAN

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft from the N/S	Ft from the E/W	Latitude	Longitude	County
M	8	24N	8W		620' SOUTH	334' WEST	36.323156° N	107.712746° W	SAN JUAN

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

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

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

Shaw-Marie Ford
Signature

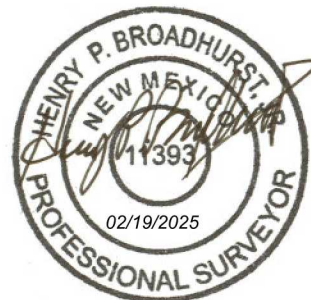
2/19/2025
Date

Shaw-Marie Ford
Printed Name

sford@enduringresources.com
E-mail Address

SURVEYOR CERTIFICATIONS

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



Signature and Seal of Professional Surveyor:

Certificate Number

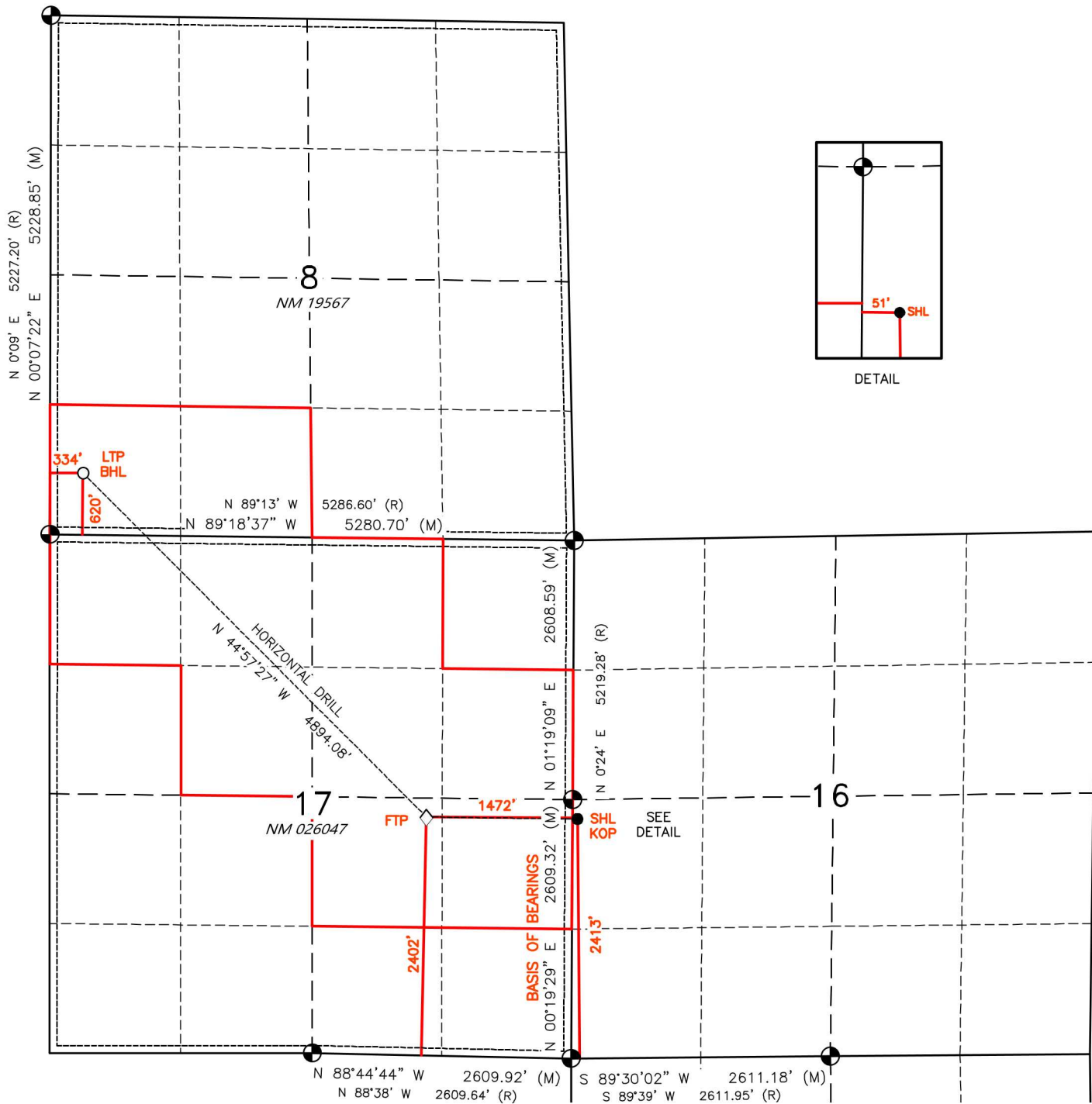
11393

Date of Survey

JUNE 18, 2021

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

FND 2 3/4" BC
GLO 1947



SURFACE LOCATION (SHL) ●
2413' FSL 51' FWL
SEC. 16, T24N, R8W
LAT. 36.313567° N (NAD83)
LONG. 107.695857° W (NAD83)

FIRST TAKE POINT (FTP) ◇
2402' FSL 1472' FEL
SEC. 17, T24N, R8W
LAT. 36.313630° N (NAD83)
LONG. 107.701023° W (NAD83)

BOTTOM HOLE LOCATION (BHL) ○
620' FSL 334' FWL
SEC. 8, T24N, R8W
LAT. 36.323156° N (NAD83)
LONG. 107.712746° W (NAD83)

KICK OFF POINT (KOP) △
2413' FSL 51' FWL
SEC. 16, T24N, R8W
LAT. 36.313567° N (NAD83)
LONG. 107.695857° W (NAD83)

LAST TAKE POINT (LTP) □
620' FSL 334' FWL
SEC. 8, T24N, R8W
LAT. 36.323156° N (NAD83)
LONG. 107.712746° W (NAD83)

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 - Plan Description

Effective May 25, 2021

I. Operator: DJR Operating, LLC **OGRID:** 371838 **Date:** 2/14/2025

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

If Other, please describe:

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

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Crow Canyon Unit 130H	TBD	L-16-24N-8W	2413 FSL x 51 FWL	561	1273	196
Crow Canyon Unit 131H	TBD	L-16-24N-8W	2416 FSL x 110 FWL	850	1929	298
Crow Canyon Unit 134H	TBD	L-16-24N-8W	2415 FSL x 91 FWL	489	1109	171
Crow Canyon Unit 135H	TBD	L-16-24N-8W	2417 FSL x 130 FWL	302	685	106
Crow Canyon Unit 136H	TBD	L-16-24N-8W	2412 FSL x 31 FWL	651	1476	228
Crow Canyon Unit 137H	TBD	L-16-24N-8W	2414 FSL x 70 FWL	549	1244	192
				3-year Decline	3-year Decline	3-year Decline
Crow Canyon Unit 130H	TBD	L-16-24N-8W	2413 FSL x 51 FWL	127	507	44
Crow Canyon Unit 131H	TBD	L-16-24N-8W	2416 FSL x 110 FWL	192	768	67
Crow Canyon Unit 134H	TBD	L-16-24N-8W	2415 FSL x 91 FWL	110	442	39
Crow Canyon Unit 135H	TBD	L-16-24N-8W	2417 FSL x 130 FWL	68	273	24
Crow Canyon Unit 136H	TBD	L-16-24N-8W	2412 FSL x 31 FWL	147	588	51
Crow Canyon Unit 137H	TBD	L-16-24N-8W	2414 FSL x 70 FWL	124	496	43

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
Crow Canyon Unit 130H	TBD	7/18/2026	7/26/2026	8/2/2026	8/9/2026	8/11/2026
Crow Canyon Unit 131H	TBD	7/19/2026	7/27/2026	8/3/2026	8/10/2026	8/12/2026
Crow Canyon Unit 134H	TBD	7/20/2026	7/28/2026	8/4/2026	8/11/2026	8/13/2026
Crow Canyon Unit 135H	TBD	7/21/2026	7/29/2026	8/5/2026	8/12/2026	8/14/2026
Crow Canyon Unit 136H	TBD	7/22/2026	7/30/2026	8/6/2026	8/13/2026	8/15/2026
Crow Canyon Unit 137H	TBD	7/23/2026	7/31/2026	8/7/2026	8/14/2026	8/16/2026

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

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

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

Section 2 – Enhanced Plan
EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications
Effective May 25, 2021

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

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

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

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

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

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

Section 4 - Notices

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

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

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

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

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

Signature: <i>Shaw-Marie Ford</i>
Printed Name: Shaw-Marie Ford
Title: Regulatory Specialist
E-mail Address: sford@enduringresources.com
Date: 2/14/2025
Phone: 505-716-3297
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:



DJR OPERATING, LLC.
OGRID NO: 371838
NATURAL GAS MANAGEMENT PLAN
Crow Canyon Unit 130H, 131H, 134H, 135H, 136H and 137H

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
Crow Canyon Unit 130H, 131H, 134H, 135H, 136H and 137H

VENTING and FLARING

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

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

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

DJR will only flare gas during the following times:

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



DJR OPERATING, LLC.
OGRID NO: 371838
NATURAL GAS MANAGEMENT PLAN
Crow Canyon Unit 130H, 131H, 134H, 135H, 136H and 137H

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.
OGRID NO: 371838
NATURAL GAS MANAGEMENT PLAN
Crow Canyon Unit 130H, 131H, 134H, 135H, 136H and 137H

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

Crow Canyon Unit 130H

San Juan County, New Mexico

Surface Location

51-ft FWL & 2413-ft FSL
 Sec 16 T24N R08W
 Graded Elevation 6794' MSL
 RKB Elevation 6808' (14' KB)

SHL Geographical Coordinates (NAD-83)

Latitude 36.3135670° N
 Longitude 107.6958570° W

Kick Off Point for Horizontal Build Curve

5105-ft MD
 4980-ft TVD

Local Coordinates (from SHL)

335-ft South
 991-ft West

Heel Location (Pay zone entry)

1472-ft FEL & 2402-ft FSL
 Sec 17 T24N R08W

Heel Geographical Coordinates (NAD-83)

Latitude 36.31363011° N
 Longitude 107.70102277° W

Bottom Hole Location (TD)

334-ft FWL & 620-ft FSL
 Sec 8 T24N R08W

BHL Geographical Coordinates (NAD-83)

Latitude 36.3231561° N
 Longitude 107.7127458° W

Well objectives

This well is planned as a 4890-ft lateral in the Gallup C sand.

Bottom Hole temperature and pressure

The temperature in the Gallup C horizontal objective is 145°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	1164	1157	Sd	W	8.3	8.4 – 8.8
Kirtland	1297	1286	Sh	-	8.3	8.4 – 8.8
Fruitland	1698	1675	C	G	8.3	9.0 - 9.5
Pictured Cliffs	1924	1894	Sd	W	8.3	9.0 - 9.5
Lewis	2001	1969	Sh	-		9.0 - 9.5
Chacra	2772	2716	Sd	-	8.3	9.0 - 9.5
Menefee	3457	3381	Sd, C	G	8.3	9.0 - 9.5
Point Lookout	4363	4260	Sd	-	8.3	9.0 - 9.5
Mancos	4580	4470	Sh	-		9.0 - 9.5
Mancos Silt	4956	4835	Slt	O/G	6.6	9.0 - 9.5
Gallup A	5424	5268	Slt	O/G	6.6	9.0 - 9.5
Gallup B	5475	5308	Sd	O/G	6.6	8.8 -9.0
Gallup C	5646	5421	Sd	O/G	6.6	8.8 -9.0
Target	6032	5535	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	5980	surf	5532	surface
4-1/2"	6-1/8"	11.6	P-110	BTC	5695	10926	5447	5573	5695

Note: all casing will be new

Rev 0

**Casing Design Load Cases**

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

Note #

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

Casing Design Factors

		Design Factors			
Casing string	Casing OD	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 Design9-5/8" Surface Casing

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

7" Intermediate Casing

	<u>Lead</u>	<u>Tail</u>
	BJ Services	BJ Services
Type	III	Poz/G
Planned top	Surface	4605-ft
Density (ppg)	12.30	13.50
Yield (cf/sx)	2.34	1.50
Mix water (gal/sx)	13.26	7.20
Volume (sx)	449	220
Volume (bbls)	187	59
Volume (cu.ft.)	1050	329
Excess %	55	55



Rev 0

4-1/2" Production Liner

	BJ Services
Type	Poz/G
Planned top	5695-ft
Density (ppg)	13.3
Yield (cf/sx)	1.56
Mix water (gal/sx)	7.71
Volume (sx)	439
Volume (bbls)	122
Volume (cu.ft)	686
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 – 5980	9.0 – 9.5	38 – 45	8 – 14	<20
Production	Low solids, non-dispersed	5980 – 10926	8.8 – 9.2	34 – 38	6 – 8	6 – 8

