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

5. Lease Serial No.

6. If Indian, Allotee or Tribe Name

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

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 38215

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.

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 04/22/2021

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

Approval Date: 04/22/2021

Additional Operator Remarks

Location of Well

0. SHL: NESE / 2046 FSL / 557 FEL / TWSP: 22N / RANGE: 8W / SECTION: 1 / LAT: 36.167066 / LONG: -107.626366 (TVD: 0 feet, MD: 0 feet)

PPP: SWNE / 1711 FNL / 2646 FWL / TWSP: 22N / RANGE: 7W / SECTION: 7 / LAT: 36.15674 / LONG: -107.615664 (TVD: 4929 feet, MD: 10037 feet)

PPP: NWNW / 0 FNL / 694 FWL / TWSP: 22N / RANGE: 7W / SECTION: 7 / LAT: 36.161445 / LONG: -107.6222 (TVD: 4929 feet, MD: 10037 feet)

PPP: SWSW / 610 FSL / 0 FEL / TWSP: 22N / RANGE: 7W / SECTION: 6 / LAT: 36.163124 / LONG: -107.62453 (TVD: 4929 feet, MD: 10037 feet)

PPP: SESE / 806 FSL / 223 FEL / TWSP: 22N / RANGE: 8W / SECTION: 1 / LAT: 36.163662 / LONG: -107.625278 (TVD: 4373 feet, MD: 4447 feet)

BHL: SWNE / 2287 FNL / 1964 FEL / TWSP: 22N / RANGE: 7W / SECTION: 7 / LAT: 36.155161 / LONG: -107.613472 (TVD: 4929 feet, MD: 10037 feet)

BLM Point of Contact

Name: GARY W SMITH
Title: Natural Resource Specialist
Phone: (505) 564-7701
Email: g1smith@blm.gov

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
DISTRICT II
811 S. First St., Artesia, N.M. 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

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

Form C-102
Revised August 1, 2011

Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30 045 38215	98174	NORTH ALAMITO UNIT MANCOS OIL POOL

[4] Property Code	[5] Property Name	[6] Well Number
325267	NORTH ALAMITO UNIT	#408H

[7] OGRID No.	[8] Operator Name	[9] Elevation
371838	DJR OPERATING, LLC	6917'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	1	22N	8W		2046'	SOUTH	557'	EAST	SAN JUAN

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	7	22N	7W		2287'	NORTH	1964'	EAST	SANDOVAL

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
PENETRATED SPACING UNIT: SEC 1: SE/SE (40 AC.); SEC 6: SW/SW (40.75 AC.); SEC 7: NW/NW, NE/NW, SW/NW, NW/NE, SW/NE (200.80 AC.) = 281.55 ACRES			R-14081 R-14081A

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

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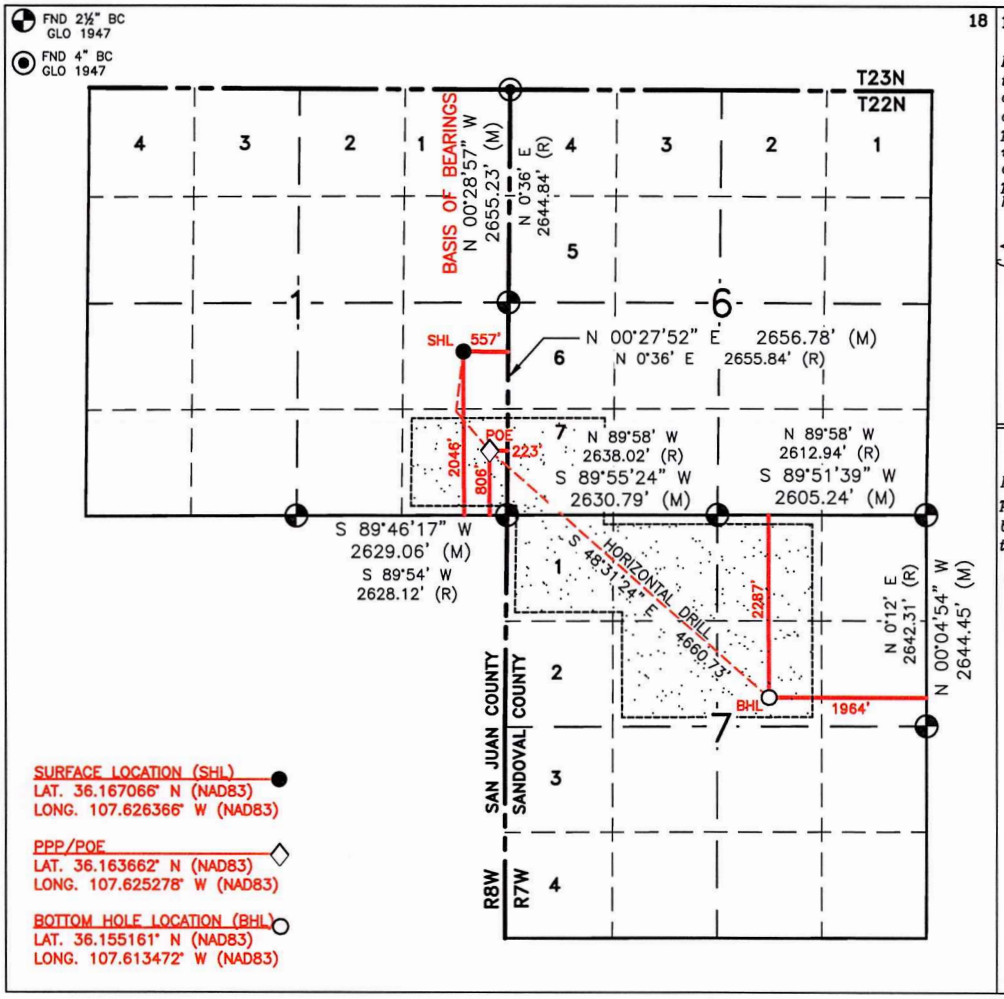

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[17] OPERATOR CERTIFICATION

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

Shaw-Marie Ford 6/22/2020
Signature Date

Shaw-Marie Ford
Printed Name

sford@djrllc.com
E-mail Address

SURVEYOR CERTIFICATION

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

FEBRUARY 20, 2020
Date of Survey

Signature and Seal of Professional Surveyor:

HENRY P. BROADHURST, NEW MEXICO, 11393, 06/18/2020, PROFESSIONAL SURVEYOR

Certificate Number 11393

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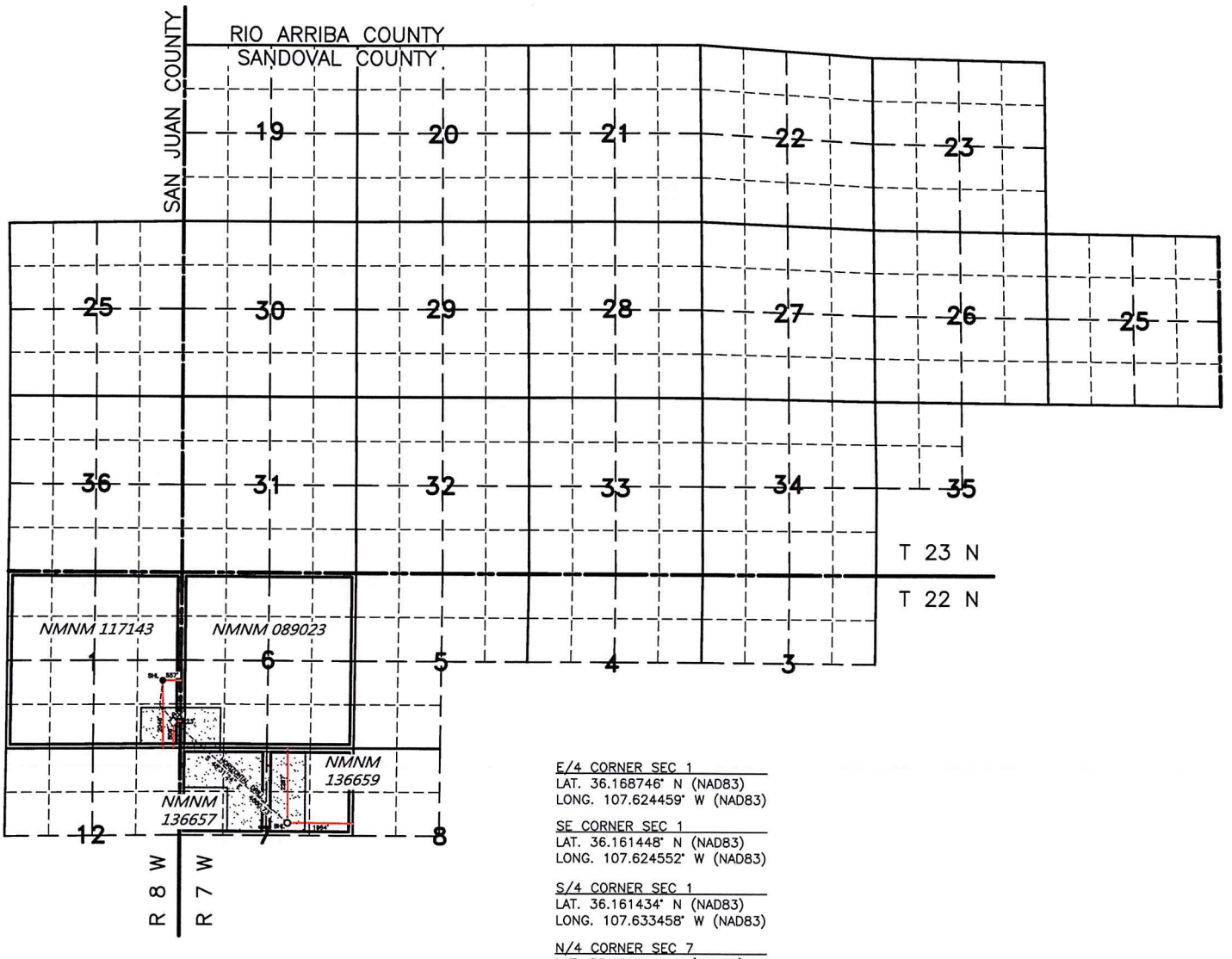
☐ AMENDED REPORT

DJR OPERATING, LLC
NORTH ALAMITO UNIT #408H



E/4 CORNER SEC 1
LAT. 36.168746° N (NAD83)
LONG. 107.624459° W (NAD83)

SE CORNER SEC 1
LAT. 36.161448° N (NAD83)
LONG. 107.624552° W (NAD83)

S/4 CORNER SEC 1
LAT. 36.161434° N (NAD83)
LONG. 107.633458° W (NAD83)

N/4 CORNER SEC 7
LAT. 36.161442° N (NAD83)
LONG. 107.615639° W (NAD83)

NE CORNER SEC 7
LAT. 36.161443° N (NAD83)
LONG. 107.606813° W (NAD83)

E/4 CORNER SEC 7
LAT. 36.154178° N (NAD83)
LONG. 107.606822° W (NAD83)

SURFACE LOCATION (SHL)
LAT. 36.167066° N (NAD83)
LONG. 107.626366° W (NAD83)

PPP/POE
LAT. 36.163662° N (NAD83)
LONG. 107.625278° W (NAD83)

BOTTOM HOLE LOCATION (BHL)
LAT. 36.155161° N (NAD83)
LONG. 107.613472° W (NAD83)

PENETRATED SPACING UNIT;
SEC 1: SE/SE (40 AC.); SEC 6: SW/SW (40.75 AC.); SEC 7: NW/NW, NE/NW, SW/NW, NW/NE, SW/NE (200.80 AC.) = 281.55 ACRES
TOTAL 14,262.78 ACRES: T23N R7W SEC. 19-23, 25, 26-34 (ALL); 35 (NW/4); T22N R7W SEC. 3 & 4 (N/2); 5 (N/2, SW/4); 6 (ALL); 7 (N/2); 8 (NW/4); T23N R8W SEC. 25, 36 (ALL); T22N R8W SEC. 1 (ALL); SEC. 12 (N/2) - UNDIVIDED UNIT

DISTRICT I
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Revised August 1, 2011

Submit one copy to appropriate District Office

☐ AMENDED REPORT

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, NM 87505

NORTH ALAMITO UNIT #408H

295.15 LINEAR FEET OF WELLBORE WITHIN
NMNM 117143
LOCATED IN THE SE/SE OF SECTION 1,
T22N, R8W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO

WELLBORE	NS-FOOT	NS INDICATOR	EW-FOOT	EW INDICATOR	LATITUDE	LONGITUDE
FROM	806	FSL	223	FEL	36.163662° N	107.625278° W
TO	610	FSL	0	FEL	36.163124° N	107.624530° W

919.92 LINEAR FEET OF WELLBORE WITHIN
NMNM 089023
LOCATED IN THE SW/SW OF SECTION 6,
T22N, R7W, N.M.P.M.,
SANDOVAL COUNTY, NEW MEXICO