Cores, tests and logs

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

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

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

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

Cuttings and drilling fluids management

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

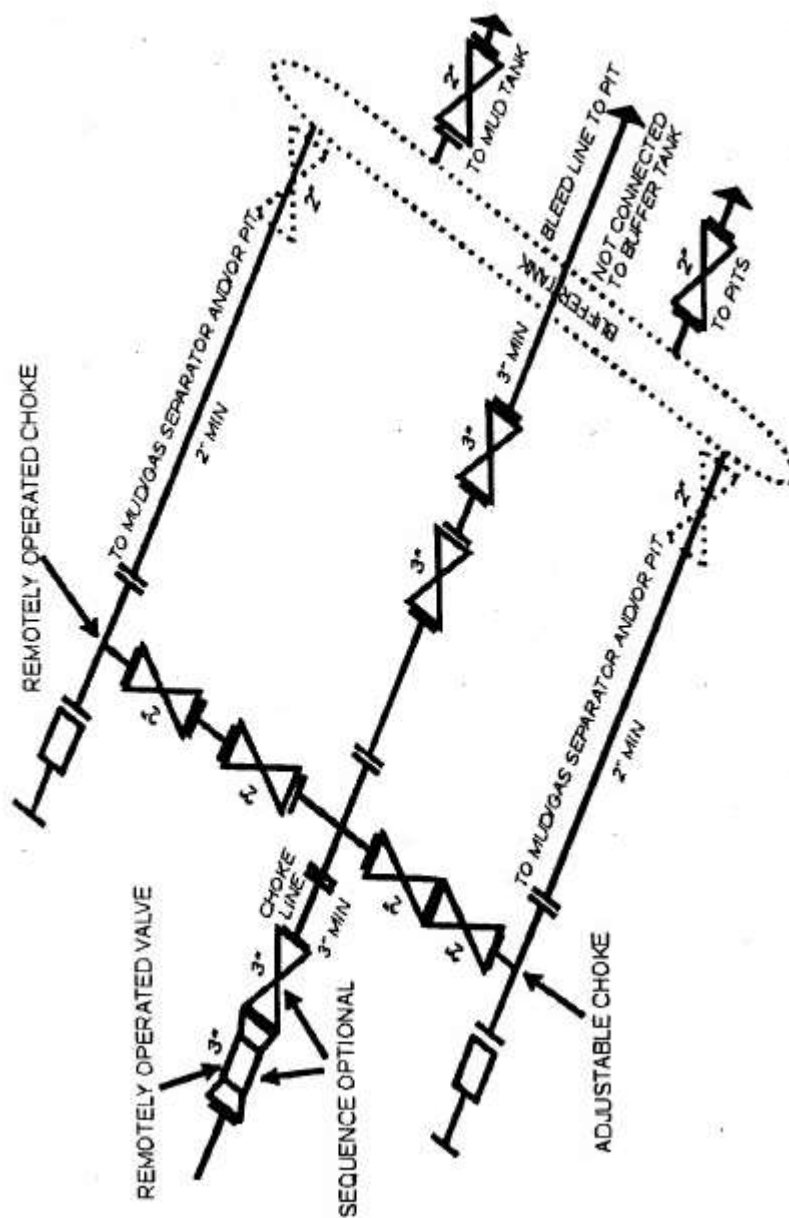
Completion

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



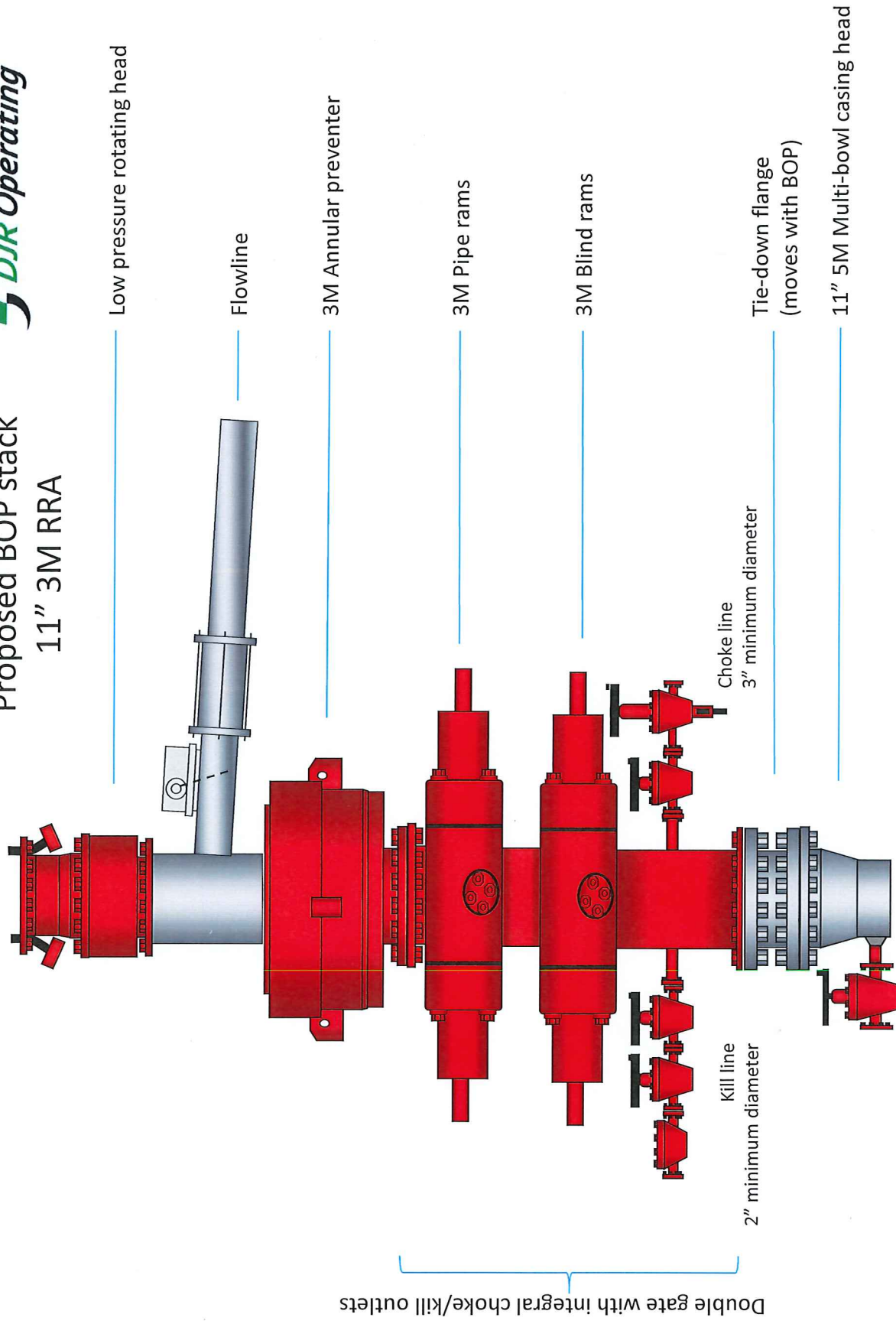
Choke Manifold

Actual system to conform with Onshore Order 2





Proposed BOP stack 11" 3M RRA





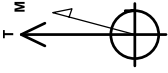
Company: DJR Operating
Project: Crow Canyon Unit
Site: L16 2408 Pad
Well: # 130H
Wellbore: Original Drilling
Design: APD

WELL DETAILS: # 130H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0	0	1933467.24	2763593.86	36.31356697	-107.69585700

GL 6794' & RKB 14' @ 6808ft
Created By: Janie Collins Date: 18:46, June 23 2021

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



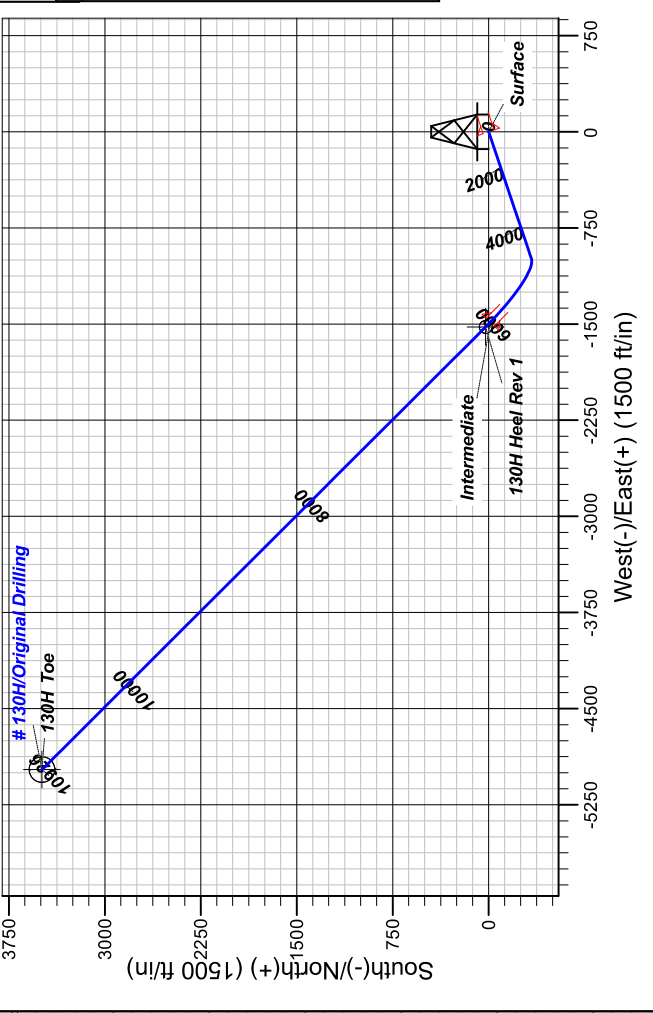
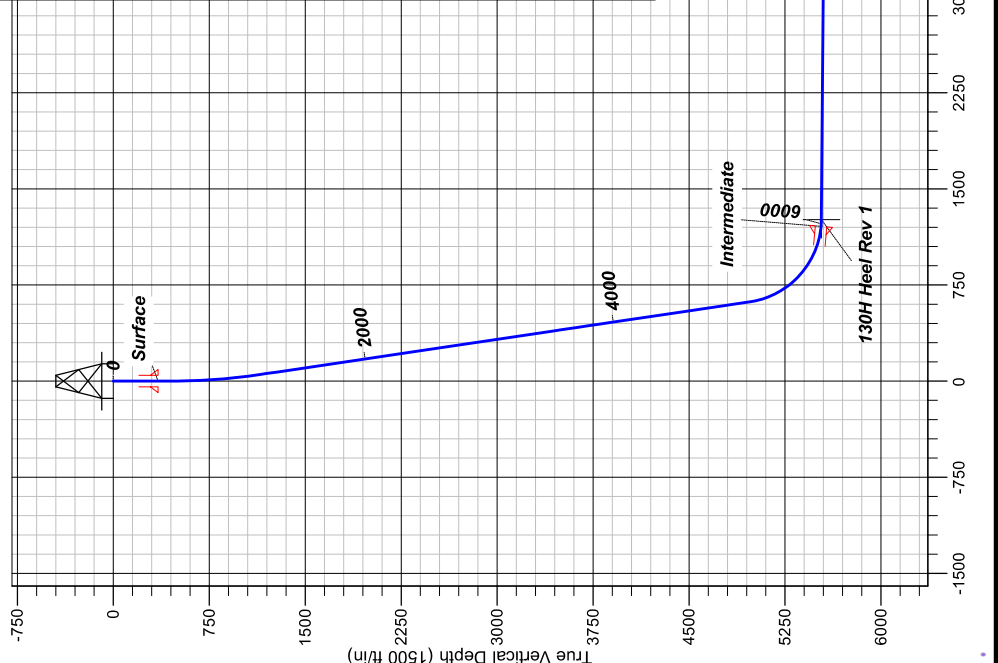
Azimuths to True North
Magnetic North: 8.0°
Magnetic Field
Strength: 49374.9 nT
Dip Angle: 62.59°
Date: 6/11/2021
Model: IGRF2015

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
130H Heel Rev 1	5535	23	-1522	1933488.11	2762071.92	36.31363011	-107.70102277
130H Toe	5573	3491	-4975	1936951.31	2758613.86	36.32315610	-107.71274580

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
0	0.00	0.00	0	0	0	0.00	0.00	0	
450	0.00	0.00	450	0	0	0.00	0.00	0	
1153	14.06	251.34	1146	-27	-81	2.00	251.34	51	
5105	14.06	251.34	4980	-335	-991	0.00	0.00	619	
6032	89.55	315.12	5535	23	-1522	9.00	64.57	1259	130H Heel Rev 1
10926	89.55	315.12	5573	3491	-4975	0.00	0.00	6078	130H Toe



FORMATION DETAILS

MDPath	Formation
1157	Ojo Alamo
1286	Kirtland
1675	Fruitland
1894	Pictured Cliffs
1989	Lewis
2716	Chacra
3381	Menefee
4260	Point Lookout
4470	Mancos
4835	Mancos Silt
5268	Gallup A
5308	Gallup B
5421	Gallup C



DJR Operating

Crow Canyon Unit

L16 2408 Pad

130H - Slot 2

Original Drilling

Plan: APD

Standard Planning Report

23 June, 2021





Database:	Grand Junction	Local Co-ordinate Reference:	Well # 130H - Slot 2
Company:	DJR Operating	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Project:	Crow Canyon Unit	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site:	L16 2408 Pad	North Reference:	True
Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

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

Site	L16 2408 Pad				
Site Position:		Northing:	1,933,466.49 usft	Latitude:	36.31356497
From:	Lat/Long	Easting:	2,763,573.83 usft	Longitude:	-107.69592500
Position Uncertainty:	0 ft	Slot Radius:	13.20 in	Grid Convergence:	0.08

Well	# 130H - Slot 2					
Well Position	+N/-S	1 ft	Northing:	1,933,467.25 usft	Latitude:	36.31356697
	+E/-W	20 ft	Easting:	2,763,593.86 usft	Longitude:	-107.69585700
Position Uncertainty		0 ft	Wellhead Elevation:		Ground Level:	6794 ft

Wellbore	Original Drilling				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	6/11/2021	8.78	62.94	49,374.63320490

Design	APD			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0	0	0	305.06

Plan Survey Tool Program	Date	6/23/2021		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0	10,926 APD (Original Drilling)	MWD+IGRF	
			OWSG MWD + IGRF or WMM	

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0	0.00	0.00	0	0	0	0.00	0.00	0.00	0.00	
450	0.00	0.00	450	0	0	0.00	0.00	0.00	0.00	
1153	14.06	251.34	1146	-27	-81	2.00	2.00	0.00	251.34	
5105	14.06	251.34	4980	-335	-991	0.00	0.00	0.00	0.00	
6032	89.55	315.12	5535	23	-1522	9.00	8.15	6.88	64.57	130H Heel Rev 1
10,926	89.55	315.12	5573	3491	-4975	0.00	0.00	0.00	0.00	130H Toe



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 130H - Slot 2
Company:	DJR Operating	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Project:	Crow Canyon Unit	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site:	L16 2408 Pad	North Reference:	True
Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0	0.00	0.00	0	0	0	0	0.00	0.00	0.00
100	0.00	0.00	100	0	0	0	0.00	0.00	0.00
200	0.00	0.00	200	0	0	0	0.00	0.00	0.00
300	0.00	0.00	300	0	0	0	0.00	0.00	0.00
400	0.00	0.00	400	0	0	0	0.00	0.00	0.00
450	0.00	0.00	450	0	0	0	0.00	0.00	0.00
500	1.00	251.34	500	0	0	0	2.00	2.00	0.00
600	3.00	251.34	600	-1	-4	2	2.00	2.00	0.00
700	5.00	251.34	700	-3	-10	6	2.00	2.00	0.00
800	7.00	251.34	799	-7	-20	13	2.00	2.00	0.00
900	9.00	251.34	898	-11	-33	21	2.00	2.00	0.00
1000	11.00	251.34	997	-17	-50	31	2.00	2.00	0.00
1100	13.00	251.34	1094	-23	-70	43	2.00	2.00	0.00
1153	14.06	251.34	1146	-27	-81	51	2.00	2.00	0.00
1200	14.06	251.34	1192	-31	-92	58	0.00	0.00	0.00
1300	14.06	251.34	1289	-39	-115	72	0.00	0.00	0.00
1400	14.06	251.34	1386	-47	-138	86	0.00	0.00	0.00
1500	14.06	251.34	1483	-54	-161	101	0.00	0.00	0.00
1600	14.06	251.34	1580	-62	-184	115	0.00	0.00	0.00
1700	14.06	251.34	1677	-70	-207	129	0.00	0.00	0.00
1800	14.06	251.34	1774	-78	-230	144	0.00	0.00	0.00
1900	14.06	251.34	1871	-86	-253	158	0.00	0.00	0.00
2000	14.06	251.34	1968	-93	-276	173	0.00	0.00	0.00
2100	14.06	251.34	2065	-101	-299	187	0.00	0.00	0.00
2200	14.06	251.34	2162	-109	-322	201	0.00	0.00	0.00
2300	14.06	251.34	2259	-117	-345	216	0.00	0.00	0.00
2400	14.06	251.34	2356	-124	-368	230	0.00	0.00	0.00
2500	14.06	251.34	2453	-132	-391	244	0.00	0.00	0.00
2600	14.06	251.34	2550	-140	-414	259	0.00	0.00	0.00
2700	14.06	251.34	2647	-148	-437	273	0.00	0.00	0.00
2800	14.06	251.34	2744	-156	-460	288	0.00	0.00	0.00
2900	14.06	251.34	2841	-163	-483	302	0.00	0.00	0.00
3000	14.06	251.34	2938	-171	-506	316	0.00	0.00	0.00
3100	14.06	251.34	3035	-179	-530	331	0.00	0.00	0.00
3200	14.06	251.34	3132	-187	-553	345	0.00	0.00	0.00
3300	14.06	251.34	3229	-194	-576	359	0.00	0.00	0.00
3400	14.06	251.34	3326	-202	-599	374	0.00	0.00	0.00
3500	14.06	251.34	3423	-210	-622	388	0.00	0.00	0.00
3600	14.06	251.34	3520	-218	-645	403	0.00	0.00	0.00
3700	14.06	251.34	3617	-226	-668	417	0.00	0.00	0.00
3800	14.06	251.34	3714	-233	-691	431	0.00	0.00	0.00
3900	14.06	251.34	3811	-241	-714	446	0.00	0.00	0.00
4000	14.06	251.34	3908	-249	-737	460	0.00	0.00	0.00
4100	14.06	251.34	4005	-257	-760	474	0.00	0.00	0.00
4200	14.06	251.34	4102	-264	-783	489	0.00	0.00	0.00
4300	14.06	251.34	4199	-272	-806	503	0.00	0.00	0.00
4400	14.06	251.34	4296	-280	-829	518	0.00	0.00	0.00
4500	14.06	251.34	4393	-288	-852	532	0.00	0.00	0.00
4600	14.06	251.34	4490	-296	-875	546	0.00	0.00	0.00
4700	14.06	251.34	4587	-303	-898	561	0.00	0.00	0.00
4800	14.06	251.34	4684	-311	-921	575	0.00	0.00	0.00
4900	14.06	251.34	4781	-319	-944	589	0.00	0.00	0.00
5000	14.06	251.34	4878	-327	-967	604	0.00	0.00	0.00
5100	14.06	251.34	4975	-334	-990	618	0.00	0.00	0.00