WELLBORE	NS-FOOT	NS INDICATOR	EW-FOOT	EW INDICATOR	LATITUDE	LONGITUDE
FROM	610	FSL	0	FEL	36.163124° N	107.624530° W
TO	0	FSL	694	FWL	36.161446° N	107.622200° W

2579.99 LINEAR FEET OF WELLBORE WITHIN
NMNM 136657
LOCATED IN THE NW/NW, NE/NW & SE/NW OF SECTION 7,
T22N, R7W, N.M.P.M.,
SANDOVAL COUNTY, NEW MEXICO

WELLBORE	NS-FOOT	NS INDICATOR	EW-FOOT	EW INDICATOR	LATITUDE	LONGITUDE
FROM	0	FNL	694	FWL	36.161446° N	107.622200° W
TO	1711	FNL	2646	FWL	36.156740° N	107.615664° W

865.67 LINEAR FEET OF WELLBORE WITHIN
NMNM 136659
LOCATED IN THE SW/NE OF SECTION 7,
T22N, R7W, N.M.P.M.,
SANDOVAL COUNTY, NEW MEXICO

WELLBORE	NS-FOOT	NS INDICATOR	EW-FOOT	EW INDICATOR	LATITUDE	LONGITUDE
FROM	1711	FNL	2646	FWL	36.156740° N	107.615664° W
TO	2287	FNL	1964	FEL	36.155161° N	107.613472° W

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State of New Mexico
Energy, Minerals and Natural Resources Department

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

Submit Original to Appropriate District Office

GAS CAPTURE PLAN

Date:**6/15/2020**

☒ Original Operator & OGRID No.: **DJR Operating LLC. ; 371838**
☐ Amended - Reason for Amendment:_____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.
Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility
The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
North Alamito Unit 405H		**NESE,Section 1, T22N, R8W**	**2047' FSL, 517' FEL**	**420**	**Flared**	
North Alamito Unit 406H		**NESE,Section 1, T22N, R8W**	**2046' FSL, 536' FEL**	**515**	**Flared**	
North Alamito Unit 407H		**NESE,Section 1, T22N, R8W**	**2047' FSL, 497' FEL**	**364**	**Flared**	
North Alamito Unit 408H		**NESE,Section 1, T22N, R8W**	**2046' FSL, 557' FEL**	**388**	**Flared**	

Gathering System and Pipeline Notification
Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to **Enterprise Field Services, LLC (Enterprise)** and will be connected to **Enterprise's** low/**high** pressure gathering system located in **Sandoval** County, New Mexico. It will require approximately **4,935'** of pipeline to connect the facility to DJR Operating LLC. low/**high** pressure Existing **Pipeline in Sec. 1, T22N, R8W** which ties into **Enterprise'** existing pipeline in **Section 25, T23N, R7W**. **DJR Operating LLC.** provides (periodically) to **Enterprise** a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, **DJR Operating LLC.** and **Enterprise** have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at the **Chaco Processing Plant** located in Sec.**16**, Twn **26N**, Rng **12W**, **San Juan** County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy
After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on **Enterprise** system at that time. Based on current information, it is **DJR Operating LLC.'s** belief the system can take this gas upon completion of the well(s).
Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring
Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
  - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
  - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
  - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

Rev 0

DJR Operating

DRILLING PLAN
North Alamito #408H
San Juan County, New Mexico

Surface Location
557-ft FEL & 2046-ft FSL
Sec 1 T22N R08W
Graded Elevation 6917' MSL
RKB Elevation 6931' (14' KB)

SHL Geographical Coordinates (NAD-83)
Latitude 36.1670660° N
Longitude 107.6263660° W

Kick Off Point for Horizontal Build Curve
4447-ft MD
4373-ft TVD

Local Coordinates (from SHL)
748-ft South
91-ft West

Heel Location (Pay zone entry)
223-ft FEL & 806-ft FSL
Sec 1 T22N R08W

Heel Geographical Coordinates (NAD-83)
Latitude 36.1636624° N
Longitude 107.62527810° W

Bottom Hole Location (TD)
1964-ft FEL & 2287-ft FNL
Sec 7 T22N R07W

BHL Geographical Coordinates (NAD-83)
Latitude 36.1551613° N
Longitude 107.6134718° W

Well objectives
This well is planned as a 4660-ft lateral in the Gallup C sand.

Bottom Hole temperature and pressure
The temperature in the Gallup C horizontal objective is 136°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	704	703	Sd	W	8.3	8.4 – 8.8
Kirtland	767	766	Sh	-	8.3	8.4 – 8.8
Fruitland	1036	1031	C	G	8.3	9.0 - 9.5
Pictured Cliffs	1293	1283	Sd	W	8.3	9.0 - 9.5
Lewis	1469	1455	Sh	-		9.0 - 9.5
Chacra	2041	2016	Sd	-	8.3	9.0 - 9.5
Menefee	2825	2784	Sd, C	G	8.3	9.0 - 9.5
Point Lookout	3724	3664	Sd	-	8.3	9.0 - 9.5
Mancos	3890	3827	Sh	-		9.0 - 9.5
Mancos Silt	4200	4131	Slt	O/G	6.6	9.0 - 9.5
Gallup A	4716	4622	Slt	O/G	6.6	9.0 - 9.5
Gallup B	4785	4679	Sd	O/G	6.6	8.8 -9.0
Gallup C	4925	4779	Sd	O/G	6.6	8.8 -9.0
Target	5376	4929	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	5318	surf	4927	surface
4-1/2"	6-1/8"	11.6	P-110	BTC	5036	10037	4842	4917	5036

Note: all casing will be new

Rev 0

DJR Operating

Casing Design Load Cases

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

Note #

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

Casing Design Factors

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

Cement Design

9-5/8" Surface Casing	Lead
Name	Redi-Mix
Type	I-II
Planned top	Surface
Density (ppg)	14.50
Yield (cf/sx)	1.61
Mix water (gal/sx)	7.41
Volume (sx)	114
Volume (bbls)	33
Volume (cu. ft.)	185
Excess %	50

7" Intermediate Casing	Lead	Tail
	BJ Services	BJ Services
Type	III	Poz/G
Planned top	Surface	3947-ft
Density (ppg)	12.30	13.50
Yield (cf/sx)	2.34	1.50
Mix water (gal/sx)	13.26	7.20
Volume (sx)	372	213
Volume (bbls)	155	57
Volume (cu.ft.)	870	318
Excess %	50	50

4-1/2" Production Liner

	BJ Services
Type	Poz/G
Planned top	5036-ft
Density (ppg)	13.3
Yield (cf/sx)	1.56
Mix water (gal/sx)	7.71
Volume (sx)	419
Volume (bbls)	117
Volume (cu.ft)	655
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 – 5318	9.0 – 9.5	38 – 45	8 – 14	<20
Production	Low solids, non-dispersed	5318 – 10037	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.

DJR Operating

Company: DJR Operating
Project: North Alamito Unit
Site: I01 2208
Well: # 408H
Wellbore: Original Drilling
Design: APD

PROJECT DETAILS: North Alamito 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

Scientific Drilling

WELL DETAILS: # 408H

GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude	
0.00	0.00	1880173.96	2784180.65	36.1670660	-107.6263660	1

Plan: APD (# 408H/Original Drilling)

Created By: Janie Collins Date: 11:14, February 28 2020

Azimuths to True North
Magnetic North: 8.[illegible]°
Magnetic Field
Strength: 49287.[illegible]nT
Dip Angle: 62.[illegible]°
Date: 2/26/2020
Model: HDGM_RF[illegible]

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
408H Heel	4929.00	-1238.97	321.12	1878935.68	2784504.41	36.1636624	-107.6252781
408H Toe	4917.00	-4333.29	3806.47	1875848.80	2787996.35	36.1551613	-107.6134718

SECTION DETAILS

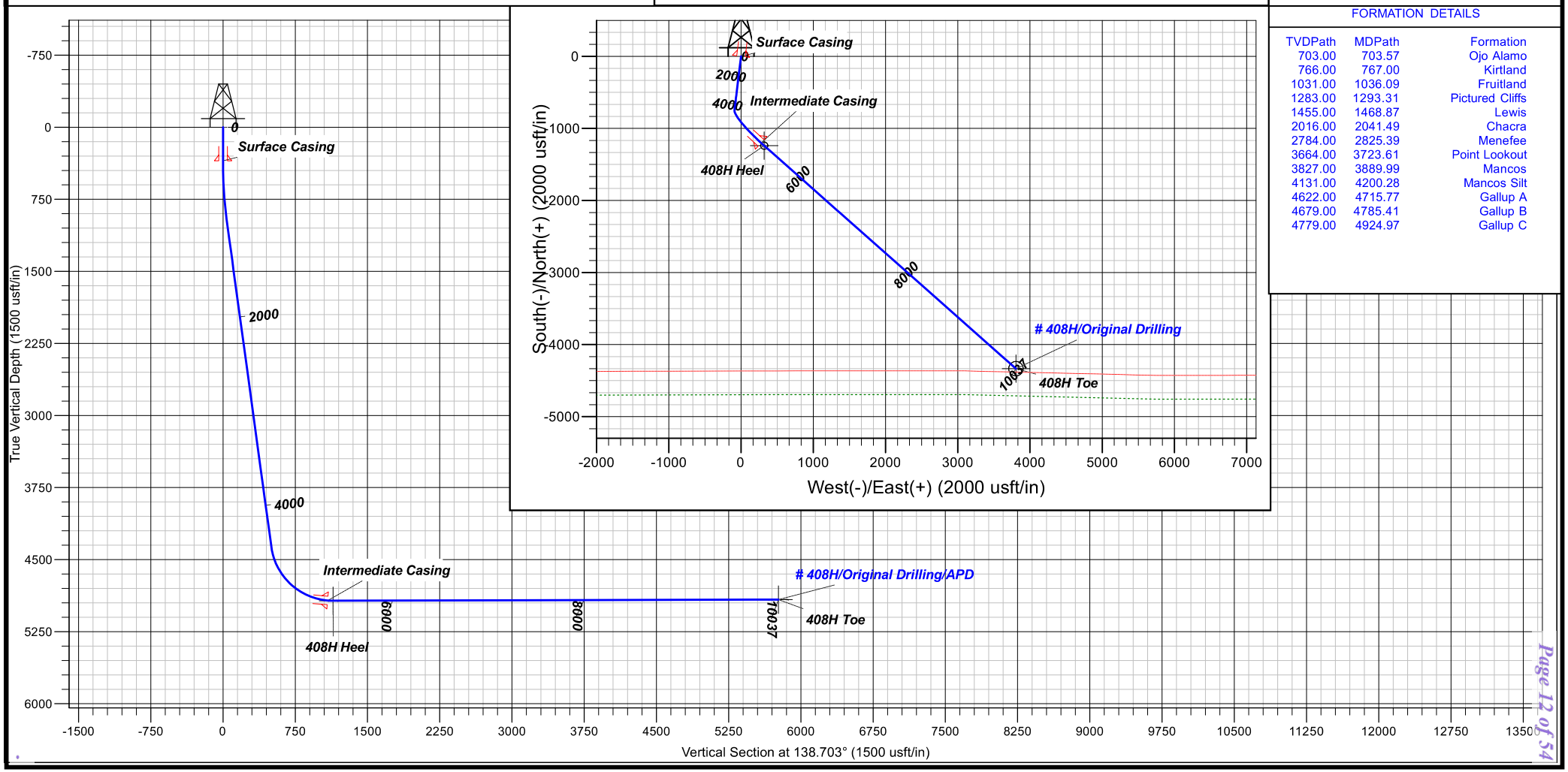
MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSect	Target
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.000	400.00	0.00	0.00	0.00	0.00	0.00	
978.03	11.56	186.921	974.12	-57.69	-7.00	2.00	186.92	38.72	
4447.12	11.56	186.921	4372.83	-747.85	-90.77	0.00	0.00	501.95	
5375.99	90.15	131.599	4929.00	-1238.97	321.12	9.00	-55.84	1142.77	408H Heel
10036.73	90.15	131.599	4917.00	-4333.29	3806.47	0.00	0.00	5767.72	408H Toe

CASING DETAILS

TVD	MD	Name
350.00	350.00	Surface Casing
4926.54	5317.98	Intermediate Casing

FORMATION DETAILS

TVDPath	MDPath	Formation
703.00	703.57	Ojo Alamo
766.00	767.00	Kirtland
1031.00	1036.09	Fruitland
1283.00	1293.31	Pictured Cliffs
1455.00	1468.87	Lewis
2016.00	2041.49	Chacra
2784.00	2825.39	Menefee
3664.00	3723.61	Point Lookout
3827.00	3889.99	Mancos
4131.00	4200.28	Mancos Silt
4622.00	4715.77	Gallup A
4679.00	4785.41	Gallup B
4779.00	4924.97	Gallup C



DJR Operating

DJR Operating

North Alamito Unit
I01 2208
 # 408H - Slot 1

Original Drilling

Plan: APD

Standard Planning Report

28 February, 2020

Scientific Drilling

www.scientificdrilling.com

DJR Operating

Scientific Drilling, Intl

Planning Report

Database:	Grand Junction	**Local Co-ordinate Reference:**	Well # 408H - Slot 1
Company:	DJR Operating	**TVD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Project:	North Alamito Unit	**MD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Site:	I01 2208	**North Reference:**	True
Well:	# 408H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

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

Site	I01 2208				
Site Position:		**Northing:**	1,880,173.96 usft	**Latitude:**	36.1670660
From:	Lat/Long	**Easting:**	2,784,180.65 usft	**Longitude:**	-107.6263660
Position Uncertainty:	0.00 usft	**Slot Radius:**	13.20 in	**Grid Convergence:**	0.12 °

Well	# 408H - Slot 1					
Well Position	**+N/-S**	0.00 usft	**Northing:**	1,880,173.96 usft	**Latitude:**	36.1670660
	+E/-W	0.00 usft	**Easting:**	2,784,180.65 usft	**Longitude:**	-107.6263660
Position Uncertainty		0.00 usft	**Wellhead Elevation:**		**Ground Level:**	6,917.00 usft

Wellbore	Original Drilling				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	HDGM_FILE	2/26/2020	8.72	62.73	49,287.60000000

Design	APD				
Audit Notes:					
Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00
Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**	
	0.00	0.00	0.00	138.703	

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.000	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
978.03	11.56	186.921	974.12	-57.69	-7.00	2.00	2.00	0.00	186.92	
4,447.12	11.56	186.921	4,372.83	-747.85	-90.77	0.00	0.00	0.00	0.00	
5,375.99	90.15	131.599	4,929.00	-1,238.97	321.12	9.00	8.46	-5.96	-55.84	408H Heel
10,036.73	90.15	131.599	4,917.00	-4,333.29	3,806.47	0.00	0.00	0.00	0.00	408H Toe

DJR Operating

Scientific Drilling, Intl

Planning Report

Database:	Grand Junction	**Local Co-ordinate Reference:**	Well # 408H - Slot 1
Company:	DJR Operating	**TVD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Project:	North Alamito Unit	**MD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Site:	I01 2208	**North Reference:**	True
Well:	# 408H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.000	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.000	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.000	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	2.00	186.921	499.98	-1.73	-0.21	1.16	2.00	2.00	0.00
600.00	4.00	186.921	599.84	-6.93	-0.84	4.65	2.00	2.00	0.00
700.00	6.00	186.921	699.45	-15.58	-1.89	10.46	2.00	2.00	0.00
800.00	8.00	186.921	798.70	-27.68	-3.36	18.58	2.00	2.00	0.00
900.00	10.00	186.921	897.47	-43.21	-5.24	29.00	2.00	2.00	0.00
978.03	11.56	186.921	974.12	-57.69	-7.00	38.72	2.00	2.00	0.00
1,000.00	11.56	186.921	995.64	-62.06	-7.53	41.66	0.00	0.00	0.00
1,100.00	11.56	186.921	1,093.61	-81.96	-9.95	55.01	0.00	0.00	0.00
1,200.00	11.56	186.921	1,191.58	-101.85	-12.36	68.36	0.00	0.00	0.00
1,300.00	11.56	186.921	1,289.55	-121.75	-14.78	81.72	0.00	0.00	0.00
1,400.00	11.56	186.921	1,387.53	-141.64	-17.19	95.07	0.00	0.00	0.00
1,500.00	11.56	186.921	1,485.50	-161.54	-19.61	108.42	0.00	0.00	0.00
1,600.00	11.56	186.921	1,583.47	-181.43	-22.02	121.78	0.00	0.00	0.00
1,700.00	11.56	186.921	1,681.44	-201.33	-24.44	135.13	0.00	0.00	0.00
1,800.00	11.56	186.921	1,779.41	-221.22	-26.85	148.48	0.00	0.00	0.00
1,900.00	11.56	186.921	1,877.38	-241.11	-29.27	161.83	0.00	0.00	0.00
2,000.00	11.56	186.921	1,975.35	-261.01	-31.68	175.19	0.00	0.00	0.00
2,100.00	11.56	186.921	2,073.32	-280.90	-34.10	188.54	0.00	0.00	0.00
2,200.00	11.56	186.921	2,171.30	-300.80	-36.51	201.89	0.00	0.00	0.00
2,300.00	11.56	186.921	2,269.27	-320.69	-38.93	215.25	0.00	0.00	0.00
2,400.00	11.56	186.921	2,367.24	-340.59	-41.34	228.60	0.00	0.00	0.00
2,500.00	11.56	186.921	2,465.21	-360.48	-43.76	241.95	0.00	0.00	0.00
2,600.00	11.56	186.921	2,563.18	-380.38	-46.17	255.31	0.00	0.00	0.00
2,700.00	11.56	186.921	2,661.15	-400.27	-48.58	268.66	0.00	0.00	0.00
2,800.00	11.56	186.921	2,759.12	-420.17	-51.00	282.01	0.00	0.00	0.00
2,900.00	11.56	186.921	2,857.10	-440.06	-53.41	295.37	0.00	0.00	0.00
3,000.00	11.56	186.921	2,955.07	-459.95	-55.83	308.72	0.00	0.00	0.00
3,100.00	11.56	186.921	3,053.04	-479.85	-58.24	322.07	0.00	0.00	0.00
3,200.00	11.56	186.921	3,151.01	-499.74	-60.66	335.42	0.00	0.00	0.00
3,300.00	11.56	186.921	3,248.98	-519.64	-63.07	348.78	0.00	0.00	0.00
3,400.00	11.56	186.921	3,346.95	-539.53	-65.49	362.13	0.00	0.00	0.00
3,500.00	11.56	186.921	3,444.92	-559.43	-67.90	375.48	0.00	0.00	0.00
3,600.00	11.56	186.921	3,542.89	-579.32	-70.32	388.84	0.00	0.00	0.00
3,700.00	11.56	186.921	3,640.87	-599.22	-72.73	402.19	0.00	0.00	0.00
3,800.00	11.56	186.921	3,738.84	-619.11	-75.15	415.54	0.00	0.00	0.00
3,900.00	11.56	186.921	3,836.81	-639.00	-77.56	428.90	0.00	0.00	0.00
4,000.00	11.56	186.921	3,934.78	-658.90	-79.98	442.25	0.00	0.00	0.00
4,100.00	11.56	186.921	4,032.75	-678.79	-82.39	455.60	0.00	0.00	0.00
4,200.00	11.56	186.921	4,130.72	-698.69	-84.81	468.96	0.00	0.00	0.00
4,300.00	11.56	186.921	4,228.69	-718.58	-87.22	482.31	0.00	0.00	0.00
4,400.00	11.56	186.921	4,326.67	-738.48	-89.64	495.66	0.00	0.00	0.00
4,447.12	11.56	186.921	4,372.83	-747.85	-90.77	501.95	0.00	0.00	0.00
4,500.00	14.76	171.287	4,424.33	-759.78	-90.39	511.17	9.00	6.05	-29.56
4,600.00	22.36	155.759	4,519.12	-789.77	-80.63	540.14	9.00	7.60	-15.53
4,700.00	30.69	148.080	4,608.54	-828.86	-59.29	583.59	9.00	8.34	-7.68
4,800.00	39.30	143.478	4,690.39	-876.07	-26.88	640.45	9.00	8.61	-4.60
4,900.00	48.04	140.321	4,762.66	-930.25	15.80	709.32	9.00	8.73	-3.16

DJR Operating

Scientific Drilling, Intl

Planning Report

Database:	Grand Junction	**Local Co-ordinate Reference:**	Well # 408H - Slot 1
Company:	DJR Operating	**TVD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Project:	North Alamito Unit	**MD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Site:	I01 2208	**North Reference:**	True
Well:	# 408H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,000.00	56.84	137.933	4,823.57	-990.06	67.69	788.50	9.00	8.80	-2.39
5,100.00	65.68	135.984	4,871.61	-1,054.03	127.51	876.04	9.00	8.84	-1.95
5,200.00	74.53	134.291	4,905.61	-1,120.58	193.80	969.79	9.00	8.86	-1.69
5,300.00	83.40	132.738	4,924.73	-1,188.08	264.92	1,067.44	9.00	8.87	-1.55
5,375.99	90.15	131.599	4,929.00	-1,238.97	321.12	1,142.77	9.00	8.87	-1.50
5,400.00	90.15	131.599	4,928.94	-1,254.92	339.08	1,166.60	0.00	0.00	0.00
5,500.00	90.15	131.599	4,928.68	-1,321.31	413.86	1,265.83	0.00	0.00	0.00
5,600.00	90.15	131.599	4,928.42	-1,387.70	488.64	1,365.06	0.00	0.00	0.00
5,700.00	90.15	131.599	4,928.17	-1,454.09	563.42	1,464.29	0.00	0.00	0.00
5,800.00	90.15	131.599	4,927.91	-1,520.48	638.20	1,563.53	0.00	0.00	0.00
5,900.00	90.15	131.599	4,927.65	-1,586.87	712.98	1,662.76	0.00	0.00	0.00
6,000.00	90.15	131.599	4,927.39	-1,653.26	787.76	1,761.99	0.00	0.00	0.00
6,100.00	90.15	131.599	4,927.14	-1,719.66	862.55	1,861.22	0.00	0.00	0.00
6,200.00	90.15	131.599	4,926.88	-1,786.05	937.33	1,960.45	0.00	0.00	0.00
6,300.00	90.15	131.599	4,926.62	-1,852.44	1,012.11	2,059.69	0.00	0.00	0.00
6,400.00	90.15	131.599	4,926.36	-1,918.83	1,086.89	2,158.92	0.00	0.00	0.00
6,500.00	90.15	131.599	4,926.11	-1,985.22	1,161.67	2,258.15	0.00	0.00	0.00
6,600.00	90.15	131.599	4,925.85	-2,051.61	1,236.45	2,357.38	0.00	0.00	0.00
6,700.00	90.15	131.599	4,925.59	-2,118.00	1,311.23	2,456.61	0.00	0.00	0.00
6,800.00	90.15	131.599	4,925.33	-2,184.39	1,386.01	2,555.85	0.00	0.00	0.00
6,900.00	90.15	131.599	4,925.08	-2,250.78	1,460.79	2,655.08	0.00	0.00	0.00
7,000.00	90.15	131.599	4,924.82	-2,317.17	1,535.57	2,754.31	0.00	0.00	0.00
7,100.00	90.15	131.599	4,924.56	-2,383.57	1,610.35	2,853.54	0.00	0.00	0.00
7,200.00	90.15	131.599	4,924.30	-2,449.96	1,685.13	2,952.77	0.00	0.00	0.00
7,300.00	90.15	131.599	4,924.05	-2,516.35	1,759.91	3,052.01	0.00	0.00	0.00
7,400.00	90.15	131.599	4,923.79	-2,582.74	1,834.70	3,151.24	0.00	0.00	0.00
7,500.00	90.15	131.599	4,923.53	-2,649.13	1,909.48	3,250.47	0.00	0.00	0.00
7,600.00	90.15	131.599	4,923.27	-2,715.52	1,984.26	3,349.70	0.00	0.00	0.00
7,700.00	90.15	131.599	4,923.02	-2,781.91	2,059.04	3,448.93	0.00	0.00	0.00
7,800.00	90.15	131.599	4,922.76	-2,848.30	2,133.82	3,548.17	0.00	0.00	0.00
7,900.00	90.15	131.599	4,922.50	-2,914.69	2,208.60	3,647.40	0.00	0.00	0.00
8,000.00	90.15	131.599	4,922.24	-2,981.09	2,283.38	3,746.63	0.00	0.00	0.00
8,100.00	90.15	131.599	4,921.99	-3,047.48	2,358.16	3,845.86	0.00	0.00	0.00
8,200.00	90.15	131.599	4,921.73	-3,113.87	2,432.94	3,945.09	0.00	0.00	0.00
8,300.00	90.15	131.599	4,921.47	-3,180.26	2,507.72	4,044.33	0.00	0.00	0.00
8,400.00	90.15	131.599	4,921.21	-3,246.65	2,582.50	4,143.56	0.00	0.00	0.00
8,500.00	90.15	131.599	4,920.96	-3,313.04	2,657.28	4,242.79	0.00	0.00	0.00
8,600.00	90.15	131.599	4,920.70	-3,379.43	2,732.06	4,342.02	0.00	0.00	0.00
8,700.00	90.15	131.599	4,920.44	-3,445.82	2,806.85	4,441.25	0.00	0.00	0.00
8,800.00	90.15	131.599	4,920.18	-3,512.21	2,881.63	4,540.49	0.00	0.00	0.00
8,900.00	90.15	131.599	4,919.93	-3,578.60	2,956.41	4,639.72	0.00	0.00	0.00
9,000.00	90.15	131.599	4,919.67	-3,645.00	3,031.19	4,738.95	0.00	0.00	0.00
9,100.00	90.15	131.599	4,919.41	-3,711.39	3,105.97	4,838.18	0.00	0.00	0.00
9,200.00	90.15	131.599	4,919.15	-3,777.78	3,180.75	4,937.41	0.00	0.00	0.00
9,300.00	90.15	131.599	4,918.90	-3,844.17	3,255.53	5,036.65	0.00	0.00	0.00
9,400.00	90.15	131.599	4,918.64	-3,910.56	3,330.31	5,135.88	0.00	0.00	0.00
9,500.00	90.15	131.599	4,918.38	-3,976.95	3,405.09	5,235.11	0.00	0.00	0.00
9,600.00	90.15	131.599	4,918.12	-4,043.34	3,479.87	5,334.34	0.00	0.00	0.00
9,700.00	90.15	131.599	4,917.87	-4,109.73	3,554.65	5,433.57	0.00	0.00	0.00
9,800.00	90.15	131.599	4,917.61	-4,176.12	3,629.43	5,532.81	0.00	0.00	0.00
9,900.00	90.15	131.599	4,917.35	-4,242.52	3,704.21	5,632.04	0.00	0.00	0.00
10,000.00	90.15	131.599	4,917.09	-4,308.91	3,779.00	5,731.27	0.00	0.00	0.00