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 130H - Slot 2
Company:	DJR Operating	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Project:	Crow Canyon Unit	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site:	L16 2408 Pad	North Reference:	True
Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5105	14.06	251.34	4980	-335	-991	619	0.00	0.00	0.00
5200	19.29	275.22	5071	-337	-1018	639	9.00	5.52	25.24
5300	26.66	288.62	5163	-328	-1055	675	9.00	7.38	13.39
5400	34.77	296.32	5249	-309	-1102	725	9.00	8.11	7.71
5500	43.20	301.37	5326	-278	-1157	788	9.00	8.43	5.04
5600	51.79	305.03	5394	-238	-1219	861	9.00	8.59	3.66
5700	60.47	307.91	5449	-188	-1285	944	9.00	8.68	2.88
5800	69.20	310.32	5492	-131	-1356	1034	9.00	8.73	2.42
5900	77.96	312.48	5520	-68	-1427	1130	9.00	8.76	2.15
6000	86.74	314.49	5534	0	-1499	1227	9.00	8.78	2.01
6032	89.55	315.12	5535	23	-1522	1259	9.00	8.78	1.98
6100	89.55	315.12	5535	71	-1570	1326	0.00	0.00	0.00
6200	89.55	315.12	5536	142	-1640	1424	0.00	0.00	0.00
6300	89.55	315.12	5537	213	-1711	1523	0.00	0.00	0.00
6400	89.55	315.12	5537	284	-1782	1621	0.00	0.00	0.00
6500	89.55	315.12	5538	355	-1852	1720	0.00	0.00	0.00
6600	89.55	315.12	5539	425	-1923	1818	0.00	0.00	0.00
6700	89.55	315.12	5540	496	-1993	1917	0.00	0.00	0.00
6800	89.55	315.12	5541	567	-2064	2015	0.00	0.00	0.00
6900	89.55	315.12	5541	638	-2134	2114	0.00	0.00	0.00
7000	89.55	315.12	5542	709	-2205	2212	0.00	0.00	0.00
7100	89.55	315.12	5543	780	-2275	2310	0.00	0.00	0.00
7200	89.55	315.12	5544	851	-2346	2409	0.00	0.00	0.00
7300	89.55	315.12	5545	922	-2417	2507	0.00	0.00	0.00
7400	89.55	315.12	5545	992	-2487	2606	0.00	0.00	0.00
7500	89.55	315.12	5546	1063	-2558	2704	0.00	0.00	0.00
7600	89.55	315.12	5547	1134	-2628	2803	0.00	0.00	0.00
7700	89.55	315.12	5548	1205	-2699	2901	0.00	0.00	0.00
7800	89.55	315.12	5548	1276	-2769	3000	0.00	0.00	0.00
7900	89.55	315.12	5549	1347	-2840	3098	0.00	0.00	0.00
8000	89.55	315.12	5550	1418	-2910	3197	0.00	0.00	0.00
8100	89.55	315.12	5551	1488	-2981	3295	0.00	0.00	0.00
8200	89.55	315.12	5552	1559	-3052	3394	0.00	0.00	0.00
8300	89.55	315.12	5552	1630	-3122	3492	0.00	0.00	0.00
8400	89.55	315.12	5553	1701	-3193	3590	0.00	0.00	0.00
8500	89.55	315.12	5554	1772	-3263	3689	0.00	0.00	0.00
8600	89.55	315.12	5555	1843	-3334	3787	0.00	0.00	0.00
8700	89.55	315.12	5556	1914	-3404	3886	0.00	0.00	0.00
8800	89.55	315.12	5556	1984	-3475	3984	0.00	0.00	0.00
8900	89.55	315.12	5557	2055	-3545	4083	0.00	0.00	0.00
9000	89.55	315.12	5558	2126	-3616	4181	0.00	0.00	0.00
9100	89.55	315.12	5559	2197	-3687	4280	0.00	0.00	0.00
9200	89.55	315.12	5559	2268	-3757	4378	0.00	0.00	0.00
9300	89.55	315.12	5560	2339	-3828	4477	0.00	0.00	0.00
9400	89.55	315.12	5561	2410	-3898	4575	0.00	0.00	0.00
9500	89.55	315.12	5562	2480	-3969	4673	0.00	0.00	0.00
9600	89.55	315.12	5563	2551	-4039	4772	0.00	0.00	0.00
9700	89.55	315.12	5563	2622	-4110	4870	0.00	0.00	0.00
9800	89.55	315.12	5564	2693	-4180	4969	0.00	0.00	0.00
9900	89.55	315.12	5565	2764	-4251	5067	0.00	0.00	0.00
10,000	89.55	315.12	5566	2835	-4322	5166	0.00	0.00	0.00
10,100	89.55	315.12	5567	2906	-4392	5264	0.00	0.00	0.00
10,200	89.55	315.12	5567	2976	-4463	5363	0.00	0.00	0.00
10,300	89.55	315.12	5568	3047	-4533	5461	0.00	0.00	0.00



Lonestar Consulting, LLC
Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well # 130H - Slot 2
Company:	DJR Operating	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Project:	Crow Canyon Unit	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site:	L16 2408 Pad	North Reference:	True
Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,400	89.55	315.12	5569	3118	-4604	5560	0.00	0.00	0.00	
10,500	89.55	315.12	5570	3189	-4674	5658	0.00	0.00	0.00	
10,600	89.55	315.12	5570	3260	-4745	5757	0.00	0.00	0.00	
10,700	89.55	315.12	5571	3331	-4815	5855	0.00	0.00	0.00	
10,800	89.55	315.12	5572	3402	-4886	5953	0.00	0.00	0.00	
10,900	89.55	315.12	5573	3473	-4957	6052	0.00	0.00	0.00	
10,926	89.55	315.12	5573	3491	-4975	6078	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
130H Heel Rev 1	0.00	0.00	5535	23	-1522	1,933,488.11	2,762,071.93	36.31363011	-107.70102278	
- plan hits target center										
- Circle (radius 50)										
130H Toe	0.00	0.00	5573	3491	-4975	1,936,951.32	2,758,613.86	36.32315610	-107.71274580	
- plan hits target center										
- Circle (radius 100)										

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
350	350	Surface	9.63	12.25	
5980	5532	Intermediate	7.00	8.75	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1164	1157	Ojo Alamo		0.00	0.00	
1297	1286	Kirtland		0.00	0.00	
1698	1675	Fruitland		0.00	0.00	
1924	1894	Pictured Cliffs		0.00	0.00	
2001	1969	Lewis		0.00	0.00	
2772	2716	Chacra		0.00	0.00	
3457	3381	Menefee		0.00	0.00	
4363	4260	Point Lookout		0.00	0.00	
4580	4470	Mancos		0.00	0.00	
4956	4835	Mancos Silt		0.00	0.00	
5424	5268	Gallup A		0.00	0.00	
5475	5308	Gallup B		0.00	0.00	
5646	5421	Gallup C		0.00	0.00	



DJR Operating

Crow Canyon Unit

L16 2408 Pad

130H

Original Drilling

APD

Anticollision Report

24 June, 2021





Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 130H - Slot 2
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Reference	APD		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 10,000ft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	6/24/2021		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0	10,926	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						
L16 2408 Pad						
# 131H - Original Drilling - APD	1430	1444	59	49	5.859	CC
# 131H - Original Drilling - APD	4900	4914	73	24	1.486	Level 3, ES, SF
# 134H - Original Drilling - APD	450	450	40	37	14.242	
# 134H - Original Drilling - APD	500	500	40	37	12.719	ES
# 134H - Original Drilling - APD	10,926	10,446	1313	1025	4.567	SF
# 135H - Original Drilling - APD	450	450	80	77	28.372	CC
# 135H - Original Drilling - APD	500	501	80	77	25.262	ES
# 135H - Original Drilling - APD	900	902	104	98	17.051	SF
# 136H - Original Drilling - APD	450	450	20	17	7.115	CC
# 136H - Original Drilling - APD	700	698	21	16	4.579	ES
# 136H - Original Drilling - APD	1100	1096	28	20	3.539	SF
# 137H - Original Drilling - APD	556	557	20	16	5.637	CC
# 137H - Original Drilling - APD	700	702	20	16	4.499	ES
# 137H - Original Drilling - APD	10,926	10,611	675	396	2.419	SF
Mesa #4 SWD - OH - OH	349	360	4051	4039	337.938	CC
Mesa #4 SWD - OH - OH	600	611	4054	4034	197.971	ES
Mesa #4 SWD - OH - OH	4800	4650	4902	4741	30.487	SF

Offset Design: L16 2408 Pad - # 131H - Original Drilling - APD													Offset Site Error: 0 ft	
Survey Program: 0-MWD+IGRF				Rule Assigned:							Offset Well Error: 0 ft			
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Distance					Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0	0	0	0	0	0	86.86	3	60	60					
100	100	100	100	0	0	86.86	3	60	60	60	0.31	194.287		
200	200	200	200	1	1	86.86	3	60	60	59	1.03	58.422		
300	300	300	300	1	1	86.86	3	60	60	58	1.74	34.380		
400	400	400	400	1	1	86.86	3	60	60	57	2.46	24.357		
450	450	450	450	1	1	86.86	3	60	60	57	2.82	21.258		
500	500	501	501	2	2	-164.45	3	59	60	57	3.17	18.907		
600	600	603	603	2	2	-164.28	2	56	60	56	3.85	15.533		
700	700	705	705	2	2	-163.94	-1	49	60	55	4.55	13.147		
800	799	807	806	3	3	-163.43	-5	39	60	55	5.26	11.375		
900	898	909	907	3	3	-162.74	-10	26	60	54	5.97	10.003		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 130H - Slot 2
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 131H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference	Offset	Rule Assigned:												
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
1000	997	1011	1007	3	4	-161.89	-17	9	60	53	6.70	8.906		
1100	1094	1113	1107	4	4	-160.87	-24	-11	60	52	7.44	8.004		
1153	1146	1167	1160	4	4	-160.25	-29	-23	60	52	7.85	7.587		
1200	1192	1214	1205	4	5	-159.70	-33	-34	60	51	8.22	7.236		
1300	1289	1314	1302	5	5	-158.51	-42	-57	59	50	9.05	6.573		
1400	1386	1414	1399	6	6	-157.33	-51	-80	59	50	9.89	6.009		
1430	1414	1444	1428	6	6	-156.98	-54	-87	59	49	10.15	5.859 CC		
1500	1483	1514	1496	6	6	-156.14	-60	-104	59	49	10.76	5.526		
1600	1580	1614	1593	7	7	-154.96	-69	-127	59	48	11.64	5.108		
1700	1677	1714	1690	7	7	-153.77	-78	-150	60	47	12.55	4.743		
1800	1774	1814	1786	8	8	-152.59	-87	-173	60	46	13.48	4.423		
1900	1871	1914	1883	8	8	-151.41	-96	-196	60	45	14.42	4.140		
2000	1968	2014	1980	9	9	-150.24	-105	-219	60	44	15.39	3.889		
2100	2065	2114	2077	10	10	-149.07	-114	-242	60	44	16.37	3.665		
2200	2162	2214	2174	10	10	-147.91	-123	-265	60	43	17.37	3.464		
2300	2259	2314	2271	11	11	-146.76	-132	-288	60	42	18.39	3.284		
2400	2356	2414	2368	11	11	-145.62	-141	-311	61	41	19.43	3.120		
2500	2453	2514	2464	12	12	-144.48	-150	-334	61	40	20.49	2.972		
2600	2550	2614	2561	12	13	-143.35	-159	-358	61	40	21.56	2.837		
2700	2647	2714	2658	13	13	-142.24	-168	-381	61	39	22.64	2.714		
2800	2744	2814	2755	14	14	-141.14	-177	-404	62	38	23.74	2.602		
2900	2841	2914	2852	14	14	-140.04	-186	-427	62	37	24.86	2.499		
3000	2938	3014	2949	15	15	-138.96	-195	-450	63	37	25.99	2.405		
3100	3035	3114	3046	15	16	-137.90	-204	-473	63	36	27.14	2.318		
3200	3132	3214	3143	16	16	-136.84	-213	-496	63	35	28.29	2.238		
3300	3229	3314	3239	17	17	-135.81	-222	-519	64	34	29.46	2.164		
3400	3326	3414	3336	17	17	-134.78	-231	-542	64	34	30.64	2.095		
3500	3423	3514	3433	18	18	-133.77	-240	-565	65	33	31.83	2.032		
3600	3520	3614	3530	18	19	-132.78	-249	-589	65	32	33.03	1.973		
3700	3617	3714	3627	19	19	-131.80	-258	-612	66	31	34.24	1.918		
3800	3714	3814	3724	20	20	-130.83	-267	-635	66	31	35.46	1.867		
3900	3811	3914	3821	20	20	-129.89	-276	-658	67	30	36.68	1.820		
4000	3908	4014	3918	21	21	-128.95	-285	-681	67	29	37.92	1.776		
4100	4005	4114	4014	21	22	-128.04	-294	-704	68	29	39.16	1.735		
4200	4102	4214	4111	22	22	-127.14	-303	-727	69	28	40.40	1.696		
4300	4199	4314	4208	22	23	-126.25	-312	-750	69	27	41.65	1.660		
4400	4296	4414	4305	23	23	-125.38	-321	-773	70	27	42.91	1.626		
4500	4393	4514	4402	24	24	-124.53	-330	-796	70	26	44.17	1.595		
4600	4490	4614	4499	24	25	-123.69	-339	-820	71	26	45.43	1.565		
4700	4587	4714	4596	25	25	-122.87	-348	-843	72	25	46.70	1.537		
4800	4684	4814	4693	25	26	-122.07	-357	-866	72	25	47.97	1.511		
4900	4781	4914	4789	26	26	-121.28	-366	-889	73	24	49.24	1.486 Level 3, ES, SF		
5000	4878	5009	4882	27	27	-120.45	-376	-910	75	25	50.42	1.495 Level 3		
5105	4980	5100	4970	27	27	-119.16	-393	-922	91	40	50.71	1.786		
5150	5023	5139	5007	28	28	-131.28	-403	-925	103	52	50.76	2.028		
5200	5071	5177	5044	28	28	-141.02	-414	-925	123	73	50.48	2.439		
5250	5117	5212	5077	28	28	-147.80	-426	-925	149	99	50.07	2.983		
5300	5163	5243	5106	29	28	-152.65	-437	-923	181	131	49.58	3.648		
5350	5207	5270	5130	29	28	-156.24	-448	-920	217	168	49.07	4.422		
5400	5249	5292	5150	29	28	-158.99	-457	-918	257	208	48.58	5.286		
5450	5289	5309	5166	30	28	-161.18	-465	-915	300	252	48.15	6.225		
5500	5326	5323	5178	30	28	-162.98	-471	-913	345	297	47.79	7.221		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 130H - Slot 2
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 131H - Original Drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF												Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5550	5361	5334	5187	31	28	-164.58	-476	-911	392	345	47.51	8.256	
5600	5394	5350	5201	31	28	-165.92	-484	-908	441	393	47.92	9.201	
5650	5423	5350	5201	32	28	-168.09	-484	-908	490	443	47.47	10.325	
5700	5449	5350	5201	32	28	-175.71	-484	-908	540	493	47.29	11.417	
5750	5472	5350	5201	33	28	22.27	-484	-908	590	543	47.32	12.467	
5800	5492	5350	5201	34	28	16.39	-484	-908	640	592	47.51	13.467	
5850	5508	5350	5201	34	28	14.87	-484	-908	689	641	47.81	14.415	
5900	5520	5336	5189	35	28	14.06	-477	-911	738	690	47.60	15.501	
5950	5529	5329	5183	36	28	13.63	-474	-912	786	738	47.82	16.428	
6000	5534	5322	5176	36	28	13.37	-470	-913	832	784	48.08	17.310	
6032	5535	5316	5171	37	28	13.28	-468	-914	862	813	48.26	17.852	
6100	5535	5300	5157	38	28	13.27	-461	-917	923	875	48.49	19.041	
6200	5536	5300	5157	39	28	13.27	-461	-917	1015	966	49.49	20.513	
6300	5537	5274	5134	41	28	13.27	-450	-920	1108	1058	49.54	22.359	
6400	5537	5250	5112	43	28	13.27	-440	-922	1201	1152	49.59	24.225	
6500	5538	5250	5112	44	28	13.27	-440	-922	1295	1245	50.21	25.799	
6600	5539	5250	5112	46	28	13.27	-440	-922	1390	1339	50.71	27.409	
6700	5540	5230	5094	48	28	13.26	-433	-924	1485	1434	50.72	29.279	
6800	5541	5222	5086	50	28	13.26	-429	-924	1581	1530	50.93	31.034	
6900	5541	5200	5066	52	28	13.26	-422	-925	1677	1626	50.85	32.974	
7000	5542	5200	5066	54	28	13.26	-422	-925	1773	1722	51.17	34.648	
7100	5543	5200	5066	56	28	13.26	-422	-925	1869	1818	51.45	36.338	
7200	5544	5200	5066	58	28	13.26	-422	-925	1966	1915	51.69	38.041	
7300	5545	5200	5066	61	28	13.26	-422	-925	2064	2012	51.91	39.754	
7400	5545	5200	5066	63	28	13.26	-422	-925	2161	2109	52.10	41.476	
7500	5546	5177	5044	65	28	13.26	-414	-925	2258	2206	51.93	43.481	
7600	5547	5173	5040	67	28	13.26	-413	-925	2356	2304	52.03	45.273	
7700	5548	5150	5018	70	28	13.25	-406	-925	2454	2402	51.86	47.316	
7800	5548	5150	5018	72	28	13.25	-406	-925	2552	2500	52.01	49.056	
7900	5549	5150	5018	74	28	13.25	-406	-925	2650	2597	52.15	50.801	
8000	5550	5150	5018	76	28	13.25	-406	-925	2748	2695	52.29	52.550	
8100	5551	5150	5018	79	28	13.25	-406	-925	2846	2793	52.41	54.302	
8200	5552	5150	5018	81	28	13.25	-406	-925	2944	2892	52.52	56.057	
8300	5552	5150	5018	83	28	13.25	-406	-925	3043	2990	52.63	57.813	
8400	5553	5150	5018	86	28	13.25	-406	-925	3141	3088	52.73	59.571	
8500	5554	5150	5018	88	28	13.25	-406	-925	3240	3187	52.83	61.330	
8600	5555	5150	5018	91	28	13.25	-406	-925	3339	3286	52.92	63.089	
8700	5556	5150	5018	93	28	13.25	-406	-925	3437	3384	53.01	64.849	
8800	5556	5150	5018	95	28	13.25	-406	-925	3536	3483	53.09	66.608	
8900	5557	5150	5018	98	28	13.25	-406	-925	3635	3582	53.17	68.368	
9000	5558	5150	5018	100	28	13.25	-406	-925	3734	3681	53.25	70.126	
9100	5559	5127	4996	102	28	13.25	-400	-924	3833	3780	53.07	72.226	
9200	5559	5125	4995	105	28	13.25	-399	-924	3932	3879	53.12	74.016	
9300	5560	5123	4993	107	28	13.25	-399	-924	4031	3978	53.17	75.805	
9400	5561	5100	4970	110	27	13.25	-393	-922	4130	4077	52.99	77.945	
9500	5562	5100	4970	112	27	13.25	-393	-922	4229	4176	53.06	79.704	
9600	5563	5100	4970	114	27	13.25	-393	-922	4328	4275	53.13	81.461	
9700	5563	5100	4970	117	27	13.25	-393	-922	4428	4374	53.21	83.216	
9800	5564	5100	4970	119	27	13.25	-393	-922	4527	4473	53.27	84.969	
9900	5565	5100	4970	122	27	13.25	-393	-922	4626	4573	53.34	86.721	
10,000	5566	5100	4970	124	27	13.25	-393	-922	4725	4672	53.41	88.470	
10,100	5567	5100	4970	127	27	13.25	-393	-922	4824	4771	53.48	90.217	