DJR Operating

Scientific Drilling, Intl
Planning Report

Database:	Grand Junction	**Local Co-ordinate Reference:**	Well # 408H - Slot 1
Company:	DJR Operating	**TVD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Project:	North Alamito Unit	**MD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Site:	I01 2208	**North Reference:**	True
Well:	# 408H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Drilling		
Design:	APD		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,036.73	90.15	131.599	4,917.00	-4,333.29	3,806.47	5,767.72	0.00	0.00	0.00

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
408H Toe - plan hits target center - Circle (radius 100.00)	0.00	0.000	4,917.00	-4,333.29	3,806.47	1,875,848.80	2,787,996.36	36.1551613	-107.6134718
408H Heel - plan hits target center - Circle (radius 50.00)	0.00	0.000	4,929.00	-1,238.97	321.12	1,878,935.68	2,784,504.42	36.1636624	-107.6252781

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)
350.00	350.00	Surface Casing	9.62	12.25
5,317.98	4,926.55	Intermediate Casing	7.00	8.75

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
703.57	703.00	Ojo Alamo		0.00	0.000
767.00	766.00	Kirtland		0.00	0.000
1,036.09	1,031.00	Fruitland		0.00	0.000
1,293.31	1,283.00	Pictured Cliffs		0.00	0.000
1,468.87	1,455.00	Lewis		0.00	0.000
2,041.49	2,016.00	Chacra		0.00	0.000
2,825.39	2,784.00	Menefee		0.00	0.000
3,723.61	3,664.00	Point Lookout		0.00	0.000
3,889.99	3,827.00	Mancos		0.00	0.000
4,200.28	4,131.00	Mancos Silt		0.00	0.000
4,715.77	4,622.00	Gallup A		0.00	0.000
4,785.41	4,679.00	Gallup B		0.00	0.000
4,924.97	4,779.00	Gallup C		0.00	0.000

DJR Operating

DJR Operating

North Alamito Unit
I01 2208
 # 408H

Original Drilling
APD

Anticollision Report

28 February, 2020

Scientific Drilling

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DJR Operating

Scientific Drilling, Intl

Anticollision Report

Company:	DJR Operating	**Local Co-ordinate Reference:**	Well # 408H - Slot 1
Project:	North Alamito Unit	**TVD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Reference Site:	I01 2208	**MD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Site Error:	0.00 usft	**North Reference:**	True
Reference Well:	# 408H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**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 ellipse separation of 1,000.00 usft	**Error Surface:**	Pedal Curve
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 2/28/2020

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	10,036.73	APD (Original Drilling)	MWD+IGRF	OWSG MWD + IGRF or WMM

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
I01 2208						
# 405H - Original Drilling - APD	462.77	462.92	39.83	36.93	13.740	CC
# 405H - Original Drilling - APD	500.00	500.17	39.89	36.73	12.624	ES
# 405H - Original Drilling - APD	600.00	599.63	41.71	37.86	10.816	SF
# 406H - Original Drilling - APD	443.26	443.31	20.06	17.30	7.264	CC
# 406H - Original Drilling - APD	500.00	500.02	20.26	17.10	6.413	ES
# 406H - Original Drilling - APD	10,036.73	11,048.77	1,244.79	952.68	4.261	SF
# 407H - Original Drilling - APD	400.00	400.00	59.92	57.46	24.368	CC
# 407H - Original Drilling - APD	700.00	700.32	61.19	56.65	13.502	ES
# 407H - Original Drilling - APD	4,850.00	4,865.92	202.46	160.47	4.821	SF

Offset Design I01 2208 - # 405H - Original Drilling - APD — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IGRF — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	88.95	0.73	39.85	39.85				
100.00	100.00	100.00	100.00	0.15	0.15	88.95	0.73	39.85	39.85	39.55	0.31	129.275	
200.00	200.00	200.00	200.00	0.51	0.51	88.95	0.73	39.85	39.85	38.83	1.03	38.873	
300.00	300.00	300.00	300.00	0.87	0.87	88.95	0.73	39.85	39.85	38.11	1.74	22.876	
400.00	400.00	400.00	400.00	1.23	1.23	88.95	0.73	39.85	39.85	37.39	2.46	16.207	
462.77	462.77	462.92	462.92	1.44	1.46	-99.92	1.40	39.69	39.83	36.93	2.90	13.740	CC
500.00	499.98	500.17	500.15	1.57	1.59	-102.92	2.43	39.46	39.89	36.73	3.16	12.624	ES
600.00	599.84	599.63	599.47	1.91	1.95	-117.08	7.51	38.30	41.71	37.86	3.86	10.816	SF
700.00	699.45	697.69	697.15	2.27	2.31	-135.90	15.79	36.40	49.55	44.98	4.57	10.832	
800.00	798.70	794.89	793.76	2.65	2.68	-151.68	26.24	34.01	65.78	60.49	5.29	12.424	
900.00	897.47	891.41	889.68	3.05	3.06	-161.62	36.69	31.61	88.33	82.32	6.01	14.705	
978.03	974.12	966.06	963.87	3.40	3.35	-166.67	44.77	29.76	109.34	102.78	6.56	16.668	
1,000.00	995.64	986.99	984.67	3.50	3.43	-167.82	47.04	29.24	115.65	108.94	6.72	17.218	
1,100.00	1,093.61	1,082.26	1,079.35	3.97	3.81	-171.78	57.35	26.88	144.80	137.39	7.41	19.547	
1,200.00	1,191.58	1,177.53	1,174.04	4.45	4.20	-174.42	67.67	24.52	174.37	166.27	8.10	21.515	
1,300.00	1,289.55	1,272.80	1,268.72	4.94	4.58	-176.29	77.98	22.16	204.18	195.38	8.80	23.190	

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

DJR Operating

Scientific Drilling, Intl

Anticollision Report

Company:	DJR Operating	**Local Co-ordinate Reference:**	Well # 408H - Slot 1
Project:	North Alamito Unit	**TVD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Reference Site:	I01 2208	**MD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Site Error:	0.00 usft	**North Reference:**	True
Reference Well:	# 408H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Original Drilling	**Database:**	Grand Junction
Reference Design:	APD	**Offset TVD Reference:**	Offset Datum

Offset Design I01 2208 - # 405H - Original Drilling - APD

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IGRF

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
1,400.00	1,387.53	1,368.07	1,363.40	5.44	4.96	-177.69	88.29	19.80	234.14	224.63	9.51	24.626	
1,500.00	1,485.50	1,463.34	1,458.08	5.94	5.35	-178.77	98.61	17.44	264.20	253.98	10.21	25.866	
1,600.00	1,583.47	1,558.62	1,552.76	6.45	5.74	-179.62	108.92	15.07	294.32	283.40	10.92	26.947	
1,700.00	1,681.44	1,653.89	1,647.44	6.96	6.13	179.68	119.24	12.71	324.50	312.86	11.63	27.896	
1,800.00	1,779.41	1,749.16	1,742.13	7.47	6.51	179.10	129.55	10.35	354.71	342.36	12.34	28.734	
1,900.00	1,877.38	1,844.43	1,836.81	7.98	6.90	178.61	139.87	7.99	384.94	371.89	13.06	29.480	
2,000.00	1,975.35	1,939.70	1,931.49	8.50	7.29	178.19	150.18	5.63	415.20	401.43	13.77	30.148	
2,100.00	2,073.32	2,034.97	2,026.17	9.02	7.68	177.83	160.50	3.27	445.48	430.99	14.49	30.750	
2,200.00	2,171.30	2,130.24	2,120.85	9.53	8.07	177.51	170.81	0.91	475.77	460.57	15.20	31.293	
2,300.00	2,269.27	2,225.51	2,215.53	10.05	8.46	177.23	181.13	-1.46	506.08	490.16	15.92	31.787	
2,400.00	2,367.24	2,320.79	2,310.22	10.57	8.85	176.99	191.44	-3.82	536.39	519.75	16.64	32.238	
2,500.00	2,465.21	2,416.06	2,404.90	11.09	9.24	176.77	201.75	-6.18	566.71	549.35	17.36	32.651	
2,600.00	2,563.18	2,511.33	2,499.58	11.61	9.63	176.57	212.07	-8.54	597.04	578.96	18.08	33.031	
2,700.00	2,661.15	2,606.60	2,594.26	12.13	10.02	176.39	222.38	-10.90	627.37	608.58	18.79	33.380	
2,800.00	2,759.12	2,701.87	2,688.94	12.65	10.41	176.23	232.70	-13.26	657.71	638.19	19.51	33.704	
2,900.00	2,857.10	2,797.14	2,783.62	13.18	10.80	176.08	243.01	-15.63	688.05	667.82	20.23	34.004	
3,000.00	2,955.07	2,892.41	2,878.31	13.70	11.19	175.95	253.33	-17.99	718.40	697.44	20.95	34.283	
3,100.00	3,053.04	2,987.68	2,972.99	14.22	11.59	175.82	263.64	-20.35	748.75	727.07	21.68	34.544	
3,200.00	3,151.01	3,082.95	3,067.67	14.74	11.98	175.71	273.96	-22.71	779.10	756.70	22.40	34.787	
3,300.00	3,248.98	3,178.23	3,162.35	15.27	12.37	175.60	284.27	-25.07	809.45	786.34	23.12	35.014	
3,400.00	3,346.95	3,273.50	3,257.03	15.79	12.76	175.50	294.59	-27.43	839.81	815.97	23.84	35.228	
3,500.00	3,444.92	3,368.77	3,351.71	16.31	13.15	175.41	304.90	-29.80	870.17	845.61	24.56	35.429	
3,600.00	3,542.89	3,464.04	3,446.40	16.84	13.54	175.33	315.21	-32.16	900.53	875.25	25.28	35.618	
3,700.00	3,640.87	3,559.31	3,541.08	17.36	13.93	175.25	325.53	-34.52	930.90	904.89	26.01	35.796	
3,800.00	3,738.84	3,654.58	3,635.76	17.89	14.33	175.17	335.84	-36.88	961.26	934.53	26.73	35.965	
3,900.00	3,836.81	3,749.85	3,730.44	18.41	14.72	175.10	346.16	-39.24	991.63	964.18	27.45	36.124	
4,000.00	3,934.78	3,845.12	3,825.12	18.94	15.11	175.04	356.47	-41.60	1,022.00	993.82	28.17	36.275	
4,100.00	4,032.75	3,940.39	3,919.81	19.46	15.50	174.97	366.79	-43.97	1,052.36	1,023.47	28.90	36.419	
4,200.00	4,130.72	4,035.67	4,014.49	19.98	15.89	174.92	377.10	-46.33	1,082.73	1,053.12	29.62	36.555	
4,300.00	4,228.69	4,130.94	4,109.17	20.51	16.28	174.86	387.42	-48.69	1,113.11	1,082.76	30.34	36.684	
4,400.00	4,326.67	4,226.21	4,203.85	21.03	16.68	174.81	397.73	-51.05	1,143.48	1,112.41	31.07	36.807	
4,447.12	4,372.83	4,271.10	4,248.46	21.28	16.86	174.78	402.59	-52.16	1,157.79	1,126.38	31.41	36.864	
4,450.00	4,375.65	4,273.84	4,251.19	21.30	16.87	175.88	402.89	-52.23	1,158.67	1,127.24	31.43	36.867	
4,500.00	4,424.33	4,320.98	4,298.04	21.57	17.07	-168.81	407.99	-53.40	1,175.16	1,143.37	31.79	36.967	
4,550.00	4,472.25	4,367.03	4,343.80	21.88	17.26	-158.70	412.98	-54.54	1,193.94	1,161.79	32.15	37.142	
4,600.00	4,519.12	4,400.00	4,376.57	22.20	17.39	-151.47	416.55	-55.37	1,214.98	1,182.58	32.40	37.494	
4,650.00	4,564.64	4,422.14	4,398.51	22.55	17.49	-145.76	419.28	-56.30	1,238.80	1,206.22	32.58	38.022	
4,700.00	4,608.54	4,450.00	4,425.99	22.92	17.61	-141.06	423.43	-58.29	1,265.52	1,232.72	32.80	38.586	
4,750.00	4,650.54	4,450.00	4,425.99	23.32	17.61	-136.14	423.43	-58.29	1,294.64	1,261.86	32.78	39.498	
4,800.00	4,690.39	4,468.77	4,444.38	23.74	17.70	-131.81	426.66	-60.14	1,326.17	1,293.26	32.91	40.293	
4,850.00	4,727.84	4,480.69	4,456.01	24.19	17.76	-127.24	428.90	-61.53	1,359.84	1,326.85	32.99	41.222	
4,900.00	4,762.66	4,500.00	4,474.74	24.66	17.86	-122.81	432.82	-64.14	1,395.44	1,362.30	33.14	42.113	
4,950.00	4,794.64	4,500.00	4,474.74	25.17	17.86	-117.27	432.82	-64.14	1,432.48	1,399.37	33.11	43.270	
5,000.00	4,823.57	4,500.00	4,474.74	25.70	17.86	-111.33	432.82	-64.14	1,470.93	1,437.85	33.08	44.463	
5,050.00	4,849.28	4,500.00	4,474.74	26.27	17.86	-105.04	432.82	-64.14	1,510.48	1,477.41	33.07	45.677	
5,100.00	4,871.61	4,500.00	4,474.74	26.88	17.86	-98.49	432.82	-64.14	1,550.79	1,517.72	33.07	46.895	
5,150.00	4,890.43	4,500.00	4,474.74	27.53	17.86	-91.85	432.82	-64.14	1,591.58	1,558.49	33.09	48.102	
5,200.00	4,905.61	4,500.00	4,474.74	28.21	17.86	-85.29	432.82	-64.14	1,632.56	1,599.43	33.12	49.287	
5,250.00	4,917.07	4,500.00	4,474.74	28.92	17.86	-79.01	432.82	-64.14	1,673.47	1,640.29	33.18	50.439	
5,300.00	4,924.73	4,500.00	4,474.74	29.67	17.86	-73.15	432.82	-64.14	1,714.08	1,680.83	33.25	51.547	
5,350.00	4,928.54	4,500.00	4,474.74	30.44	17.86	-67.82	432.82	-64.14	1,754.17	1,720.83	33.35	52.604	