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 130H - Slot 2
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 131H - 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)			
10,200	5567	5100	4970	129	27	13.25	-393	-922	4924	4870	53.54	91.961		
10,300	5568	5100	4970	131	27	13.25	-393	-922	5023	4969	53.61	93.703		
10,400	5569	5100	4970	134	27	13.25	-393	-922	5122	5069	53.67	95.442		
10,500	5570	5100	4970	136	27	13.25	-393	-922	5222	5168	53.73	97.178		
10,600	5570	5100	4970	139	27	13.25	-393	-922	5321	5267	53.80	98.912		
10,700	5571	5100	4970	141	27	13.25	-393	-922	5421	5367	53.86	100.643		
10,800	5572	5100	4970	144	27	13.25	-393	-922	5520	5466	53.92	102.370		
10,900	5573	5100	4970	146	27	13.25	-393	-922	5620	5566	53.98	104.094		
10,926	5573	5100	4970	147	27	13.25	-393	-922	5646	5592	54.00	104.547		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 130H - Slot 2
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 134H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0	0	0	0	0	0	86.88	2	40	40					
100	100	100	100	0	0	86.88	2	40	40	40	0.31	130.161		
200	200	200	200	1	1	86.88	2	40	40	39	1.03	39.139		
300	300	300	300	1	1	86.88	2	40	40	38	1.74	23.033		
400	400	400	400	1	1	86.88	2	40	40	38	2.46	16.318		
450	450	450	450	1	1	86.88	2	40	40	37	2.82	14.242 CC		
500	500	500	500	2	2	-165.16	3	40	40	37	3.17	12.719 ES		
600	600	601	601	2	2	-170.55	5	38	42	38	3.87	10.888		
700	700	701	701	2	2	-179.84	11	34	47	42	4.58	10.198		
800	799	801	800	3	3	169.59	20	28	55	50	5.32	10.421		
900	898	899	897	3	3	160.07	31	21	69	63	6.08	11.342		
1000	997	996	993	3	3	152.51	45	11	87	81	6.87	12.729		
1100	1094	1092	1087	4	4	146.82	62	0	111	103	7.69	14.385		
1153	1146	1143	1137	4	4	144.51	72	-6	125	117	8.15	15.307		
1200	1192	1188	1180	4	4	143.08	80	-12	138	129	8.56	16.084		
1300	1289	1284	1274	5	5	140.77	98	-24	165	156	9.45	17.512		
1400	1386	1380	1367	6	5	139.13	116	-36	193	183	10.35	18.675		
1500	1483	1476	1461	6	6	137.90	134	-48	221	210	11.27	19.635		
1600	1580	1572	1554	7	6	136.95	152	-60	249	237	12.20	20.436		
1700	1677	1668	1647	7	7	136.19	170	-72	278	264	13.15	21.112		
1800	1774	1764	1741	8	7	135.57	188	-84	306	292	14.09	21.689		
1900	1871	1860	1834	8	8	135.05	207	-96	334	319	15.05	22.186		
2000	1968	1955	1928	9	8	134.62	225	-108	362	346	16.01	22.618		
2100	2065	2051	2021	10	9	134.24	243	-120	390	373	16.97	22.997		
2200	2162	2147	2115	10	9	133.92	261	-132	419	401	17.94	23.332		
2300	2259	2243	2208	11	10	133.64	279	-144	447	428	18.91	23.629		
2400	2356	2339	2301	11	11	133.39	297	-156	475	455	19.88	23.894		
2500	2453	2435	2395	12	11	133.17	315	-168	503	483	20.86	24.133		
2600	2550	2531	2488	12	12	132.97	333	-180	532	510	21.84	24.349		
2700	2647	2627	2582	13	12	132.80	351	-192	560	537	22.82	24.544		
2800	2744	2723	2675	14	13	132.64	369	-204	588	564	23.79	24.722		
2900	2841	2819	2768	14	13	132.49	387	-216	617	592	24.78	24.886		
3000	2938	2914	2862	15	14	132.36	405	-228	645	619	25.76	25.035		
3100	3035	3010	2955	15	14	132.24	424	-240	673	646	26.74	25.173		
3200	3132	3106	3049	16	15	132.13	442	-252	701	674	27.73	25.300		
3300	3229	3202	3142	17	15	132.02	460	-264	730	701	28.71	25.419		
3400	3326	3298	3235	17	16	131.93	478	-276	758	728	29.70	25.528		
3500	3423	3394	3329	18	16	131.84	496	-288	786	756	30.68	25.630		
3600	3520	3490	3422	18	17	131.76	514	-300	815	783	31.67	25.726		
3700	3617	3586	3516	19	17	131.68	532	-312	843	810	32.66	25.815		
3800	3714	3682	3609	20	18	131.61	550	-324	871	838	33.64	25.898		
3900	3811	3778	3703	20	18	131.54	568	-336	900	865	34.63	25.977		
4000	3908	3874	3796	21	19	131.48	586	-348	928	892	35.62	26.051		
4100	4005	3969	3889	21	20	131.42	604	-360	956	920	36.61	26.120		
4200	4102	4065	3983	22	20	131.36	622	-372	985	947	37.60	26.186		
4300	4199	4161	4076	22	21	131.31	641	-384	1013	974	38.59	26.248		
4400	4296	4257	4170	23	21	131.26	659	-396	1041	1002	39.58	26.307		
4500	4393	4353	4263	24	22	131.21	677	-408	1070	1029	40.57	26.362		
4600	4490	4449	4356	24	22	131.17	695	-420	1098	1056	41.56	26.415		
4700	4587	4545	4450	25	23	131.13	713	-432	1126	1084	42.55	26.466		
4800	4684	4641	4543	25	23	131.09	731	-444	1155	1111	43.55	26.514		
4900	4781	4737	4637	26	24	131.05	749	-456	1183	1138	44.54	26.559		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 130H - Slot 2
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 134H - Original Drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF												Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5000	4878	4833	4730	27	24	131.01	767	-468	1211	1166	45.53	26.603	
5105	4980	4934	4829	27	25	130.97	786	-481	1241	1194	46.57	26.646	
5150	5023	4977	4870	28	25	117.34	794	-486	1253	1206	47.03	26.643	
5200	5071	5025	4917	28	25	106.27	803	-492	1265	1217	47.58	26.589	
5250	5117	5073	4964	28	26	98.57	812	-498	1275	1227	48.16	26.484	
5300	5163	5121	5011	29	26	93.21	821	-504	1284	1235	48.77	26.332	
5350	5207	5168	5057	29	26	89.47	830	-510	1291	1242	49.41	26.137	
5400	5249	5200	5088	29	26	86.63	837	-514	1297	1247	49.93	25.983	
5450	5289	5227	5114	30	27	84.47	843	-519	1303	1252	50.46	25.814	
5500	5326	5250	5136	30	27	82.79	849	-523	1307	1256	50.95	25.648	
5550	5361	5284	5167	31	27	81.77	858	-531	1310	1259	51.67	25.363	
5600	5394	5313	5194	31	27	81.02	868	-538	1313	1261	52.36	25.083	
5650	5423	5350	5227	32	28	80.74	880	-549	1315	1262	53.23	24.708	
5700	5449	5371	5245	32	28	80.38	889	-556	1317	1263	53.92	24.418	
5750	5472	5400	5270	33	28	80.41	900	-566	1317	1262	54.77	24.051	
5800	5492	5431	5295	34	28	80.69	913	-577	1317	1262	55.74	23.633	
5850	5508	5462	5320	34	29	81.14	927	-589	1317	1260	56.75	23.203	
5900	5520	5493	5343	35	29	81.77	942	-603	1316	1258	57.82	22.753	
5950	5529	5524	5366	36	29	82.56	958	-617	1314	1255	58.96	22.287	
6000	5534	5556	5389	36	30	83.52	975	-632	1312	1252	60.15	21.813	
6032	5535	5577	5403	37	30	84.21	986	-643	1311	1250	60.95	21.503	
6100	5535	5625	5433	38	31	85.51	1014	-668	1308	1246	62.75	20.849	
6196	5536	5702	5475	39	32	87.33	1061	-712	1307	1242	65.62	19.922	
6200	5536	5706	5477	39	32	87.42	1063	-715	1307	1241	65.77	19.877	
6300	5537	5800	5517	41	34	89.14	1125	-773	1308	1239	69.28	18.880	
6400	5537	5906	5546	43	36	90.40	1197	-844	1309	1236	73.29	17.864	
6500	5538	6018	5559	44	38	90.91	1277	-922	1310	1232	77.65	16.870	
6600	5539	6120	5560	46	40	90.91	1349	-994	1310	1228	81.77	16.020	
6700	5540	6220	5561	48	42	90.91	1420	-1064	1310	1224	85.96	15.241	
6800	5541	6320	5561	50	44	90.91	1491	-1135	1310	1220	90.22	14.521	
6900	5541	6420	5562	52	46	90.90	1562	-1205	1310	1216	94.55	13.856	
7000	5542	6520	5563	54	48	90.90	1633	-1276	1310	1211	98.95	13.241	
7100	5543	6620	5563	56	50	90.90	1704	-1346	1310	1207	103.40	12.672	
7200	5544	6720	5564	58	52	90.90	1774	-1417	1310	1202	107.90	12.144	
7300	5545	6820	5565	61	55	90.89	1845	-1487	1310	1198	112.45	11.654	
7400	5545	6920	5566	63	57	90.89	1916	-1558	1310	1193	117.02	11.199	
7500	5546	7020	5566	65	59	90.89	1987	-1628	1311	1189	121.63	10.775	
7600	5547	7120	5567	67	62	90.89	2058	-1699	1311	1184	126.27	10.379	
7700	5548	7220	5568	70	64	90.88	2129	-1769	1311	1180	130.94	10.010	
7800	5548	7320	5569	72	66	90.88	2200	-1840	1311	1175	135.63	9.664	
7900	5549	7420	5569	74	68	90.88	2271	-1910	1311	1170	140.34	9.340	
8000	5550	7520	5570	76	71	90.88	2342	-1981	1311	1166	145.07	9.036	
8100	5551	7620	5571	79	73	90.87	2413	-2051	1311	1161	149.82	8.750	
8200	5552	7720	5572	81	76	90.87	2483	-2122	1311	1156	154.58	8.481	
8300	5552	7820	5572	83	78	90.87	2554	-2192	1311	1152	159.36	8.227	
8400	5553	7920	5573	86	80	90.87	2625	-2263	1311	1147	164.15	7.988	
8500	5554	8020	5574	88	83	90.86	2696	-2333	1311	1142	168.95	7.761	
8600	5555	8120	5574	91	85	90.86	2767	-2404	1311	1137	173.76	7.546	
8700	5556	8220	5575	93	87	90.86	2838	-2474	1311	1133	178.58	7.343	
8800	5556	8320	5576	95	90	90.86	2909	-2545	1311	1128	183.41	7.150	
8900	5557	8420	5577	98	92	90.85	2980	-2615	1311	1123	188.25	6.966	
9000	5558	8520	5577	100	95	90.85	3051	-2686	1312	1118	193.10	6.792	



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 130H - Slot 2
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 134H - Original Drilling - APD													Offset Site Error: 0 ft		
Survey Program: Reference		0-MWD+IGRF		Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned: Distance				Offset Well Error: 0 ft	
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	Warning		
9100	5559	8620	5578	102	97	90.85	3122	-2757	1312	1114	197.95	6.626			
9200	5559	8720	5579	105	100	90.85	3193	-2827	1312	1109	202.82	6.467			
9300	5560	8820	5580	107	102	90.84	3263	-2898	1312	1104	207.68	6.316			
9400	5561	8920	5580	110	104	90.84	3334	-2968	1312	1099	212.56	6.171			
9500	5562	9020	5581	112	107	90.84	3405	-3039	1312	1094	217.44	6.033			
9600	5563	9120	5582	114	109	90.84	3476	-3109	1312	1090	222.32	5.901			
9700	5563	9220	5582	117	112	90.83	3547	-3180	1312	1085	227.21	5.774			
9800	5564	9320	5583	119	114	90.83	3618	-3250	1312	1080	232.10	5.653			
9900	5565	9420	5584	122	117	90.83	3689	-3321	1312	1075	237.00	5.536			
10,000	5566	9520	5585	124	119	90.83	3760	-3391	1312	1070	241.90	5.424			
10,100	5567	9620	5585	127	121	90.82	3831	-3462	1312	1065	246.81	5.317			
10,200	5567	9720	5586	129	124	90.82	3902	-3532	1312	1061	251.72	5.213			
10,300	5568	9820	5587	131	126	90.82	3973	-3603	1312	1056	256.63	5.114			
10,400	5569	9920	5588	134	129	90.82	4043	-3673	1312	1051	261.54	5.018			
10,500	5570	10,020	5588	136	131	90.81	4114	-3744	1312	1046	266.46	4.925			
10,600	5570	10,120	5589	139	134	90.81	4185	-3814	1313	1041	271.38	4.836			
10,700	5571	10,220	5590	141	136	90.81	4256	-3885	1313	1036	276.30	4.750			
10,800	5572	10,320	5590	144	139	90.81	4327	-3955	1313	1031	281.23	4.667			
10,900	5573	10,420	5591	146	141	90.80	4398	-4026	1313	1027	286.16	4.587			
10,926	5573	10,446	5591	147	142	90.81	4417	-4044	1313	1025	287.45	4.567 SF			