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

DJR Operating

Scientific Drilling, Intl

Anticollision Report

Company:	DJR Operating	**Local Co-ordinate Reference:**	Well # 408H - Slot 1
Project:	North Alamito Unit	**TVD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Reference Site:	I01 2208	**MD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Site Error:	0.00 usft	**North Reference:**	True
Reference Well:	# 408H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Original Drilling	**Database:**	Grand Junction
Reference Design:	APD	**Offset TVD Reference:**	Offset Datum

Offset Design I01 2208 - # 405H - Original Drilling - APD

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IGRF

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,375.99	4,929.00	4,500.00	4,474.74	30.85	17.86	-65.28	432.82	-64.14	1,774.73	1,741.33	33.40	53.133	
5,400.00	4,928.94	4,500.00	4,474.74	31.24	17.86	-65.28	432.82	-64.14	1,793.70	1,760.24	33.46	53.612	
5,500.00	4,928.68	4,500.00	4,474.74	32.92	17.86	-65.28	432.82	-64.14	1,873.90	1,840.20	33.71	55.596	
5,600.00	4,928.42	4,500.00	4,474.74	34.71	17.86	-65.28	432.82	-64.14	1,955.94	1,921.98	33.96	57.594	
5,700.00	4,928.17	4,500.00	4,474.74	36.59	17.86	-65.28	432.82	-64.14	2,039.57	2,005.36	34.22	59.606	
5,800.00	4,927.91	4,479.48	4,454.84	38.55	17.76	-64.31	428.66	-61.38	2,124.24	2,089.94	34.30	61.926	
5,900.00	4,927.65	4,474.04	4,449.53	40.58	17.73	-64.05	427.63	-60.73	2,210.31	2,175.80	34.51	64.043	
6,000.00	4,927.39	4,450.00	4,425.99	42.66	17.61	-62.93	423.43	-58.29	2,297.79	2,263.22	34.57	66.469	
6,100.00	4,927.14	4,450.00	4,425.99	44.79	17.61	-62.93	423.43	-58.29	2,385.76	2,350.95	34.81	68.529	
6,200.00	4,926.88	4,450.00	4,425.99	46.97	17.61	-62.93	423.43	-58.29	2,474.65	2,439.60	35.05	70.606	
6,300.00	4,926.62	4,450.00	4,425.99	49.17	17.61	-62.93	423.43	-58.29	2,564.36	2,529.08	35.27	72.699	
6,400.00	4,926.36	4,450.00	4,425.99	51.41	17.61	-62.93	423.43	-58.29	2,654.80	2,619.31	35.49	74.806	
6,500.00	4,926.11	4,450.00	4,425.99	53.68	17.61	-62.93	423.43	-58.29	2,745.90	2,710.21	35.70	76.926	
6,600.00	4,925.85	4,450.00	4,425.99	55.97	17.61	-62.93	423.43	-58.29	2,837.60	2,801.71	35.89	79.059	
6,700.00	4,925.59	4,450.00	4,425.99	58.28	17.61	-62.93	423.43	-58.29	2,929.85	2,893.77	36.08	81.202	
6,800.00	4,925.33	4,450.00	4,425.99	60.61	17.61	-62.93	423.43	-58.29	3,022.59	2,986.33	36.26	83.355	
6,900.00	4,925.08	4,450.00	4,425.99	62.95	17.61	-62.93	423.43	-58.29	3,115.78	3,079.34	36.43	85.517	
7,000.00	4,924.82	4,450.00	4,425.99	65.31	17.61	-62.93	423.43	-58.29	3,209.38	3,172.78	36.60	87.686	
7,100.00	4,924.56	4,450.00	4,425.99	67.68	17.61	-62.93	423.43	-58.29	3,303.35	3,266.59	36.76	89.863	
7,200.00	4,924.30	4,428.41	4,404.72	70.07	17.52	-61.93	420.15	-56.66	3,397.25	3,360.48	36.78	92.377	
7,300.00	4,924.05	4,426.13	4,402.46	72.46	17.51	-61.83	419.83	-56.52	3,491.79	3,454.88	36.91	94.602	
7,400.00	4,923.79	4,423.95	4,400.30	74.86	17.50	-61.73	419.53	-56.40	3,586.62	3,549.58	37.04	96.830	
7,500.00	4,923.53	4,421.87	4,398.25	77.27	17.49	-61.63	419.25	-56.28	3,681.72	3,644.55	37.17	99.060	
7,600.00	4,923.27	4,400.00	4,376.57	79.69	17.39	-60.63	416.55	-55.37	3,777.41	3,740.25	37.17	101.638	
7,700.00	4,923.02	4,400.00	4,376.57	82.12	17.39	-60.63	416.55	-55.37	3,872.92	3,835.62	37.30	103.841	
7,800.00	4,922.76	4,400.00	4,376.57	84.55	17.39	-60.63	416.55	-55.37	3,968.64	3,931.22	37.42	106.047	
7,900.00	4,922.50	4,400.00	4,376.57	86.99	17.39	-60.63	416.55	-55.37	4,064.58	4,027.03	37.55	108.255	
8,000.00	4,922.24	4,400.00	4,376.57	89.43	17.39	-60.63	416.55	-55.37	4,160.70	4,123.04	37.67	110.464	
8,100.00	4,921.99	4,400.00	4,376.57	91.88	17.39	-60.63	416.55	-55.37	4,257.00	4,219.22	37.78	112.674	
8,200.00	4,921.73	4,400.00	4,376.57	94.33	17.39	-60.63	416.55	-55.37	4,353.47	4,315.58	37.89	114.885	
8,300.00	4,921.47	4,400.00	4,376.57	96.79	17.39	-60.63	416.55	-55.37	4,450.10	4,412.10	38.00	117.095	
8,400.00	4,921.21	4,400.00	4,376.57	99.25	17.39	-60.63	416.55	-55.37	4,546.87	4,508.76	38.11	119.305	
8,500.00	4,920.96	4,400.00	4,376.57	101.71	17.39	-60.63	416.55	-55.37	4,643.78	4,605.56	38.22	121.514	
8,600.00	4,920.70	4,400.00	4,376.57	104.18	17.39	-60.63	416.55	-55.37	4,740.82	4,702.50	38.32	123.721	
8,700.00	4,920.44	4,400.00	4,376.57	106.65	17.39	-60.63	416.55	-55.37	4,837.97	4,799.56	38.42	125.927	
8,800.00	4,920.18	4,400.00	4,376.57	109.12	17.39	-60.63	416.55	-55.37	4,935.24	4,896.73	38.52	128.131	
8,900.00	4,919.93	4,400.00	4,376.57	111.59	17.39	-60.63	416.55	-55.37	5,032.62	4,994.01	38.61	130.333	
9,000.00	4,919.67	4,400.00	4,376.57	114.07	17.39	-60.63	416.55	-55.37	5,130.10	5,091.39	38.71	132.532	
9,100.00	4,919.41	4,398.41	4,374.99	116.55	17.38	-60.56	416.38	-55.32	5,227.67	5,188.88	38.79	134.759	
9,200.00	4,919.15	4,396.45	4,373.03	119.03	17.38	-60.47	416.16	-55.27	5,325.33	5,286.46	38.87	136.991	
9,300.00	4,918.90	4,395.62	4,372.21	121.52	17.37	-60.44	416.07	-55.25	5,423.08	5,384.12	38.96	139.198	
9,400.00	4,918.64	4,386.32	4,362.97	124.00	17.33	-60.02	415.07	-55.02	5,520.89	5,481.89	39.00	141.569	
9,500.00	4,918.38	4,377.02	4,353.73	126.49	17.30	-59.60	414.06	-54.79	5,618.77	5,579.73	39.04	143.940	
9,600.00	4,918.12	4,367.73	4,344.49	128.98	17.26	-59.19	413.05	-54.56	5,716.70	5,677.63	39.07	146.309	
9,700.00	4,917.87	4,358.43	4,335.25	131.47	17.22	-58.78	412.05	-54.33	5,814.69	5,775.58	39.11	148.677	
9,800.00	4,917.61	4,349.13	4,326.01	133.96	17.18	-58.37	411.04	-54.10	5,912.74	5,873.59	39.15	151.044	
9,900.00	4,917.35	4,339.83	4,316.77	136.46	17.14	-57.97	410.03	-53.87	6,010.83	5,971.65	39.18	153.409	
10,000.00	4,917.09	4,330.54	4,307.53	138.95	17.11	-57.57	409.03	-53.64	6,108.97	6,069.75	39.22	155.773	
10,036.73	4,917.00	4,327.12	4,304.14	139.87	17.09	-57.42	408.66	-53.55	6,145.03	6,105.80	39.23	156.641	

DJR Operating

Scientific Drilling, Intl

Anticollision Report

Company:	DJR Operating	**Local Co-ordinate Reference:**	Well # 408H - Slot 1
Project:	North Alamito Unit	**TVD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Reference Site:	I01 2208	**MD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Site Error:	0.00 usft	**North Reference:**	True
Reference Well:	# 408H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Original Drilling	**Database:**	Grand Junction
Reference Design:	APD	**Offset TVD Reference:**	Offset Datum