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 130H - Slot 2
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 135H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference	Offset	Semi Major Axis			Offset Wellbore Centre		Distance			Rule Assigned:		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0	0	0	0	0	0	87.13	4	80	80					
100	100	100	100	0	0	87.13	4	80	80	80	0.31	259.306		
200	200	200	200	1	1	87.13	4	80	80	79	1.03	77.973		
300	300	300	300	1	1	87.13	4	80	80	78	1.74	45.886		
400	400	400	400	1	1	87.13	4	80	80	77	2.46	32.508		
450	450	450	450	1	1	87.13	4	80	80	77	2.82	28.372 CC		
500	500	501	501	2	2	-164.57	4	80	80	77	3.17	25.262 ES		
600	600	602	602	2	2	-167.38	7	78	82	78	3.87	21.111		
700	700	703	703	2	2	-172.61	13	74	86	81	4.59	18.668		
800	799	803	802	3	3	-179.51	22	68	93	87	5.32	17.411		
900	898	902	901	3	3	172.94	34	60	104	98	6.08	17.051 SF		
1000	997	1000	997	3	4	165.63	48	50	119	112	6.87	17.370		
1100	1094	1097	1092	4	4	159.43	64	40	140	132	7.69	18.175		
1153	1146	1149	1142	4	4	156.96	72	34	152	144	8.14	18.724		
1200	1192	1194	1186	4	4	155.23	80	29	164	156	8.54	19.227		
1300	1289	1290	1281	5	5	152.25	96	18	190	180	9.40	20.173		
1400	1386	1386	1375	6	5	149.98	112	7	215	205	10.28	20.960		
1500	1483	1483	1469	6	6	148.19	128	-4	242	230	11.17	21.618		
1600	1580	1579	1564	7	6	146.75	145	-15	268	256	12.08	22.173		
1700	1677	1675	1658	7	7	145.57	161	-26	294	281	12.99	22.645		
1800	1774	1772	1752	8	7	144.58	177	-36	321	307	13.91	23.050		
1900	1871	1868	1847	8	8	143.75	193	-47	347	332	14.84	23.401		
2000	1968	1964	1941	9	8	143.03	209	-58	374	358	15.77	23.706		
2100	2065	2060	2035	10	9	142.41	225	-69	400	384	16.70	23.975		
2200	2162	2157	2130	10	9	141.86	241	-80	427	409	17.64	24.212		
2300	2259	2253	2224	11	10	141.38	257	-91	454	435	18.58	24.424		
2400	2356	2349	2318	11	10	140.95	274	-102	481	461	19.53	24.613		
2500	2453	2446	2413	12	11	140.57	290	-113	507	487	20.47	24.783		
2600	2550	2542	2507	12	11	140.22	306	-123	534	513	21.42	24.937		
2700	2647	2638	2601	13	12	139.91	322	-134	561	539	22.37	25.077		
2800	2744	2735	2695	14	12	139.63	338	-145	588	564	23.32	25.204		
2900	2841	2831	2790	14	13	139.37	354	-156	615	590	24.27	25.321		
3000	2938	2927	2884	15	13	139.13	370	-167	641	616	25.23	25.428		
3100	3035	3023	2978	15	14	138.92	386	-178	668	642	26.18	25.526		
3200	3132	3120	3073	16	14	138.71	403	-189	695	668	27.13	25.617		
3300	3229	3216	3167	17	15	138.53	419	-199	722	694	28.09	25.702		
3400	3326	3312	3261	17	15	138.36	435	-210	749	720	29.05	25.780		
3500	3423	3409	3356	18	16	138.20	451	-221	776	746	30.01	25.853		
3600	3520	3505	3450	18	16	138.05	467	-232	803	772	30.96	25.922		
3700	3617	3601	3544	19	17	137.91	483	-243	830	798	31.92	25.986		
3800	3714	3698	3639	20	17	137.77	499	-254	856	824	32.88	26.045		
3900	3811	3794	3733	20	18	137.65	516	-265	883	849	33.84	26.102		
4000	3908	3890	3827	21	18	137.53	532	-275	910	875	34.80	26.154		
4100	4005	3986	3922	21	19	137.42	548	-286	937	901	35.76	26.204		
4200	4102	4083	4016	22	19	137.32	564	-297	964	927	36.72	26.251		
4300	4199	4179	4110	22	20	137.22	580	-308	991	953	37.68	26.296		
4400	4296	4275	4205	23	20	137.13	596	-319	1018	979	38.65	26.338		
4500	4393	4372	4299	24	21	137.04	612	-330	1045	1005	39.61	26.378		
4600	4490	4468	4393	24	21	136.96	628	-341	1072	1031	40.57	26.416		
4700	4587	4564	4487	25	22	136.88	645	-351	1099	1057	41.53	26.452		
4800	4684	4661	4582	25	22	136.80	661	-362	1125	1083	42.49	26.486		
4900	4781	4757	4676	26	23	136.73	677	-373	1152	1109	43.46	26.518		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 130H - Slot 2
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 135H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				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		
5000	4878	4853	4770	27	23	136.66	693	-384	1179	1135	44.42	26.549		
5105	4980	5039	4955	27	24	137.58	709	-389	1205	1159	45.80	26.302		
5150	5023	5120	5035	28	24	125.48	703	-380	1213	1167	46.11	26.302		
5200	5071	5200	5112	28	24	116.50	691	-363	1219	1173	46.30	26.339		
5250	5117	5265	5173	28	24	110.80	676	-345	1225	1178	46.42	26.389		
5300	5163	5316	5218	29	24	107.04	662	-328	1230	1183	46.53	26.429		
5350	5207	5354	5251	29	24	104.32	649	-314	1235	1188	46.66	26.463		
5400	5249	5381	5274	29	24	102.13	639	-302	1240	1193	46.80	26.500		
5450	5289	5400	5290	30	24	100.18	631	-294	1247	1200	46.96	26.549		
5500	5326	5412	5299	30	24	98.31	627	-289	1254	1207	47.11	26.622		
5550	5361	5419	5304	31	24	96.45	624	-286	1263	1216	47.27	26.722		
5600	5394	5421	5306	31	24	94.55	623	-285	1273	1226	47.41	26.850		
5650	5423	5420	5305	32	24	92.60	624	-286	1284	1236	47.54	27.006		
5700	5449	5415	5302	32	24	90.60	625	-288	1296	1248	47.67	27.186		
5750	5472	5409	5296	33	24	88.56	628	-291	1309	1261	47.79	27.387		
5800	5492	5400	5289	34	24	86.51	632	-294	1322	1274	47.91	27.604		
5850	5508	5390	5281	34	24	84.46	636	-299	1337	1289	48.02	27.832		
5900	5520	5378	5272	35	24	82.44	640	-304	1351	1303	48.14	28.065		
5950	5529	5365	5261	36	24	80.47	645	-309	1366	1317	48.26	28.300		
6000	5534	5350	5248	36	24	78.51	650	-315	1380	1332	48.38	28.533		
6032	5535	5350	5248	37	24	77.68	650	-315	1390	1341	48.47	28.674		
6100	5535	5324	5225	38	24	76.71	659	-325	1411	1362	48.62	29.017		
6200	5536	5300	5205	39	24	75.84	666	-334	1446	1398	48.83	29.623		
6300	5537	5278	5185	41	24	75.00	673	-341	1487	1438	48.98	30.365		
6400	5537	5250	5159	43	24	73.94	680	-350	1533	1484	49.05	31.251		
6500	5538	5250	5159	44	24	73.94	680	-350	1583	1534	49.21	32.172		
6600	5539	5228	5139	46	24	73.11	685	-356	1638	1588	49.22	33.268		
6700	5540	5200	5112	48	24	72.02	691	-363	1696	1647	49.16	34.503		
6800	5541	5200	5112	50	24	72.02	691	-363	1758	1709	49.24	35.700		
6900	5541	5200	5112	52	24	72.02	691	-363	1823	1774	49.29	36.980		
7000	5542	5200	5112	54	24	72.02	691	-363	1891	1842	49.33	38.332		
7100	5543	5176	5089	56	24	71.08	696	-369	1961	1912	49.20	39.861		
7200	5544	5168	5082	58	24	70.78	697	-371	2034	1985	49.17	41.371		
7300	5545	5150	5064	61	24	70.08	700	-374	2109	2060	49.06	42.994		
7400	5545	5150	5064	63	24	70.08	700	-374	2186	2137	49.07	44.557		
7500	5546	5150	5064	65	24	70.08	700	-374	2265	2216	49.07	46.162		
7600	5547	5150	5064	67	24	70.08	700	-374	2345	2296	49.06	47.804		
7700	5548	5150	5064	70	24	70.08	700	-374	2427	2378	49.05	49.480		
7800	5548	5150	5064	72	24	70.08	700	-374	2510	2461	49.04	51.186		
7900	5549	5128	5043	74	24	69.24	702	-378	2594	2545	48.89	53.059		
8000	5550	5124	5039	76	24	69.07	703	-379	2679	2631	48.86	54.842		
8100	5551	5120	5035	79	24	68.92	703	-380	2766	2717	48.82	56.645		
8200	5552	5100	5015	81	24	68.16	705	-383	2853	2804	48.69	58.595		
8300	5552	5100	5015	83	24	68.16	705	-383	2941	2892	48.68	60.405		
8400	5553	5100	5015	86	24	68.16	705	-383	3029	2980	48.68	62.229		
8500	5554	5100	5015	88	24	68.16	705	-383	3118	3070	48.67	64.068		
8600	5555	5100	5015	91	24	68.16	705	-383	3208	3159	48.67	65.919		
8700	5556	5100	5015	93	24	68.16	705	-383	3299	3250	48.67	67.781		
8800	5556	5100	5015	95	24	68.16	705	-383	3390	3341	48.66	69.652		
8900	5557	5100	5015	98	24	68.16	705	-383	3481	3432	48.66	71.532		
9000	5558	5100	5015	100	24	68.16	705	-383	3573	3524	48.66	73.420		
9100	5559	5100	5015	102	24	68.16	705	-383	3665	3617	48.67	75.315		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 130H - Slot 2
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 135H - Original Drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF												Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
							+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
9200	5559	5100	5015	105	24	68.16	705	-383	3758	3709	48.67	77.215	
9300	5560	5100	5015	107	24	68.16	705	-383	3851	3802	48.67	79.120	
9400	5561	5100	5015	110	24	68.16	705	-383	3945	3896	48.68	81.029	
9500	5562	5100	5015	112	24	68.16	705	-383	4038	3990	48.69	82.943	
9600	5563	5100	5015	114	24	68.16	705	-383	4132	4084	48.70	84.859	
9700	5563	5100	5015	117	24	68.16	705	-383	4227	4178	48.71	86.778	
9800	5564	5078	4994	119	24	67.32	707	-386	4321	4272	48.60	88.905	
9900	5565	5077	4992	122	24	67.26	707	-386	4416	4367	48.61	90.844	
10,000	5566	5075	4991	124	24	67.20	707	-386	4511	4462	48.61	92.784	
10,100	5567	5074	4989	127	24	67.15	707	-386	4606	4557	48.62	94.724	
10,200	5567	5072	4988	129	24	67.10	707	-386	4701	4653	48.63	96.665	
10,300	5568	5050	4966	131	24	66.25	708	-388	4797	4749	48.53	98.840	
10,400	5569	5050	4966	134	24	66.25	708	-388	4893	4844	48.56	100.767	
10,500	5570	5050	4966	136	24	66.25	708	-388	4989	4940	48.58	102.693	
10,600	5570	5050	4966	139	24	66.25	708	-388	5085	5036	48.60	104.619	
10,700	5571	5050	4966	141	24	66.25	708	-388	5181	5132	48.63	106.543	
10,800	5572	5050	4966	144	24	66.25	708	-388	5277	5229	48.65	108.467	
10,900	5573	5050	4966	146	24	66.25	708	-388	5374	5325	48.68	110.388	
10,926	5573	5050	4966	147	24	66.25	708	-388	5399	5350	48.69	110.893	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 130H - Slot 2
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 136H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0	0	0	0	0	0	-92.08	-1	-20	20					
100	100	100	100	0	0	-92.08	-1	-20	20	20	0.31	65.027		
200	200	200	200	1	1	-92.08	-1	-20	20	19	1.03	19.554		
300	300	300	300	1	1	-92.08	-1	-20	20	18	1.74	11.507		
400	400	400	400	1	1	-92.08	-1	-20	20	18	2.46	8.152		
450	450	450	450	1	1	-92.08	-1	-20	20	17	2.82	7.115 CC		
500	500	500	500	2	2	17.05	-1	-20	20	17	3.16	6.338		
600	600	599	599	2	2	20.72	-1	-24	20	16	3.85	5.255		
700	700	698	698	2	2	27.81	0	-31	21	16	4.54	4.579 ES		
800	799	797	797	3	3	37.50	0	-41	22	17	5.24	4.229		
900	898	897	895	3	3	49.66	1	-54	24	18	6.00	3.969		
1000	997	997	994	3	3	66.74	2	-66	25	18	6.85	3.629		
1100	1094	1096	1093	4	4	88.39	2	-79	28	20	7.78	3.539 SF		
1153	1146	1149	1145	4	4	100.21	3	-85	31	22	8.27	3.691		
1200	1192	1195	1191	4	4	109.35	3	-91	34	26	8.67	3.941		
1300	1289	1295	1290	5	5	122.97	4	-104	44	35	9.48	4.649		
1400	1386	1394	1388	6	5	131.33	4	-116	56	45	10.26	5.411		
1500	1483	1493	1486	6	6	136.77	5	-129	68	57	11.04	6.136		
1600	1580	1592	1585	7	6	140.52	6	-142	80	69	11.82	6.799		
1700	1677	1691	1683	7	6	143.25	6	-154	93	81	12.61	7.398		
1800	1774	1790	1781	8	7	145.32	7	-167	106	93	13.40	7.935		
1900	1871	1889	1879	8	7	146.93	8	-179	119	105	14.19	8.419		
2000	1968	1988	1978	9	8	148.23	8	-192	133	118	14.99	8.855		
2100	2065	2087	2076	10	8	149.28	9	-204	146	130	15.78	9.249		
2200	2162	2186	2174	10	8	150.17	10	-217	159	143	16.58	9.606		
2300	2259	2285	2273	11	9	150.91	10	-229	173	155	17.38	9.932		
2400	2356	2384	2371	11	9	151.55	11	-242	186	168	18.19	10.229		
2500	2453	2484	2469	12	10	152.10	12	-254	199	180	18.99	10.502		
2600	2550	2583	2567	12	10	152.58	12	-267	213	193	19.79	10.753		
2700	2647	2682	2666	13	11	153.01	13	-279	226	206	20.60	10.984		
2800	2744	2781	2764	14	11	153.39	14	-292	240	218	21.40	11.198		
2900	2841	2880	2862	14	11	153.73	14	-304	253	231	22.21	11.397		
3000	2938	2979	2961	15	12	154.03	15	-317	267	244	23.02	11.582		
3100	3035	3078	3059	15	12	154.30	16	-330	280	256	23.82	11.755		
3200	3132	3177	3157	16	13	154.55	16	-342	293	269	24.63	11.916		
3300	3229	3276	3255	17	13	154.78	17	-355	307	282	25.44	12.067		
3400	3326	3375	3354	17	14	154.99	18	-367	320	294	26.25	12.208		
3500	3423	3474	3452	18	14	155.18	18	-380	334	307	27.06	12.341		
3600	3520	3573	3550	18	14	155.36	19	-392	347	320	27.87	12.467		
3700	3617	3673	3649	19	15	155.52	20	-405	361	332	28.68	12.585		
3800	3714	3772	3747	20	15	155.67	20	-417	374	345	29.49	12.697		
3900	3811	3871	3845	20	16	155.82	21	-430	388	358	30.30	12.802		
4000	3908	3970	3943	21	16	155.95	22	-442	401	370	31.11	12.903		
4100	4005	4069	4042	21	17	156.07	22	-455	415	383	31.92	12.998		
4200	4102	4168	4140	22	17	156.19	23	-467	428	396	32.73	13.088		
4300	4199	4267	4238	22	17	156.29	24	-480	442	408	33.54	13.174		
4400	4296	4366	4336	23	18	156.40	24	-492	455	421	34.35	13.256		
4500	4393	4465	4435	24	18	156.49	25	-505	469	434	35.16	13.334		
4600	4490	4564	4533	24	19	156.58	26	-518	482	446	35.97	13.409		
4700	4587	4663	4631	25	19	156.67	26	-530	496	459	36.78	13.480		
4800	4684	4758	4726	25	20	157.39	23	-538	510	472	37.42	13.619		
4900	4781	4850	4817	26	20	159.52	10	-536	525	487	37.75	13.906		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 130H - Slot 2
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 136H - Original Drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF												Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5000	4878	4932	4896	27	20	162.49	-9	-527	543	505	37.81	14.358	
5105	4980	5011	4969	27	20	166.11	-34	-511	567	529	37.68	15.040	
5150	5023	5040	4995	28	20	153.93	-45	-504	579	541	37.56	15.416	
5200	5071	5069	5020	28	20	143.99	-56	-495	595	558	37.37	15.932	
5250	5117	5100	5046	28	20	137.19	-69	-485	615	577	37.18	16.530	
5300	5163	5114	5058	29	20	131.00	-75	-481	637	600	36.82	17.294	
5350	5207	5131	5071	29	20	126.02	-83	-475	662	625	36.48	18.145	
5400	5249	5150	5087	29	20	121.93	-92	-467	690	654	36.22	19.050	
5450	5289	5150	5087	30	20	116.29	-92	-467	720	685	35.69	20.184	
5500	5326	5150	5087	30	20	110.63	-92	-467	753	718	35.21	21.397	
5550	5361	5162	5097	31	20	106.17	-98	-463	788	753	35.03	22.494	
5600	5394	5164	5098	31	20	100.47	-99	-462	824	790	34.72	23.737	
5650	5423	5163	5097	32	20	94.49	-98	-463	862	827	34.46	25.005	
5700	5449	5150	5087	32	20	87.38	-92	-467	900	866	34.03	26.444	
5750	5472	5150	5087	33	20	81.72	-92	-467	938	904	33.95	27.638	
5800	5492	5150	5087	34	20	76.32	-92	-467	977	943	33.95	28.771	
5850	5508	5150	5087	34	20	71.26	-92	-467	1015	981	34.03	29.834	
5900	5520	5135	5075	35	20	65.61	-85	-473	1053	1019	33.87	31.096	
5950	5529	5126	5067	36	20	61.01	-81	-477	1090	1056	33.90	32.166	
6000	5534	5115	5059	36	20	56.95	-76	-480	1127	1093	33.97	33.163	
6032	5535	5100	5046	37	20	54.25	-69	-485	1149	1116	33.87	33.936	
6100	5535	5100	5046	38	20	54.25	-69	-485	1198	1163	34.34	34.882	
6200	5536	5075	5025	39	20	53.14	-58	-493	1271	1237	34.54	36.815	
6300	5537	5050	5004	41	20	52.05	-48	-501	1348	1313	34.74	38.802	
6400	5537	5050	5004	43	20	52.05	-48	-501	1427	1391	35.34	40.369	
6500	5538	5027	4983	44	20	51.05	-40	-507	1507	1472	35.53	42.426	
6600	5539	5000	4959	46	20	49.92	-30	-514	1590	1555	35.65	44.603	
6700	5540	5000	4959	48	20	49.92	-30	-514	1674	1638	36.15	46.321	
6800	5541	5000	4959	50	20	49.92	-30	-514	1760	1723	36.59	48.100	
6900	5541	4980	4940	52	20	49.07	-23	-518	1847	1810	36.74	50.266	
7000	5542	4970	4931	54	20	48.68	-20	-520	1935	1898	37.00	52.281	
7100	5543	4950	4913	56	20	47.86	-14	-524	2024	1986	37.13	54.507	
7200	5544	4950	4913	58	20	47.86	-14	-524	2113	2076	37.46	56.416	
7300	5545	4950	4913	61	20	47.86	-14	-524	2204	2166	37.76	58.358	
7400	5545	4950	4913	63	20	47.86	-14	-524	2295	2257	38.04	60.329	
7500	5546	4950	4913	65	20	47.86	-14	-524	2387	2349	38.30	62.325	
7600	5547	4925	4889	67	20	46.88	-7	-528	2479	2441	38.31	64.714	
7700	5548	4900	4865	70	20	45.90	-1	-532	2572	2534	38.31	67.137	
7800	5548	4900	4865	72	20	45.90	-1	-532	2665	2627	38.53	69.167	
7900	5549	4900	4865	74	20	45.90	-1	-532	2759	2720	38.74	71.213	
8000	5550	4900	4865	76	20	45.90	-1	-532	2853	2814	38.94	73.272	
8100	5551	4900	4865	79	20	45.90	-1	-532	2947	2908	39.12	75.345	
8200	5552	4900	4865	81	20	45.90	-1	-532	3042	3003	39.29	77.427	
8300	5552	4900	4865	83	20	45.90	-1	-532	3137	3098	39.45	79.519	
8400	5553	4900	4865	86	20	45.90	-1	-532	3233	3193	39.61	81.618	
8500	5554	4900	4865	88	20	45.90	-1	-532	3328	3289	39.75	83.723	
8600	5555	4900	4865	91	20	45.90	-1	-532	3424	3384	39.89	85.834	
8700	5556	4876	4842	93	20	44.99	5	-534	3520	3480	39.86	88.302	
8800	5556	4872	4838	95	20	44.87	6	-535	3616	3576	39.97	90.464	
8900	5557	4850	4817	98	20	44.05	10	-536	3713	3673	39.96	92.915	
9000	5558	4850	4817	100	20	44.05	10	-536	3809	3769	40.08	95.031	
9100	5559	4850	4817	102	20	44.05	10	-536	3906	3866	40.21	97.149	



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 130H - Slot 2
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 136H - 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)			
9200	5559	4850	4817	105	20	44.05	10	-536	4003	3962	40.32	99.269		
9300	5560	4850	4817	107	20	44.05	10	-536	4100	4059	40.44	101.389		
9400	5561	4850	4817	110	20	44.05	10	-536	4197	4156	40.54	103.510		
9500	5562	4850	4817	112	20	44.05	10	-536	4294	4253	40.65	105.630		
9600	5563	4850	4817	114	20	44.05	10	-536	4391	4351	40.76	107.750		
9700	5563	4850	4817	117	20	44.05	10	-536	4489	4448	40.86	109.869		
9800	5564	4850	4817	119	20	44.05	10	-536	4586	4546	40.96	111.986		
9900	5565	4850	4817	122	20	44.05	10	-536	4684	4643	41.05	114.101		
10,000	5566	4850	4817	124	20	44.05	10	-536	4782	4741	41.15	116.213		
10,100	5567	4850	4817	127	20	44.05	10	-536	4880	4839	41.24	118.324		
10,200	5567	4850	4817	129	20	44.05	10	-536	4978	4936	41.33	120.431		
10,300	5568	4850	4817	131	20	44.05	10	-536	5076	5034	41.42	122.535		
10,400	5569	4850	4817	134	20	44.05	10	-536	5174	5132	41.51	124.635		
10,500	5570	4850	4817	136	20	44.05	10	-536	5272	5230	41.60	126.732		
10,600	5570	4850	4817	139	20	44.05	10	-536	5370	5329	41.69	128.825		
10,700	5571	4850	4817	141	20	44.05	10	-536	5469	5427	41.77	130.914		
10,800	5572	4850	4817	144	20	44.05	10	-536	5567	5525	41.86	132.998		
10,900	5573	4850	4817	146	20	44.05	10	-536	5665	5624	41.94	135.077		
10,926	5573	4827	4794	147	20	43.25	14	-538	5691	5649	41.85	135.973		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 130H - Slot 2
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 137H - Original Drilling - APD													Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF													Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0	0	0	0	0	0	86.88	1	20	20					
100	100	100	100	0	0	86.88	1	20	20	20	0.31	65.081		
200	200	200	200	1	1	86.88	1	20	20	19	1.03	19.570		
300	300	300	300	1	1	86.88	1	20	20	18	1.74	11.516		
400	400	400	400	1	1	86.88	1	20	20	18	2.46	8.159		
450	450	450	450	1	1	86.88	1	20	20	17	2.82	7.121		
500	500	500	500	2	2	-165.05	1	20	20	17	3.17	6.331		
556	556	557	557	2	2	-167.14	1	18	20	16	3.56	5.637 CC		
600	600	601	601	2	2	-169.81	2	16	20	16	3.86	5.202		
700	700	702	701	2	2	-179.15	3	9	20	16	4.55	4.499 ES		
800	799	802	801	3	3	168.09	4	-1	22	17	5.27	4.188		
900	898	902	901	3	3	154.49	6	-15	26	20	6.03	4.241		
1000	997	1002	999	3	3	145.89	9	-30	32	25	6.84	4.724		
1100	1094	1102	1097	4	4	143.28	11	-46	42	35	7.66	5.512		
1153	1146	1154	1149	4	4	143.33	12	-54	49	41	8.11	6.004		
1200	1192	1201	1195	4	4	143.69	13	-61	55	46	8.50	6.436		
1300	1289	1300	1293	5	5	144.25	16	-76	68	58	9.34	7.233		
1400	1386	1399	1391	6	5	144.63	18	-91	80	70	10.19	7.891		
1500	1483	1498	1489	6	6	144.90	20	-106	93	82	11.04	8.442		
1600	1580	1597	1587	7	6	145.11	23	-121	106	94	11.91	8.909		
1700	1677	1697	1685	7	7	145.27	25	-136	119	106	12.78	9.309		
1800	1774	1796	1783	8	7	145.40	27	-151	132	118	13.65	9.656		
1900	1871	1895	1881	8	7	145.51	30	-166	145	130	14.52	9.959		
2000	1968	1994	1979	9	8	145.60	32	-181	158	142	15.40	10.226		
2100	2065	2093	2077	10	8	145.67	34	-197	170	154	16.28	10.462		
2200	2162	2192	2175	10	9	145.74	36	-212	183	166	17.17	10.674		
2300	2259	2292	2273	11	9	145.80	39	-227	196	178	18.05	10.863		
2400	2356	2391	2371	11	10	145.85	41	-242	209	190	18.93	11.034		
2500	2453	2490	2469	12	10	145.89	43	-257	222	202	19.82	11.190		
2600	2550	2589	2567	12	11	145.93	46	-272	235	214	20.71	11.331		
2700	2647	2688	2665	13	11	145.96	48	-287	247	226	21.60	11.460		
2800	2744	2788	2763	14	12	146.00	50	-302	260	238	22.49	11.579		
2900	2841	2887	2861	14	12	146.02	53	-317	273	250	23.38	11.688		
3000	2938	2986	2959	15	12	146.05	55	-332	286	262	24.27	11.789		
3100	3035	3085	3057	15	13	146.07	57	-348	299	274	25.16	11.882		
3200	3132	3184	3155	16	13	146.10	60	-363	312	286	26.05	11.969		
3300	3229	3283	3253	17	14	146.12	62	-378	325	298	26.94	12.050		
3400	3326	3383	3351	17	14	146.14	64	-393	338	310	27.83	12.126		
3500	3423	3482	3449	18	15	146.15	66	-408	350	322	28.73	12.197		
3600	3520	3581	3547	18	15	146.17	69	-423	363	334	29.62	12.263		
3700	3617	3680	3645	19	16	146.18	71	-438	376	346	30.51	12.325		
3800	3714	3779	3743	20	16	146.20	73	-453	389	358	31.41	12.384		
3900	3811	3878	3841	20	17	146.21	76	-468	402	369	32.30	12.439		
4000	3908	3978	3939	21	17	146.22	78	-483	415	381	33.19	12.491		
4100	4005	4077	4037	21	18	146.24	80	-499	428	393	34.09	12.541		
4200	4102	4176	4135	22	18	146.25	83	-514	440	405	34.98	12.588		
4300	4199	4275	4233	22	18	146.26	85	-529	453	417	35.88	12.632		
4400	4296	4374	4331	23	19	146.27	87	-544	466	429	36.77	12.674		
4500	4393	4473	4429	24	19	146.28	90	-559	479	441	37.67	12.714		
4600	4490	4573	4527	24	20	146.28	92	-574	492	453	38.56	12.753		
4700	4587	4672	4625	25	20	146.29	94	-589	505	465	39.46	12.789		
4800	4684	4771	4723	25	21	146.30	96	-604	518	477	40.36	12.824		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 130H - Slot 2
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 137H - Original Drilling - APD												Offset Site Error:	0 ft
Survey Program: 0-MWD+IGRF												Offset Well Error:	0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4900	4781	4867	4818	26	21	146.24	99	-619	530	489	41.25	12.860	
5000	4878	4955	4903	27	22	145.22	108	-639	545	503	42.32	12.875	
5105	4980	5043	4984	27	22	143.02	126	-667	563	519	43.68	12.885	
5150	5023	5078	5016	28	23	128.53	135	-681	571	527	44.29	12.900	
5200	5071	5118	5049	28	23	116.33	147	-697	581	536	44.96	12.920	
5250	5117	5156	5081	28	23	107.32	160	-714	590	545	45.62	12.941	
5300	5163	5194	5112	29	24	100.48	174	-732	600	553	46.28	12.959	
5350	5207	5232	5140	29	24	95.14	190	-752	609	562	46.93	12.972	
5400	5249	5270	5167	29	24	90.85	207	-772	618	570	47.59	12.977	
5450	5289	5307	5192	30	25	87.36	225	-793	626	578	48.24	12.974	
5500	5326	5350	5219	30	25	84.38	247	-818	634	585	49.16	12.893	
5550	5361	5380	5237	31	26	82.04	263	-837	641	591	49.59	12.925	
5600	5394	5417	5256	31	26	80.03	283	-860	648	597	50.29	12.876	
5650	5423	5450	5272	32	27	78.37	303	-881	653	603	50.87	12.846	
5700	5449	5489	5290	32	27	76.97	327	-907	659	607	51.78	12.721	
5750	5472	5525	5304	33	28	75.85	349	-931	663	610	52.57	12.613	
5800	5492	5561	5316	34	28	74.97	373	-956	667	613	53.40	12.483	
5850	5508	5600	5326	34	29	74.32	398	-983	669	615	54.41	12.303	
5900	5520	5633	5334	35	29	73.88	421	-1006	671	616	55.21	12.160	
5950	5529	5669	5340	36	30	73.64	445	-1032	672	616	56.18	11.969	
6000	5534	5700	5344	36	30	73.58	467	-1053	673	616	56.94	11.812	
6032	5535	5728	5346	37	31	73.67	487	-1073	672	614	57.87	11.617	
6069	5535	5755	5346	37	31	73.72	506	-1092	672	613	58.65	11.457	
6100	5535	5785	5347	38	32	73.72	527	-1113	672	612	59.71	11.255	
6200	5536	5885	5347	39	34	73.72	598	-1184	672	609	63.33	10.612	
6300	5537	5985	5348	41	36	73.72	669	-1254	672	605	67.10	10.017	
6400	5537	6085	5349	43	38	73.72	740	-1325	672	601	71.00	9.468	
6500	5538	6185	5350	44	40	73.72	811	-1396	672	597	75.01	8.963	
6600	5539	6285	5350	46	42	73.72	882	-1466	672	593	79.10	8.500	
6700	5540	6385	5351	48	44	73.71	952	-1537	672	589	83.27	8.075	
6800	5541	6485	5352	50	46	73.71	1023	-1607	672	585	87.51	7.685	
6900	5541	6585	5353	52	48	73.71	1094	-1678	673	581	91.80	7.326	
7000	5542	6685	5353	54	51	73.71	1165	-1748	673	576	96.15	6.996	
7100	5543	6785	5354	56	53	73.71	1236	-1819	673	572	100.54	6.691	
7200	5544	6885	5355	58	55	73.71	1307	-1889	673	568	104.96	6.410	
7300	5545	6985	5356	61	57	73.71	1378	-1960	673	563	109.42	6.149	
7400	5545	7085	5357	63	60	73.71	1449	-2030	673	559	113.90	5.908	
7500	5546	7185	5357	65	62	73.71	1520	-2101	673	555	118.42	5.683	
7600	5547	7285	5358	67	64	73.70	1591	-2171	673	550	122.95	5.474	
7700	5548	7385	5359	70	67	73.70	1662	-2242	673	546	127.51	5.279	
7800	5548	7485	5360	72	69	73.70	1732	-2312	673	541	132.08	5.097	
7900	5549	7585	5360	74	71	73.70	1803	-2383	673	537	136.67	4.926	
8000	5550	7685	5361	76	74	73.70	1874	-2453	673	532	141.28	4.766	
8100	5551	7785	5362	79	76	73.70	1945	-2524	673	527	145.89	4.615	
8200	5552	7885	5363	81	79	73.70	2016	-2594	673	523	150.53	4.474	
8300	5552	7985	5363	83	81	73.70	2087	-2665	674	518	155.17	4.340	
8400	5553	8085	5364	86	83	73.70	2158	-2735	674	514	159.82	4.215	
8500	5554	8185	5365	88	86	73.69	2229	-2806	674	509	164.48	4.096	
8600	5555	8285	5366	91	88	73.69	2300	-2876	674	505	169.15	3.983	
8700	5556	8385	5366	93	91	73.69	2371	-2947	674	500	173.83	3.876	
8800	5556	8485	5367	95	93	73.69	2441	-3017	674	495	178.51	3.775	
8900	5557	8585	5368	98	95	73.69	2512	-3088	674	491	183.21	3.678	