Offset Design I01 2208 - # 406H - Original Drilling - APD — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IGRF — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	88.96	0.36	20.07	20.07				
100.00	100.00	100.00	100.00	0.15	0.15	88.96	0.36	20.07	20.07	19.77	0.31	65.116	
200.00	200.00	200.00	200.00	0.51	0.51	88.96	0.36	20.07	20.07	19.05	1.03	19.580	
300.00	300.00	300.00	300.00	0.87	0.87	88.96	0.36	20.07	20.07	18.33	1.74	11.523	
400.00	400.00	400.00	400.00	1.23	1.23	88.96	0.36	20.07	20.07	17.62	2.46	8.163	
443.26	443.26	443.31	443.31	1.38	1.38	-99.80	0.68	20.00	20.06	17.30	2.76	7.264	CC
500.00	499.98	500.02	500.00	1.57	1.59	-107.72	2.07	19.69	20.26	17.10	3.16	6.413	ES
600.00	599.84	599.34	599.18	1.91	1.95	-132.71	7.13	18.55	23.96	20.10	3.86	6.209	
700.00	699.45	697.26	696.73	2.27	2.31	-155.66	15.40	16.69	36.23	31.65	4.57	7.923	
800.00	798.70	793.15	791.91	2.65	2.68	-168.75	26.64	14.16	57.48	52.20	5.28	10.894	
900.00	897.47	886.40	884.07	3.05	3.06	-175.74	40.55	11.04	86.37	80.41	5.96	14.483	
978.03	974.12	957.00	953.50	3.40	3.36	-179.03	53.03	8.23	113.65	107.16	6.49	17.513	
1,000.00	995.64	976.72	972.83	3.50	3.45	-179.75	56.81	7.39	121.96	115.32	6.64	18.368	
1,100.00	1,093.61	1,069.00	1,063.28	3.97	3.87	177.81	74.67	3.37	160.09	152.77	7.32	21.871	
1,200.00	1,191.58	1,161.28	1,153.72	4.45	4.31	176.31	92.52	-0.64	198.38	190.38	8.00	24.809	
1,300.00	1,289.55	1,253.56	1,244.17	4.94	4.75	175.30	110.38	-4.66	236.74	228.05	8.69	27.247	
1,400.00	1,387.53	1,345.84	1,334.62	5.44	5.19	174.57	128.24	-8.67	275.15	265.77	9.38	29.321	
1,500.00	1,485.50	1,438.12	1,425.06	5.94	5.65	174.01	146.10	-12.68	313.59	303.51	10.08	31.100	
1,600.00	1,583.47	1,530.40	1,515.51	6.45	6.10	173.58	163.96	-16.70	352.05	341.27	10.79	32.640	
1,700.00	1,681.44	1,622.68	1,605.95	6.96	6.56	173.23	181.82	-20.71	390.52	379.03	11.49	33.986	
1,800.00	1,779.41	1,714.96	1,696.40	7.47	7.02	172.95	199.67	-24.73	429.01	416.81	12.20	35.170	
1,900.00	1,877.38	1,807.24	1,786.85	7.98	7.48	172.71	217.53	-28.74	467.50	454.59	12.91	36.220	
2,000.00	1,975.35	1,899.51	1,877.29	8.50	7.94	172.51	235.39	-32.75	505.99	492.38	13.62	37.156	
2,100.00	2,073.32	1,991.79	1,967.74	9.02	8.41	172.34	253.25	-36.77	544.50	530.17	14.33	37.997	
2,200.00	2,171.30	2,084.07	2,058.19	9.53	8.87	172.19	271.11	-40.78	583.00	567.96	15.04	38.755	
2,300.00	2,269.27	2,176.35	2,148.63	10.05	9.34	172.05	288.97	-44.79	621.51	605.75	15.76	39.442	
2,400.00	2,367.24	2,268.63	2,239.08	10.57	9.80	171.94	306.82	-48.81	660.02	643.54	16.47	40.067	
2,500.00	2,465.21	2,360.91	2,329.52	11.09	10.27	171.83	324.68	-52.82	698.53	681.34	17.19	40.639	
2,600.00	2,563.18	2,453.19	2,419.97	11.61	10.74	171.74	342.54	-56.84	737.04	719.14	17.91	41.163	
2,700.00	2,661.15	2,545.47	2,510.42	12.13	11.21	171.66	360.40	-60.85	775.56	756.94	18.62	41.646	
2,800.00	2,759.12	2,637.75	2,600.86	12.65	11.68	171.58	378.26	-64.86	814.08	794.73	19.34	42.091	
2,900.00	2,857.10	2,730.03	2,691.31	13.18	12.15	171.51	396.12	-68.88	852.59	832.53	20.06	42.504	
3,000.00	2,955.07	2,822.31	2,781.75	13.70	12.62	171.45	413.97	-72.89	891.11	870.33	20.78	42.887	
3,100.00	3,053.04	2,914.59	2,872.20	14.22	13.09	171.39	431.83	-76.90	929.63	908.13	21.50	43.244	
3,200.00	3,151.01	3,006.87	2,962.65	14.74	13.56	171.34	449.69	-80.92	968.15	945.93	22.22	43.577	
3,300.00	3,248.98	3,099.15	3,053.09	15.27	14.03	171.29	467.55	-84.93	1,006.67	983.73	22.94	43.888	
3,400.00	3,346.95	3,191.43	3,143.54	15.79	14.50	171.25	485.41	-88.95	1,045.19	1,021.54	23.66	44.180	
3,500.00	3,444.92	3,283.71	3,233.98	16.31	14.97	171.20	503.27	-92.96	1,083.72	1,059.34	24.38	44.454	
3,600.00	3,542.89	3,375.99	3,324.43	16.84	15.44	171.17	521.12	-96.97	1,122.24	1,097.14	25.10	44.711	
3,700.00	3,640.87	3,468.27	3,414.88	17.36	15.91	171.13	538.98	-100.99	1,160.76	1,134.94	25.82	44.954	
3,800.00	3,738.84	3,560.55	3,505.32	17.89	16.38	171.09	556.84	-105.00	1,199.28	1,172.74	26.54	45.183	
3,900.00	3,836.81	3,652.83	3,595.77	18.41	16.86	171.06	574.70	-109.01	1,237.81	1,210.54	27.27	45.399	
4,000.00	3,934.78	3,745.11	3,686.22	18.94	17.33	171.03	592.56	-113.03	1,276.33	1,248.34	27.99	45.604	
4,100.00	4,032.75	3,837.39	3,776.66	19.46	17.80	171.00	610.42	-117.04	1,314.86	1,286.15	28.71	45.798	
4,200.00	4,130.72	3,929.67	3,867.11	19.98	18.27	170.98	628.28	-121.06	1,353.38	1,323.95	29.43	45.982	
4,300.00	4,228.69	5,739.30	4,951.07	20.51	26.21	-148.71	115.85	653.07	1,328.96	1,291.72	37.24	35.685	
4,400.00	4,326.67	5,750.41	4,951.04	21.03	26.39	-148.19	108.49	661.39	1,292.77	1,253.62	39.14	33.026	
4,447.12	4,372.83	5,755.64	4,951.02	21.28	26.48	-147.95	105.03	665.31	1,278.04	1,238.01	40.02	31.932	
4,450.00	4,375.65	5,755.96	4,951.02	21.30	26.49	-146.98	104.81	665.56	1,277.19	1,237.11	40.08	31.869	
4,500.00	4,424.33	5,763.68	4,951.00	21.57	26.62	-133.71	99.70	671.34	1,263.46	1,222.42	41.03	30.791	
4,550.00	4,472.25	5,775.26	4,950.97	21.88	26.82	-125.34	92.03	680.01	1,251.70	1,209.66	42.04	29.772	

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

DJR Operating

Scientific Drilling, Intl

Anticollision Report

Company:	DJR Operating	**Local Co-ordinate Reference:**	Well # 408H - Slot 1
Project:	North Alamito Unit	**TVD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Reference Site:	I01 2208	**MD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Site Error:	0.00 usft	**North Reference:**	True
Reference Well:	# 408H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Original Drilling	**Database:**	Grand Junction
Reference Design:	APD	**Offset TVD Reference:**	Offset Datum

Offset Design I01 2208 - # 406H - Original Drilling - APD — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IGRF — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,600.00	4,519.12	5,790.61	4,950.93	22.20	27.08	-119.72	81.87	691.51	1,241.94	1,198.84	43.10	28.814	
4,650.00	4,564.64	5,809.64	4,950.88	22.55	27.42	-115.59	69.26	705.77	1,234.16	1,189.94	44.21	27.913	
4,700.00	4,608.54	5,832.25	4,950.82	22.92	27.83	-112.30	54.29	722.71	1,228.26	1,182.88	45.38	27.067	
4,750.00	4,650.54	5,858.28	4,950.75	23.32	28.30	-109.49	37.04	742.21	1,224.11	1,177.53	46.59	26.276	
4,800.00	4,690.39	5,887.58	4,950.67	23.74	28.83	-106.97	17.64	764.16	1,221.56	1,173.72	47.84	25.535	
4,850.00	4,727.84	5,919.97	4,950.58	24.19	29.44	-104.64	-3.81	788.43	1,220.38	1,171.23	49.15	24.829	
4,875.18	4,745.72	5,937.38	4,950.54	24.42	29.77	-103.53	-15.35	801.47	1,220.25	1,170.43	49.82	24.494	
4,900.00	4,762.66	5,955.24	4,950.49	24.66	30.11	-102.46	-27.18	814.86	1,220.37	1,169.85	50.52	24.154	
4,950.00	4,794.64	5,993.19	4,950.39	25.17	30.84	-100.41	-52.31	843.28	1,221.28	1,169.33	51.95	23.509	
5,000.00	4,823.57	6,033.57	4,950.28	25.70	31.64	-98.50	-79.06	873.54	1,222.85	1,169.40	53.45	22.877	
5,050.00	4,849.28	6,076.14	4,950.16	26.27	32.49	-96.76	-107.25	905.43	1,224.86	1,169.84	55.02	22.262	
5,100.00	4,871.61	6,120.63	4,950.04	26.88	33.39	-95.20	-136.72	938.76	1,227.08	1,170.42	56.66	21.657	
5,150.00	4,890.43	6,166.78	4,949.92	27.53	34.33	-93.85	-167.29	973.33	1,229.29	1,170.92	58.37	21.059	
5,200.00	4,905.61	6,214.29	4,949.79	28.21	35.32	-92.73	-198.75	1,008.93	1,231.32	1,171.16	60.15	20.469	
5,250.00	4,917.07	6,262.87	4,949.66	28.92	36.35	-91.87	-230.93	1,045.33	1,233.00	1,171.00	62.01	19.886	
5,300.00	4,924.73	6,312.22	4,949.53	29.67	37.40	-91.29	-263.62	1,082.30	1,234.24	1,170.33	63.91	19.312	
5,350.00	4,928.54	6,362.05	4,949.40	30.44	38.47	-90.99	-296.62	1,119.63	1,234.93	1,169.06	65.87	18.749	
5,375.99	4,929.00	6,388.03	4,949.33	30.85	39.04	-90.94	-313.83	1,139.09	1,235.06	1,168.17	66.89	18.463	
5,400.00	4,928.94	6,412.04	4,949.26	31.24	39.56	-90.94	-329.74	1,157.09	1,235.11	1,167.26	67.86	18.202	
5,500.00	4,928.68	6,512.04	4,948.99	32.92	41.77	-90.94	-395.97	1,232.00	1,235.32	1,163.37	71.95	17.170	
5,600.00	4,928.42	6,612.04	4,948.72	34.71	44.01	-90.94	-462.21	1,306.92	1,235.53	1,159.37	76.16	16.222	
5,700.00	4,928.17	6,712.04	4,948.46	36.59	46.28	-90.94	-528.44	1,381.84	1,235.74	1,155.26	80.48	15.354	
5,800.00	4,927.91	6,812.04	4,948.19	38.55	48.57	-90.94	-594.67	1,456.76	1,235.95	1,151.06	84.89	14.560	
5,900.00	4,927.65	6,912.04	4,947.92	40.58	50.89	-90.94	-660.91	1,531.68	1,236.16	1,146.79	89.37	13.832	
6,000.00	4,927.39	7,012.04	4,947.65	42.66	53.23	-90.94	-727.14	1,606.60	1,236.37	1,142.46	93.91	13.166	
6,100.00	4,927.14	7,112.04	4,947.38	44.79	55.58	-90.94	-793.38	1,681.52	1,236.58	1,138.07	98.50	12.554	
6,200.00	4,926.88	7,212.04	4,947.11	46.97	57.95	-90.94	-859.61	1,756.44	1,236.78	1,133.64	103.14	11.991	
6,300.00	4,926.62	7,312.04	4,946.84	49.17	60.33	-90.94	-925.85	1,831.36	1,236.99	1,129.17	107.82	11.473	
6,400.00	4,926.36	7,412.04	4,946.57	51.41	62.72	-90.94	-992.08	1,906.28	1,237.20	1,124.67	112.53	10.994	
6,500.00	4,926.11	7,512.04	4,946.31	53.68	65.12	-90.94	-1,058.32	1,981.20	1,237.41	1,120.13	117.28	10.551	
6,600.00	4,925.85	7,612.04	4,946.04	55.97	67.54	-90.93	-1,124.55	2,056.12	1,237.62	1,115.57	122.05	10.140	
6,700.00	4,925.59	7,712.04	4,945.77	58.28	69.96	-90.93	-1,190.78	2,131.03	1,237.83	1,110.99	126.84	9.759	
6,800.00	4,925.33	7,812.04	4,945.50	60.61	72.39	-90.93	-1,257.02	2,205.95	1,238.04	1,106.38	131.66	9.404	
6,900.00	4,925.08	7,912.04	4,945.23	62.95	74.82	-90.93	-1,323.25	2,280.87	1,238.25	1,101.76	136.49	9.072	
7,000.00	4,924.82	8,012.04	4,944.96	65.31	77.26	-90.93	-1,389.49	2,355.79	1,238.45	1,097.12	141.34	8.762	
7,100.00	4,924.56	8,112.04	4,944.69	67.68	79.71	-90.93	-1,455.72	2,430.71	1,238.66	1,092.46	146.20	8.472	
7,200.00	4,924.30	8,212.04	4,944.43	70.07	82.16	-90.93	-1,521.96	2,505.63	1,238.87	1,087.79	151.08	8.200	
7,300.00	4,924.05	8,312.04	4,944.16	72.46	84.62	-90.93	-1,588.19	2,580.55	1,239.08	1,083.11	155.97	7.944	
7,400.00	4,923.79	8,412.04	4,943.89	74.86	87.08	-90.93	-1,654.43	2,655.47	1,239.29	1,078.42	160.87	7.704	
7,500.00	4,923.53	8,512.04	4,943.62	77.27	89.55	-90.93	-1,720.66	2,730.39	1,239.50	1,073.72	165.78	7.477	
7,600.00	4,923.27	8,612.04	4,943.35	79.69	92.02	-90.93	-1,786.89	2,805.31	1,239.71	1,069.01	170.70	7.263	
7,700.00	4,923.02	8,712.04	4,943.08	82.12	94.49	-90.93	-1,853.13	2,880.23	1,239.92	1,064.29	175.62	7.060	
7,800.00	4,922.76	8,812.04	4,942.81	84.55	96.96	-90.93	-1,919.36	2,955.15	1,240.13	1,059.57	180.56	6.868	
7,900.00	4,922.50	8,912.04	4,942.55	86.99	99.44	-90.93	-1,985.60	3,030.07	1,240.33	1,054.83	185.50	6.686	
8,000.00	4,922.24	9,012.04	4,942.28	89.43	101.92	-90.92	-2,051.83	3,104.98	1,240.54	1,050.09	190.45	6.514	
8,100.00	4,921.99	9,112.04	4,942.01	91.88	104.41	-90.92	-2,118.07	3,179.90	1,240.75	1,045.35	195.41	6.350	
8,200.00	4,921.73	9,212.04	4,941.74	94.33	106.89	-90.92	-2,184.30	3,254.82	1,240.96	1,040.59	200.37	6.193	
8,300.00	4,921.47	9,312.03	4,941.47	96.79	109.38	-90.92	-2,250.54	3,329.74	1,241.17	1,035.84	205.33	6.045	
8,400.00	4,921.21	9,412.03	4,941.20	99.25	111.87	-90.92	-2,316.77	3,404.66	1,241.38	1,031.08	210.30	5.903	
8,500.00	4,920.96	9,512.03	4,940.93	101.71	114.36	-90.92	-2,383.00	3,479.58	1,241.59	1,026.31	215.27	5.767	