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 130H - Slot 2
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - # 137H - Original Drilling - APD													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	Reference Vertical	Measured Depth	Offset Vertical	Reference	Offset	Highside Toolface	+N/-S	+E/-W	Distance Between Centres	Distance Between Ellipses	Minimum Separation	Separation Factor	Warning		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)				
9000	5558	8685	5369	100	98	73.69	2583	-3158	674	486	187.90	3.587			
9100	5559	8785	5369	102	100	73.69	2654	-3229	674	481	192.61	3.500			
9200	5559	8885	5370	105	103	73.69	2725	-3299	674	477	197.32	3.416			
9300	5560	8985	5371	107	105	73.69	2796	-3370	674	472	202.03	3.337			
9400	5561	9085	5372	110	108	73.68	2867	-3440	674	467	206.75	3.261			
9500	5562	9185	5372	112	110	73.68	2938	-3511	674	463	211.47	3.189			
9600	5563	9285	5373	114	113	73.68	3009	-3581	674	458	216.20	3.119			
9700	5563	9385	5374	117	115	73.68	3080	-3652	674	454	220.93	3.053			
9800	5564	9485	5375	119	117	73.68	3151	-3722	675	449	225.66	2.989			
9900	5565	9585	5375	122	120	73.68	3221	-3793	675	444	230.40	2.928			
10,000	5566	9685	5376	124	122	73.68	3292	-3863	675	440	235.14	2.869			
10,100	5567	9785	5377	127	125	73.68	3363	-3934	675	435	239.88	2.813			
10,200	5567	9885	5378	129	127	73.68	3434	-4004	675	430	244.63	2.758			
10,300	5568	9985	5378	131	130	73.67	3505	-4075	675	425	249.38	2.706			
10,400	5569	10,085	5379	134	132	73.67	3576	-4145	675	421	254.13	2.656			
10,500	5570	10,185	5380	136	135	73.67	3647	-4216	675	416	258.88	2.607			
10,600	5570	10,285	5381	139	137	73.67	3718	-4287	675	411	263.64	2.561			
10,700	5571	10,385	5381	141	140	73.67	3789	-4357	675	407	268.39	2.515			
10,800	5572	10,485	5382	144	142	73.67	3860	-4428	675	402	273.15	2.472			
10,900	5573	10,585	5383	146	144	73.67	3930	-4498	675	397	277.91	2.430			
10,926	5573	10,611	5383	147	145	73.67	3949	-4517	675	396	279.17	2.419 SF			



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 130H - Slot 2
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - Mesa #4 SWD - OH - OH													Offset Site Error: 0 ft	
Survey Program: 190-INCLINOMETER				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	Warning	
0	0	11	11	0	0	103.38	-937	3941	4051					
100	100	111	111	0	3	103.38	-937	3941	4051	4047	3.53	1,149.101		
200	200	211	211	1	6	103.38	-937	3941	4051	4044	6.92	585.322		
300	300	311	311	1	9	103.38	-937	3941	4051	4040	10.32	392.674		
349	349	360	360	1	11	103.37	-937	3941	4051	4039	11.99	337.938 CC		
400	400	409	409	1	12	103.37	-937	3941	4051	4037	13.66	296.593		
450	450	457	457	1	14	103.37	-937	3941	4051	4035	15.30	264.713		
500	500	506	506	2	15	-147.96	-937	3941	4051	4034	16.94	239.123		
600	600	611	611	2	19	-147.95	-937	3941	4054	4034	20.48	197.971 ES		
700	700	711	711	2	22	-147.94	-937	3941	4060	4036	23.86	170.163		
800	799	810	810	3	25	-147.93	-937	3941	4069	4042	27.24	149.371		
900	898	909	909	3	28	-147.90	-937	3941	4081	4050	30.62	133.280		
1000	997	1008	1008	3	31	-147.87	-937	3941	4095	4061	33.99	120.489		
1100	1094	1105	1105	4	34	-147.84	-937	3941	4113	4076	37.36	110.108		
1153	1146	1157	1157	4	35	-147.81	-937	3941	4124	4085	39.14	105.355		
1200	1192	1203	1203	4	37	-147.90	-937	3941	4134	4093	40.72	101.523		
1300	1289	1298	1298	5	39	-148.08	-936	3941	4154	4110	44.02	94.363		
1400	1386	1392	1392	6	42	-148.25	-936	3941	4175	4128	47.30	88.268		
1500	1483	1486	1486	6	45	-148.41	-937	3941	4196	4145	50.58	82.954		
1600	1580	1591	1591	7	48	-148.59	-937	3941	4217	4163	54.18	77.832		
1700	1677	1688	1688	7	51	-148.76	-937	3941	4238	4180	57.55	73.633		
1800	1774	1784	1783	8	54	-148.94	-936	3941	4259	4198	60.90	69.932		
1900	1871	1878	1878	8	57	-149.10	-936	3941	4280	4215	64.19	66.672		
2000	1968	1972	1972	9	60	-149.25	-937	3941	4301	4233	67.48	63.729		
2100	2065	2076	2076	10	63	-149.42	-937	3941	4322	4251	71.07	60.814		
2200	2162	2173	2173	10	66	-149.59	-937	3941	4343	4268	74.44	58.337		
2300	2259	2268	2268	11	69	-149.75	-936	3941	4364	4286	77.78	56.104		
2400	2356	2363	2363	11	72	-149.90	-937	3941	4385	4304	81.09	54.076		
2500	2453	2464	2464	12	75	-150.06	-937	3941	4406	4322	84.59	52.094		
2600	2550	2561	2561	12	78	-150.22	-937	3941	4428	4340	87.96	50.334		
2700	2647	2658	2658	13	81	-150.37	-937	3941	4449	4358	91.34	48.705		
2800	2744	2753	2753	14	84	-150.54	-936	3941	4470	4375	94.67	47.219		
2900	2841	2848	2847	14	86	-150.68	-936	3941	4491	4393	97.97	45.845		
3000	2938	2949	2949	15	90	-150.83	-937	3941	4513	4411	101.48	44.470		
3100	3035	3046	3046	15	92	-150.98	-937	3941	4534	4429	104.86	43.242		
3200	3132	3143	3143	16	95	-151.12	-937	3941	4556	4447	108.23	42.090		
3300	3229	3238	3238	17	98	-151.28	-936	3941	4577	4465	111.55	41.030		
3400	3326	3332	3332	17	101	-151.41	-937	3941	4598	4484	114.85	40.040		
3500	3423	3434	3434	18	104	-151.56	-937	3941	4620	4502	118.36	39.032		
3600	3520	3531	3531	18	107	-151.70	-937	3941	4642	4520	121.74	38.127		
3700	3617	3628	3628	19	110	-151.84	-937	3941	4663	4538	125.11	37.271		
3800	3714	3723	3723	20	113	-151.99	-936	3941	4685	4556	128.42	36.478		
3900	3811	3818	3817	20	116	-152.12	-937	3941	4706	4575	131.72	35.729		
4000	3908	3919	3919	21	119	-152.25	-937	3941	4728	4593	135.23	34.961		
4100	4005	4016	4016	21	122	-152.39	-937	3941	4750	4611	138.61	34.267		
4200	4102	4113	4113	22	125	-152.52	-937	3941	4771	4629	141.98	33.606		
4300	4199	4209	4208	22	128	-152.66	-936	3941	4793	4648	145.30	32.985		
4400	4296	4304	4304	23	131	-152.79	-937	3941	4815	4666	148.62	32.395		
4500	4393	4404	4404	24	134	-152.92	-937	3941	4836	4684	152.09	31.800		
4600	4490	4501	4501	24	137	-153.05	-937	3941	4858	4703	155.46	31.251		
4700	4587	4598	4598	25	140	-153.18	-937	3941	4880	4721	158.83	30.726		
4800	4684	4650	4649	25	141	-153.25	-937	3941	4902	4741	160.79	30.487 SF		



Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 130H - Slot 2
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - Mesa #4 SWD - OH - OH													Offset Site Error: 0 ft	
Survey Program: 190-INCLINOMETER		Offset		Semi Major Axis		Offset Wellbore Centre			Rule Assigned:				Offset Well Error: 0 ft	
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	Warning	
4900	4781	4650	4649	26	141	-153.25	-937	3941	4926	4765	161.10	30.576		
5000	4878	4650	4649	27	141	-153.25	-937	3941	4951	4790	161.34	30.688		
5105	4980	4650	4649	27	141	-153.25	-937	3941	4980	4819	161.54	30.831		
5150	5023	4650	4649	28	141	-166.74	-937	3941	4994	4833	161.59	30.907		
5200	5071	4650	4649	28	141	-178.17	-937	3941	5013	4852	161.64	31.016		
5250	5117	4650	4649	28	141	173.18	-937	3941	5035	4874	161.65	31.150		
5300	5163	4650	4649	29	141	166.28	-937	3941	5060	4899	161.64	31.306		
5350	5207	4650	4649	29	141	160.39	-937	3941	5088	4927	161.61	31.485		
5400	5249	4650	4649	29	141	155.04	-937	3941	5119	4957	161.55	31.684		
5450	5289	4650	4649	30	141	149.88	-937	3941	5151	4990	161.48	31.902		
5500	5326	4650	4649	30	141	144.69	-937	3941	5186	5025	161.39	32.136		
5550	5361	4650	4649	31	141	139.28	-937	3941	5223	5062	161.29	32.384		
5600	5394	4650	4649	31	141	133.52	-937	3941	5261	5100	161.17	32.644		
5650	5423	4650	4649	32	141	127.32	-937	3941	5301	5140	161.06	32.913		
5700	5449	4650	4649	32	141	120.67	-937	3941	5342	5181	160.94	33.190		
5750	5472	4650	4649	33	141	113.61	-937	3941	5383	5222	160.83	33.470		
5800	5492	4650	4649	34	141	106.28	-937	3941	5425	5264	160.73	33.753		
5850	5508	4650	4649	34	141	98.88	-937	3941	5467	5306	160.63	34.034		
5900	5520	4650	4649	35	141	91.65	-937	3941	5509	5349	160.56	34.313		
5950	5529	4650	4649	36	141	84.83	-937	3941	5551	5391	160.50	34.585		
6000	5534	4650	4649	36	141	78.57	-937	3941	5592	5432	160.47	34.850		
6032	5535	4650	4649	37	141	74.92	-937	3941	5618	5458	160.46	35.015		
6100	5535	4650	4649	38	141	74.92	-937	3941	5674	5513	160.47	35.356		
6200	5536	4650	4649	39	141	74.92	-937	3941	5755	5595	160.53	35.849		
6300	5537	4650	4649	41	141	74.92	-937	3941	5837	5677	160.66	36.333		
6400	5537	4650	4649	43	141	74.92	-937	3941	5920	5759	160.83	36.809		
6500	5538	4650	4649	44	141	74.92	-937	3941	6003	5842	161.04	37.276		
6600	5539	4650	4649	46	141	74.92	-937	3941	6087	5925	161.30	37.736		
6700	5540	4650	4649	48	141	74.92	-937	3941	6171	6009	161.59	38.189		
6800	5541	4650	4649	50	141	74.92	-937	3941	6256	6094	161.91	38.636		
6900	5541	4650	4649	52	141	74.92	-937	3941	6341	6178	162.26	39.077		
7000	5542	4650	4649	54	141	74.92	-937	3941	6426	6264	162.63	39.514		
7100	5543	4650	4649	56	141	74.92	-937	3941	6512	6349	163.02	39.947		
7200	5544	4650	4649	58	141	74.92	-937	3941	6598	6435	163.42	40.376		
7300	5545	4650	4649	61	141	74.92	-937	3941	6685	6521	163.84	40.803		
7400	5545	4650	4649	63	141	74.92	-937	3941	6772	6608	164.27	41.226		
7500	5546	4650	4649	65	141	74.92	-937	3941	6860	6695	164.71	41.647		
7600	5547	4650	4649	67	141	74.92	-937	3941	6947	6782	165.15	42.067		
7700	5548	4650	4649	70	141	74.92	-937	3941	7036	6870	165.60	42.485		
7800	5548	4650	4649	72	141	74.92	-937	3941	7124	6958	166.05	42.902		
7900	5549	4650	4649	74	141	74.92	-937	3941	7213	7046	166.51	43.318		
8000	5550	4650	4649	76	141	74.92	-937	3941	7302	7135	166.96	43.733		
8100	5551	4650	4649	79	141	74.92	-937	3941	7391	7224	167.41	44.148		
8200	5552	4650	4649	81	141	74.92	-937	3941	7481	7313	167.87	44.563		
8300	5552	4650	4649	83	141	74.92	-937	3941	7570	7402	168.32	44.977		
8400	5553	4650	4649	86	141	74.92	-937	3941	7660	7492	168.76	45.392		
8500	5554	4650	4649	88	141	74.92	-937	3941	7751	7582	169.21	45.806		
8600	5555	4650	4649	91	141	74.92	-937	3941	7841	7672	169.65	46.221		
8700	5556	4650	4649	93	141	74.92	-937	3941	7932	7762	170.09	46.636		
8800	5556	4650	4649	95	141	74.92	-937	3941	8023	7853	170.52	47.051		
8900	5557	4650	4649	98	141	74.92	-937	3941	8114	7943	170.95	47.467		
9000	5558	4650	4649	100	141	74.92	-937	3941	8206	8034	171.37	47.883		