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

DJR Operating

Scientific Drilling, Intl

Anticollision Report

Company:	DJR Operating	**Local Co-ordinate Reference:**	Well # 408H - Slot 1
Project:	North Alamito Unit	**TVD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Reference Site:	I01 2208	**MD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Site Error:	0.00 usft	**North Reference:**	True
Reference Well:	# 408H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Original Drilling	**Database:**	Grand Junction
Reference Design:	APD	**Offset TVD Reference:**	Offset Datum

Offset Design I01 2208 - # 406H - Original Drilling - APD

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IGRF

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,600.00	4,920.70	9,612.03	4,940.67	104.18	116.86	-90.92	-2,449.24	3,554.50	1,241.80	1,021.54	220.25	5.638	
8,700.00	4,920.44	9,712.03	4,940.40	106.65	119.35	-90.92	-2,515.47	3,629.42	1,242.00	1,016.77	225.24	5.514	
8,800.00	4,920.18	9,812.03	4,940.13	109.12	121.85	-90.92	-2,581.71	3,704.34	1,242.21	1,011.99	230.22	5.396	
8,900.00	4,919.93	9,912.03	4,939.86	111.59	124.35	-90.92	-2,647.94	3,779.26	1,242.42	1,007.21	235.21	5.282	
9,000.00	4,919.67	10,012.03	4,939.59	114.07	126.85	-90.92	-2,714.18	3,854.18	1,242.63	1,002.43	240.20	5.173	
9,100.00	4,919.41	10,112.03	4,939.32	116.55	129.35	-90.92	-2,780.41	3,929.10	1,242.84	997.64	245.20	5.069	
9,200.00	4,919.15	10,212.03	4,939.05	119.03	131.85	-90.92	-2,846.65	4,004.01	1,243.05	992.85	250.20	4.968	
9,300.00	4,918.90	10,312.03	4,938.79	121.52	134.36	-90.92	-2,912.88	4,078.93	1,243.26	988.06	255.20	4.872	
9,400.00	4,918.64	10,412.03	4,938.52	124.00	136.86	-90.92	-2,979.11	4,153.85	1,243.47	983.27	260.20	4.779	
9,500.00	4,918.38	10,512.03	4,938.25	126.49	139.37	-90.91	-3,045.35	4,228.77	1,243.68	978.47	265.20	4.690	
9,600.00	4,918.12	10,612.03	4,937.98	128.98	141.87	-90.91	-3,111.58	4,303.69	1,243.88	973.67	270.21	4.603	
9,700.00	4,917.87	10,712.03	4,937.71	131.47	144.38	-90.91	-3,177.82	4,378.61	1,244.09	968.87	275.22	4.520	
9,800.00	4,917.61	10,812.03	4,937.44	133.96	146.89	-90.91	-3,244.05	4,453.53	1,244.30	964.07	280.23	4.440	
9,900.00	4,917.35	10,912.03	4,937.17	136.46	149.40	-90.91	-3,310.29	4,528.45	1,244.51	959.27	285.24	4.363	
10,000.00	4,917.09	11,012.03	4,936.90	138.95	151.91	-90.91	-3,376.52	4,603.37	1,244.72	954.46	290.26	4.288	
10,036.73	4,917.00	11,048.77	4,936.81	139.87	152.83	-90.91	-3,400.85	4,630.89	1,244.79	952.68	292.10	4.261	SF

DJR Operating

Scientific Drilling, Intl

Anticollision Report

Company:	DJR Operating	**Local Co-ordinate Reference:**	Well # 408H - Slot 1
Project:	North Alamito Unit	**TVD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Reference Site:	I01 2208	**MD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Site Error:	0.00 usft	**North Reference:**	True
Reference Well:	# 408H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Original Drilling	**Database:**	Grand Junction
Reference Design:	APD	**Offset TVD Reference:**	Offset Datum

Offset Design I01 2208 - # 407H - Original Drilling - APD — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IGRF — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	89.30	0.73	59.92	59.92				
100.00	100.00	100.00	100.00	0.15	0.15	89.30	0.73	59.92	59.92	59.61	0.31	194.374	
200.00	200.00	200.00	200.00	0.51	0.51	89.30	0.73	59.92	59.92	58.90	1.03	58.448	
300.00	300.00	300.00	300.00	0.87	0.87	89.30	0.73	59.92	59.92	58.18	1.74	34.395	
400.00	400.00	400.00	400.00	1.23	1.23	89.30	0.73	59.92	59.92	57.46	2.46	24.368	CC
500.00	499.98	500.11	500.09	1.57	1.57	-97.60	-1.02	59.85	60.06	56.92	3.14	19.110	
600.00	599.84	600.22	600.05	1.91	1.91	-97.55	-6.26	59.64	60.48	56.67	3.82	15.838	
700.00	699.45	700.32	699.77	2.27	2.27	-97.47	-14.99	59.29	61.19	56.65	4.53	13.502	ES
800.00	798.70	800.42	799.12	2.65	2.65	-97.35	-27.19	58.80	62.17	56.87	5.29	11.749	
900.00	897.47	900.52	897.98	3.05	3.06	-97.21	-42.85	58.18	63.42	57.31	6.11	10.380	
978.03	974.12	978.62	974.69	3.40	3.40	-97.09	-57.46	57.59	64.60	57.80	6.80	9.498	
1,000.00	995.64	1,000.61	996.22	3.50	3.50	-96.98	-61.95	57.41	64.95	57.95	7.00	9.279	
1,100.00	1,093.61	1,100.62	1,093.65	3.97	3.99	-94.69	-84.45	56.51	66.51	58.55	7.96	8.358	
1,200.00	1,191.58	1,200.32	1,189.95	4.45	4.52	-89.60	-110.25	55.48	68.38	59.41	8.97	7.625	
1,300.00	1,289.55	1,299.73	1,285.12	4.94	5.10	-82.37	-138.95	54.34	71.36	61.37	10.00	7.138	
1,400.00	1,387.53	1,399.24	1,380.23	5.44	5.70	-75.44	-168.18	53.17	75.55	64.56	11.00	6.871	
1,500.00	1,485.50	1,498.76	1,475.35	5.94	6.31	-69.31	-197.42	52.00	80.73	68.78	11.95	6.755	
1,600.00	1,583.47	1,598.27	1,570.47	6.45	6.93	-63.97	-226.65	50.83	86.73	73.86	12.86	6.742	
1,700.00	1,681.44	1,697.79	1,665.58	6.96	7.56	-59.35	-255.88	49.67	93.37	79.63	13.74	6.796	
1,800.00	1,779.41	1,797.30	1,760.70	7.47	8.20	-55.36	-285.11	48.50	100.55	85.96	14.59	6.892	
1,900.00	1,877.38	1,896.81	1,855.82	7.98	8.84	-51.92	-314.34	47.33	108.14	92.72	15.42	7.014	
2,000.00	1,975.35	1,996.33	1,950.94	8.50	9.48	-48.93	-343.57	46.16	116.07	99.84	16.23	7.151	
2,100.00	2,073.32	2,095.84	2,046.05	9.02	10.13	-46.33	-372.80	44.99	124.28	107.24	17.04	7.295	
2,200.00	2,171.30	2,195.36	2,141.17	9.53	10.78	-44.06	-402.04	43.83	132.70	114.87	17.83	7.441	
2,300.00	2,269.27	2,294.87	2,236.29	10.05	11.43	-42.06	-431.27	42.66	141.32	122.69	18.63	7.586	
2,400.00	2,367.24	2,394.39	2,331.40	10.57	12.08	-40.29	-460.50	41.49	150.08	130.66	19.42	7.728	
2,500.00	2,465.21	2,493.90	2,426.52	11.09	12.73	-38.72	-489.73	40.32	158.97	138.76	20.21	7.866	
2,600.00	2,563.18	2,593.42	2,521.64	11.61	13.39	-37.31	-518.96	39.15	167.96	146.96	21.00	7.998	
2,700.00	2,661.15	2,692.93	2,616.76	12.13	14.04	-36.05	-548.19	37.99	177.05	155.26	21.79	8.125	
2,800.00	2,759.12	2,792.44	2,711.87	12.65	14.70	-34.91	-577.42	36.82	186.21	163.63	22.58	8.247	
2,900.00	2,857.10	2,891.96	2,806.99	13.18	15.35	-33.88	-606.65	35.65	195.44	172.07	23.37	8.363	
3,000.00	2,955.07	2,991.47	2,902.11	13.70	16.01	-32.94	-635.89	34.48	204.73	180.56	24.16	8.473	
3,100.00	3,053.04	3,090.99	2,997.23	14.22	16.67	-32.09	-665.12	33.31	214.06	189.11	24.95	8.578	
3,200.00	3,151.01	3,190.50	3,092.34	14.74	17.33	-31.30	-694.35	32.15	223.44	197.69	25.75	8.678	
3,300.00	3,248.98	3,290.02	3,187.46	15.27	17.99	-30.58	-723.58	30.98	232.86	206.32	26.54	8.773	
3,400.00	3,346.95	3,389.53	3,282.58	15.79	18.65	-29.92	-752.81	29.81	242.31	214.97	27.34	8.864	
3,500.00	3,444.92	3,489.05	3,377.69	16.31	19.31	-29.30	-782.04	28.64	251.79	223.66	28.13	8.950	
3,600.00	3,542.89	3,588.56	3,472.81	16.84	19.97	-28.73	-811.27	27.47	261.30	232.37	28.93	9.032	
3,700.00	3,640.87	3,688.07	3,567.93	17.36	20.63	-28.20	-840.50	26.31	270.83	241.10	29.73	9.110	
3,800.00	3,738.84	3,787.59	3,663.05	17.89	21.29	-27.70	-869.74	25.14	280.38	249.86	30.53	9.185	
3,900.00	3,836.81	3,887.10	3,758.16	18.41	21.95	-27.24	-898.97	23.97	289.96	258.63	31.33	9.256	
4,000.00	3,934.78	3,986.62	3,853.28	18.94	22.61	-26.81	-928.20	22.80	299.55	267.42	32.13	9.324	
4,100.00	4,032.75	4,086.13	3,948.40	19.46	23.27	-26.40	-957.43	21.63	309.15	276.23	32.93	9.389	
4,200.00	4,130.72	4,185.65	4,043.52	19.98	23.93	-26.02	-986.66	20.47	318.77	285.05	33.73	9.451	
4,300.00	4,228.69	4,285.16	4,138.63	20.51	24.59	-25.66	-1,015.89	19.30	328.41	293.88	34.53	9.511	
4,400.00	4,326.67	4,418.54	4,266.75	21.03	25.44	-24.82	-1,052.29	14.37	335.98	300.49	35.49	9.468	
4,447.12	4,372.83	4,502.97	4,348.83	21.28	25.85	-23.15	-1,067.08	1.60	333.19	297.69	35.51	9.384	
4,450.00	4,375.65	4,508.03	4,353.74	21.30	25.87	-21.96	-1,067.73	0.57	332.85	297.36	35.49	9.378	
4,500.00	4,424.33	4,591.79	4,434.40	21.57	26.15	-3.93	-1,074.52	-20.73	322.52	287.57	34.95	9.228	
4,550.00	4,472.25	4,664.87	4,503.06	21.88	26.31	11.10	-1,074.29	-45.63	305.09	270.92	34.17	8.928	
4,600.00	4,519.12	4,725.13	4,557.80	22.20	26.39	25.11	-1,069.78	-70.36	282.86	249.29	33.57	8.425	