Lonestar Consulting, LLC
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 130H - Slot 2
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Offset Design: L16 2408 Pad - Mesa #4 SWD - OH - OH													Offset Site Error: 0 ft	
Survey Program: Reference		190-INCLINOMETER						Offset Well Error: 0 ft		Rule Assigned:				
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
							+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
9100	5559	4650	4649	102	141	74.92	-937	3941	8297	8126	171.79	48.300		
9200	5559	4650	4649	105	141	74.92	-937	3941	8389	8217	172.20	48.717		
9300	5560	4650	4649	107	141	74.92	-937	3941	8481	8309	172.61	49.134		
9400	5561	4650	4649	110	141	74.92	-937	3941	8573	8400	173.01	49.553		
9500	5562	4650	4649	112	141	74.92	-937	3941	8666	8492	173.41	49.972		
9600	5563	4650	4649	114	141	74.92	-937	3941	8758	8584	173.80	50.391		
9700	5563	4650	4649	117	141	74.92	-937	3941	8851	8677	174.19	50.811		
9800	5564	4650	4649	119	141	74.92	-937	3941	8944	8769	174.57	51.232		
9900	5565	4650	4649	122	141	74.92	-937	3941	9037	8862	174.95	51.653		
10,000	5566	4650	4649	124	141	74.92	-937	3941	9130	8955	175.32	52.075		
10,100	5567	4650	4649	127	141	74.92	-937	3941	9223	9047	175.69	52.498		
10,200	5567	4650	4649	129	141	74.92	-937	3941	9317	9140	176.05	52.921		
10,300	5568	4650	4649	131	141	74.92	-937	3941	9410	9234	176.40	53.345		
10,400	5569	4650	4649	134	141	74.92	-937	3941	9504	9327	176.75	53.769		
10,500	5570	4650	4649	136	141	74.92	-937	3941	9598	9420	177.10	54.194		
10,600	5570	4650	4649	139	141	74.92	-937	3941	9692	9514	177.44	54.620		
10,700	5571	4650	4649	141	141	74.92	-937	3941	9786	9608	177.77	55.046		
10,800	5572	4650	4649	144	141	74.92	-937	3941	9880	9702	178.10	55.473		
10,900	5573	4650	4649	146	141	74.92	-937	3941	9974	9796	178.43	55.900		
10,926	5573	4650	4649	147	141	74.92	-937	3941	9999	9820	178.51	56.012		



Lonestar Consulting, LLC

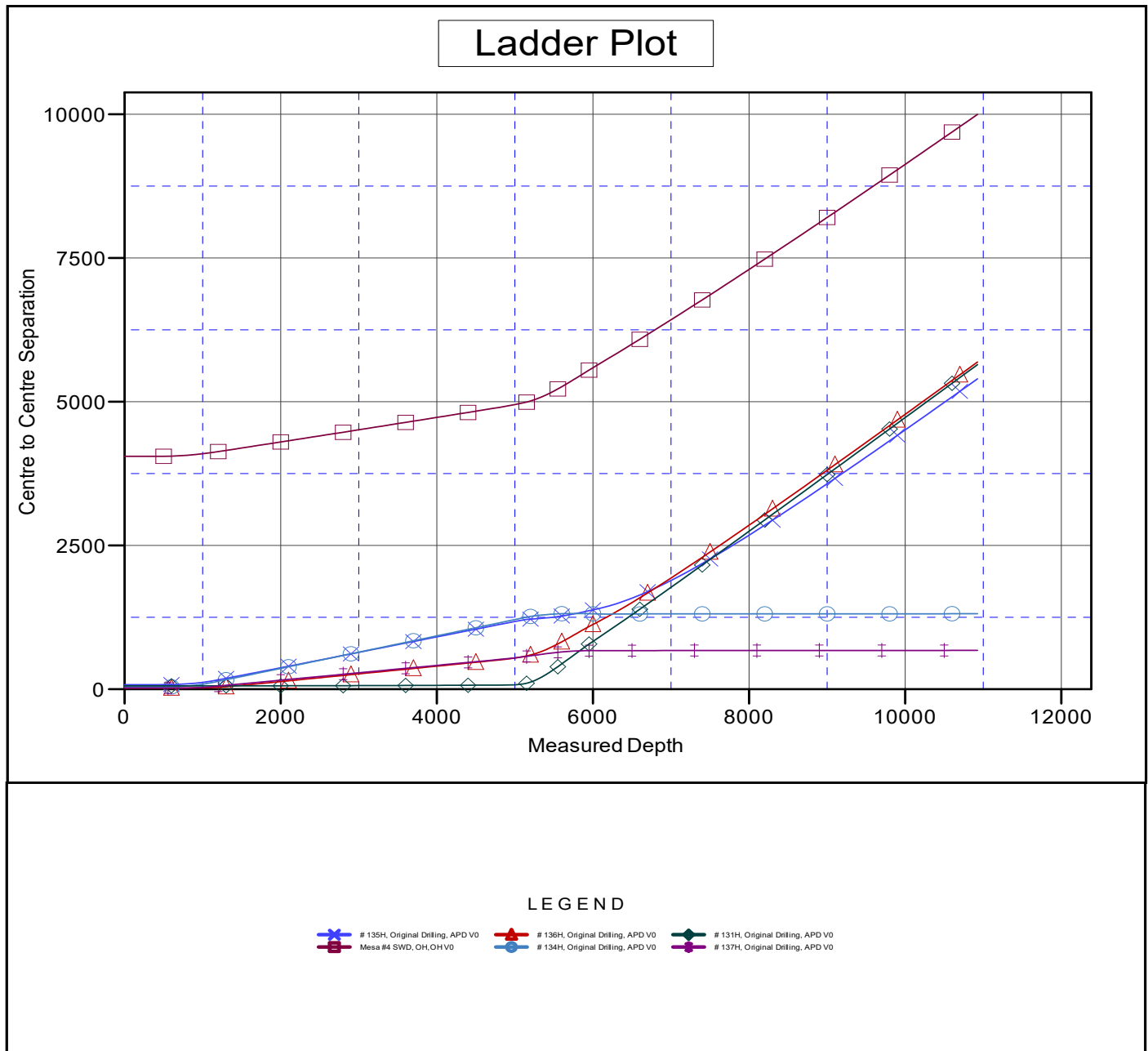
Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 130H - Slot 2
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Reference Depths are relative to GL 6794' & RKB 14' @ 6808ft
 Offset Depths are relative to Offset Datum
 Central Meridian is -107.8333333

Coordinates are relative to: # 130H - Slot 2
 Coordinate System is US State Plane 1983, New Mexico Western Zone
 Grid Convergence at Surface is: 0.08°





Lonestar Consulting, LLC

Anticollision Report



Company:	DJR Operating	Local Co-ordinate Reference:	Well # 130H - Slot 2
Project:	Crow Canyon Unit	TVD Reference:	GL 6794' & RKB 14' @ 6808ft
Reference Site:	L16 2408 Pad	MD Reference:	GL 6794' & RKB 14' @ 6808ft
Site Error:	0 ft	North Reference:	True
Reference Well:	# 130H	Survey Calculation Method:	Minimum Curvature
Well Error:	0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Drilling	Database:	Grand Junction
Reference Design:	APD	Offset TVD Reference:	Offset Datum

Reference Depths are relative to GL 6794' & RKB 14' @ 6808ft

Offset Depths are relative to Offset Datum

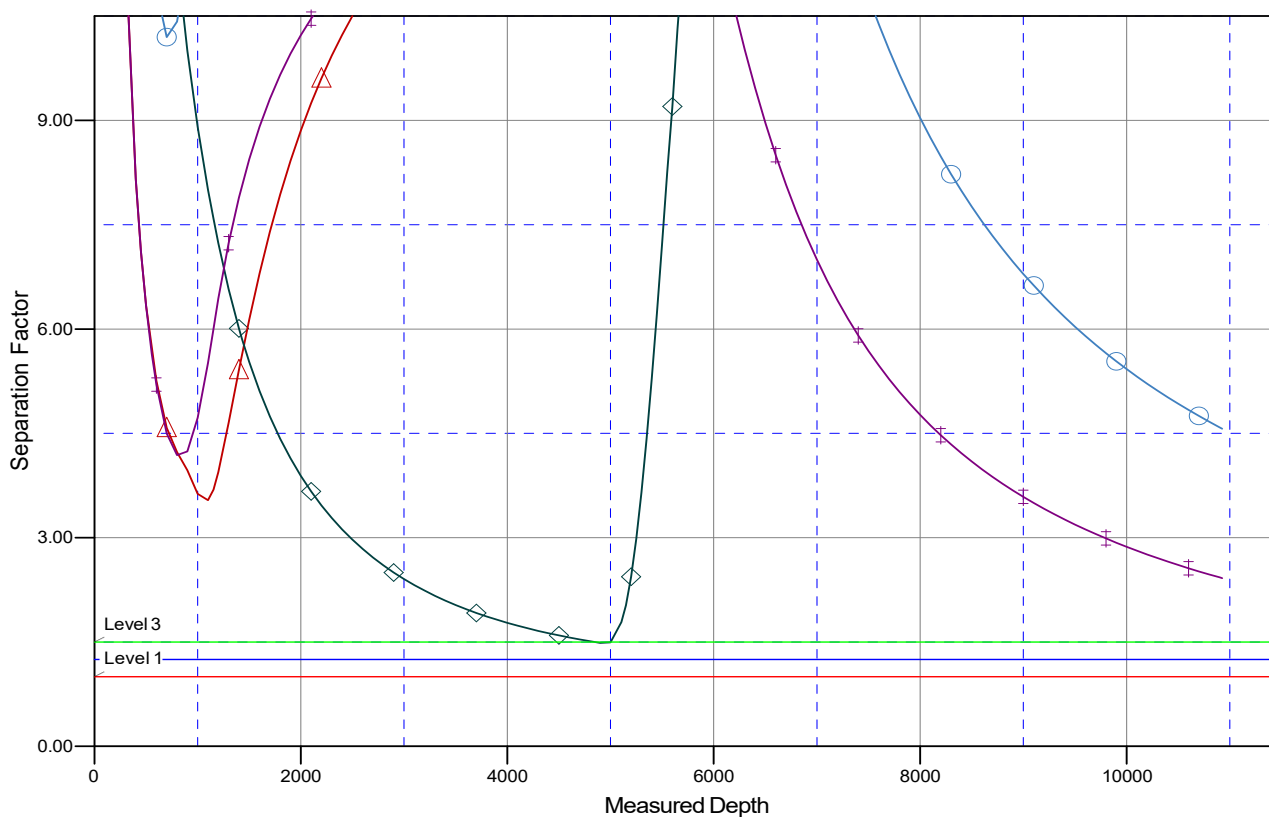
Central Meridian is -107.8333333

Coordinates are relative to: # 130H - Slot 2

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

Grid Convergence at Surface is: 0.08°

Separation Factor Plot



LEGEND

# 135H, Original Drilling, APD V0	# 136H, Original Drilling, APD V0	# 131H, Original Drilling, APD V0
Mesa #4 SWD, OH, OH V0	# 134H, Original Drilling, APD V0	# 137H, Original Drilling, APD V0



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Farmington District Office
6251 College Blvd, Suite A
Farmington, New Mexico 87402



In Reply Refer To:
3162.3-1(NMF0110)

* DJR OPERATING LLC

#130H CROW CANYON UNIT

Lease: NMNM026047 Unit: NMNM135203A
SH: NW¼SW¼ Section 16, T. 24 N., R. 8 W.
San Juan County, New Mexico
BH: SW¼SW¼ Section 8, T.24 N., R. 8 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 all casing strings below the conductor casing to .22 psi/ft. of casing string length or 1500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield (burst) for a minimum of 30 minutes. If pressure declines more than 10 percent in 30 minutes, corrective action shall be taken.
- D. ☐ Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the Bureau of Land Management, New Mexico State Office, Reservoir Management Group, 301 Dinosaur Trail, Santa Fe, New Mexico 87508.
The effective date of the agreement must be **prior** to any sales.
- E. ☐ The use of co-flex hose is authorized contingent upon the following:
 1. From the BOP to the choke manifold: the co-flex hose must be hobbled on both ends and saddle to prevent whip.
 2. From the choke manifold to the discharge tank: the co-flex hoses must be as straight as practical, hobbled on both ends and anchored to prevent whip.
 3. The co-flex hose pressure rating must be at least commensurate with approved BOPE.

INTERIOR REGION 7 • UPPER COLORADO BASIN

COLORADO, NEW MEXICO, UTAH, WYOMING

I. GENERAL

- A. Full compliance with all applicable laws and regulations, with the approved Permit to drill, and with the approved Surface Use and Operations Plan is required. Lessees and/or operators are fully accountable for the actions of their contractors and subcontractors. Failure to comply with these requirements and the filing of required reports will result in strict enforcement pursuant to 43 CFR 3163.1 or 3163.2.
- B. Each well shall have a well sign in legible condition from spud date to final abandonment. The sign should show the operator's name, lease serial number, or unit name, well number, location of the well, and whether lease is Tribal or Allotted, (See 43 CFR 3162.6(b)).
- C. A complete copy of the approved Application for Permit to Drill, along with any conditions of approval, shall be available to authorized personnel at the drill site whenever active drilling operations are under way.
- D. For Wildcat wells only, a drilling operations progress report is to be submitted, to the BLM-Field Office, weekly from the spud date until the well is completed and the Well Completion Report is filed. The report should be on 8-1/2 x 11 inch paper, and each page should identify the well by; operator's name, well number, location and lease number.
- E. As soon as practical, notice is required of all blowouts, fires and accidents involving life-threatening injuries or loss of life. (See NTL-3A).
- F. BOP equipment (except the annular preventer) shall be tested utilizing a test plug to full working pressure for 10 minutes. No bleed-off of pressure is acceptable. (See 43 CFR 3172.6(b)(9)(ii)).
- G. The operator shall have sufficient weighting materials and lost circulation materials on location in the event of a pressure kick or in the event of lost circulation. (See 43 CFR 3172.8(a)).
- H. The flare line(s) discharge shall be located not less than 100 feet from the well head, having straight lines unless turns are targeted with running tees, and shall be positioned downwind of the prevailing wind direction and shall be anchored. The flare system shall have an effective method for ignition. Where noncombustible gas is likely or expected to be vented, the system shall be provided supplemental fuel for ignition and to maintain a continuous flare. (See 43 CFR 3172.8(b)(7)).
- I. Prior approval by the BLM-Authorized Office (Drilling and Production Section) is required for variance from the approved drilling program and before commencing plugging operations, plug back work, casing repair work, corrective cementing operations, or suspending drilling operations indefinitely. Emergency approval may be obtained orally, but such approval is contingent upon filing of a Notice of Intent sundry within three business days. **Any changes to the approved plan or any questions regarding drilling operations should be directed to BLM during regular business hours at 505-564-7600. Emergency program changes after hours should be directed to Virgil Lucero at 505-793-1836.**
- J. **The Inspection and Enforcement Section (I&E), phone number (505-564-7750) is to be notified at least 24 hours in advance of BOP test, spudding, cementing, or plugging operations so that a BLM representative may witness the operations.**
- K. Unless drilling operations are commenced within three years according to 43 CFR 3171.14, approval of the Application for Permit to Drill will expire. No extensions will be granted.

- L. From the time drilling operations are initiated and until drilling operations are completed, a member of the drilling crew or the tool pusher shall maintain rig surveillance at all times, unless the well is secured with blowout preventers or cement plugs.
- M. If for any reason, drilling operations are suspended for more than 90 days, a written notice must be provided to this office outlining your plans for this well.
- N. **Commingling:** No production (oil, gas, and water) from the subject well should start until Sundry Notices (if necessary) granting variances from applicable regulations as related to commingling and off-lease measurement are approved by this office. (See 43 CFR 3173.14)

II. REPORTING REQUIREMENTS

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

III. DRILLER'S LOG

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

IV. GAS FLARING

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

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

V. SAFETY

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

VI. CHANGE OF PLANS OR ABANDONMENT

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

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.

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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Action 471656

CONDITIONS

Operator: DJR OPERATING, LLC 200 Energy Court Farmington, NM 87401	OGRID:
	371838
	Action Number: 471656
Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)	

CONDITIONS

Created By	Condition	Condition Date
scrues76	Cement is required to circulate on both surface and intermediate1 strings of casing.	6/6/2025
scrues76	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	6/6/2025
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	7/18/2025
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	7/18/2025
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.	7/18/2025
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.	7/18/2025