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

DJR Operating

Scientific Drilling, Intl

Anticollision Report

Company:	DJR Operating	**Local Co-ordinate Reference:**	Well # 408H - Slot 1
Project:	North Alamito Unit	**TVD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Reference Site:	I01 2208	**MD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Site Error:	0.00 usft	**North Reference:**	True
Reference Well:	# 408H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Original Drilling	**Database:**	Grand Junction
Reference Design:	APD	**Offset TVD Reference:**	Offset Datum

Offset Design I01 2208 - # 407H - Original Drilling - APD — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IGRF — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,650.00	4,564.64	4,772.67	4,599.45	22.55	26.42	38.66	-1,063.50	-92.39	258.49	224.93	33.55	7.704	
4,700.00	4,608.54	4,808.81	4,630.03	22.92	26.44	51.13	-1,057.14	-110.54	234.95	200.49	34.46	6.819	
4,750.00	4,650.54	4,835.30	4,651.80	23.32	26.43	61.52	-1,051.62	-124.58	215.56	179.11	36.45	5.914	
4,800.00	4,690.39	4,853.84	4,666.69	23.74	26.43	69.15	-1,047.33	-134.76	203.79	164.55	39.25	5.193	
4,831.01	4,713.91	4,862.00	4,673.15	24.01	26.43	72.42	-1,045.33	-139.34	201.62	160.58	41.03	4.913	
4,850.00	4,727.84	4,865.92	4,676.23	24.19	26.42	73.88	-1,044.34	-141.55	202.46	160.47	41.99	4.821	SF
4,900.00	4,762.66	4,872.76	4,681.57	24.66	26.42	75.88	-1,042.59	-145.45	212.60	168.76	43.84	4.850	
4,950.00	4,794.64	4,875.36	4,683.59	25.17	26.42	75.39	-1,041.91	-146.94	233.05	188.48	44.57	5.229	
5,000.00	4,823.57	4,874.49	4,682.91	25.70	26.42	72.69	-1,042.14	-146.44	261.43	216.86	44.57	5.866	
5,050.00	4,849.28	4,870.77	4,680.02	26.27	26.42	68.07	-1,043.11	-144.31	295.29	251.04	44.25	6.673	
5,100.00	4,871.61	4,864.69	4,675.26	26.88	26.43	61.96	-1,044.65	-140.86	332.66	288.77	43.89	7.579	
5,150.00	4,890.43	4,850.00	4,663.63	27.53	26.43	53.40	-1,048.24	-132.63	372.22	329.10	43.13	8.631	
5,200.00	4,905.61	4,850.00	4,663.63	28.21	26.43	48.21	-1,048.24	-132.63	412.73	369.08	43.65	9.456	
5,250.00	4,917.07	4,835.88	4,652.27	28.92	26.43	40.58	-1,051.49	-124.90	453.70	410.30	43.40	10.455	
5,300.00	4,924.73	4,823.61	4,642.27	29.67	26.44	34.21	-1,054.14	-118.31	494.56	451.12	43.45	11.383	
5,350.00	4,928.54	4,800.00	4,622.67	30.44	26.44	27.61	-1,058.81	-106.01	535.12	492.08	43.03	12.434	
5,375.99	4,929.00	4,800.00	4,622.67	30.85	26.44	25.83	-1,058.81	-106.01	555.64	512.11	43.53	12.764	
5,400.00	4,928.94	4,800.00	4,622.67	31.24	26.44	25.83	-1,058.81	-106.01	574.77	530.80	43.97	13.072	
5,500.00	4,928.68	4,770.93	4,597.95	32.92	26.42	23.29	-1,063.77	-91.54	656.62	612.44	44.17	14.865	
5,600.00	4,928.42	4,750.00	4,579.77	34.71	26.42	21.59	-1,066.80	-81.61	741.44	696.90	44.54	16.648	
5,700.00	4,928.17	4,729.47	4,561.66	36.59	26.39	20.03	-1,069.31	-72.28	828.55	783.80	44.75	18.514	
5,800.00	4,927.91	4,700.00	4,535.21	38.55	26.36	17.96	-1,072.14	-59.60	917.69	873.10	44.59	20.581	
5,900.00	4,927.65	4,700.00	4,535.21	40.58	26.36	17.96	-1,072.14	-59.60	1,007.89	962.66	45.23	22.282	
6,000.00	4,927.39	4,683.88	4,520.54	42.66	26.34	16.91	-1,073.29	-53.03	1,099.47	1,054.16	45.31	24.264	
6,100.00	4,927.14	4,671.82	4,509.47	44.79	26.32	16.16	-1,073.97	-48.29	1,192.05	1,146.60	45.44	26.231	
6,200.00	4,926.88	4,650.00	4,489.27	46.97	26.28	14.87	-1,074.80	-40.10	1,285.59	1,240.27	45.31	28.370	
6,300.00	4,926.62	4,650.00	4,489.27	49.17	26.28	14.87	-1,074.80	-40.10	1,379.54	1,333.90	45.64	30.229	
6,400.00	4,926.36	4,650.00	4,489.27	51.41	26.28	14.87	-1,074.80	-40.10	1,474.29	1,428.39	45.90	32.119	
6,500.00	4,926.11	4,650.00	4,489.27	53.68	26.28	14.87	-1,074.80	-40.10	1,569.69	1,523.57	46.12	34.034	
6,600.00	4,925.85	4,626.59	4,467.36	55.97	26.23	13.59	-1,075.13	-31.87	1,665.04	1,619.15	45.89	36.284	
6,700.00	4,925.59	4,619.74	4,460.90	58.28	26.21	13.23	-1,075.11	-29.57	1,761.05	1,715.10	45.95	38.325	
6,800.00	4,925.33	4,600.00	4,442.21	60.61	26.17	12.24	-1,074.78	-23.23	1,857.58	1,811.80	45.78	40.572	
6,900.00	4,925.08	4,600.00	4,442.21	62.95	26.17	12.24	-1,074.78	-23.23	1,954.09	1,908.15	45.94	42.537	
7,000.00	4,924.82	4,600.00	4,442.21	65.31	26.17	12.24	-1,074.78	-23.23	2,050.93	2,004.86	46.08	44.513	
7,100.00	4,924.56	4,600.00	4,442.21	67.68	26.17	12.24	-1,074.78	-23.23	2,148.07	2,101.87	46.20	46.498	
7,200.00	4,924.30	4,600.00	4,442.21	70.07	26.17	12.24	-1,074.78	-23.23	2,245.45	2,199.14	46.31	48.491	
7,300.00	4,924.05	4,600.00	4,442.21	72.46	26.17	12.24	-1,074.78	-23.23	2,343.05	2,296.65	46.41	50.490	
7,400.00	4,923.79	4,600.00	4,442.21	74.86	26.17	12.24	-1,074.78	-23.23	2,440.85	2,394.35	46.50	52.495	
7,500.00	4,923.53	4,600.00	4,442.21	77.27	26.17	12.24	-1,074.78	-23.23	2,538.82	2,492.24	46.58	54.503	
7,600.00	4,923.27	4,576.45	4,419.75	79.69	26.10	11.14	-1,073.84	-16.23	2,636.40	2,590.06	46.35	56.886	
7,700.00	4,923.02	4,573.04	4,416.48	82.12	26.09	10.99	-1,073.65	-15.27	2,734.50	2,688.12	46.38	58.957	
7,800.00	4,922.76	4,550.00	4,394.34	84.55	26.02	10.00	-1,072.07	-9.11	2,833.08	2,786.92	46.16	61.373	
7,900.00	4,922.50	4,550.00	4,394.34	86.99	26.02	10.00	-1,072.07	-9.11	2,931.29	2,885.05	46.24	63.393	
8,000.00	4,922.24	4,550.00	4,394.34	89.43	26.02	10.00	-1,072.07	-9.11	3,029.61	2,983.29	46.31	65.415	
8,100.00	4,921.99	4,550.00	4,394.34	91.88	26.02	10.00	-1,072.07	-9.11	3,128.04	3,081.65	46.38	67.438	
8,200.00	4,921.73	4,550.00	4,394.34	94.33	26.02	10.00	-1,072.07	-9.11	3,226.56	3,180.11	46.45	69.462	
8,300.00	4,921.47	4,550.00	4,394.34	96.79	26.02	10.00	-1,072.07	-9.11	3,325.17	3,278.66	46.52	71.485	
8,400.00	4,921.21	4,550.00	4,394.34	99.25	26.02	10.00	-1,072.07	-9.11	3,423.86	3,377.29	46.58	73.508	
8,500.00	4,920.96	4,550.00	4,394.34	101.71	26.02	10.00	-1,072.07	-9.11	3,522.63	3,475.99	46.64	75.530	
8,600.00	4,920.70	4,550.00	4,394.34	104.18	26.02	10.00	-1,072.07	-9.11	3,621.46	3,574.77	46.70	77.550	

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

DJR Operating

Scientific Drilling, Intl

Anticollision Report

Company:	DJR Operating	**Local Co-ordinate Reference:**	Well # 408H - Slot 1
Project:	North Alamito Unit	**TVD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Reference Site:	I01 2208	**MD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Site Error:	0.00 usft	**North Reference:**	True
Reference Well:	# 408H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Original Drilling	**Database:**	Grand Junction
Reference Design:	APD	**Offset TVD Reference:**	Offset Datum

Offset Design I01 2208 - # 407H - Original Drilling - APD

Survey Program: 0-MWD+IGRF

Offset Site Error: 0.00 usft

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,700.00	4,920.44	4,550.00	4,394.34	106.65	26.02	10.00	-1,072.07	-9.11	3,720.36	3,673.60	46.76	79.570	
8,800.00	4,920.18	4,550.00	4,394.34	109.12	26.02	10.00	-1,072.07	-9.11	3,819.31	3,772.50	46.81	81.587	
8,900.00	4,919.93	4,550.00	4,394.34	111.59	26.02	10.00	-1,072.07	-9.11	3,918.32	3,871.45	46.87	83.603	
9,000.00	4,919.67	4,550.00	4,394.34	114.07	26.02	10.00	-1,072.07	-9.11	4,017.38	3,970.45	46.92	85.616	
9,100.00	4,919.41	4,550.00	4,394.34	116.55	26.02	10.00	-1,072.07	-9.11	4,116.48	4,069.50	46.98	87.627	
9,200.00	4,919.15	4,550.00	4,394.34	119.03	26.02	10.00	-1,072.07	-9.11	4,215.62	4,168.59	47.03	89.635	
9,300.00	4,918.90	4,550.00	4,394.34	121.52	26.02	10.00	-1,072.07	-9.11	4,314.81	4,267.72	47.08	91.640	
9,400.00	4,918.64	4,550.00	4,394.34	124.00	26.02	10.00	-1,072.07	-9.11	4,414.03	4,366.89	47.14	93.642	
9,500.00	4,918.38	4,550.00	4,394.34	126.49	26.02	10.00	-1,072.07	-9.11	4,513.28	4,466.09	47.19	95.641	
9,600.00	4,918.12	4,550.00	4,394.34	128.98	26.02	10.00	-1,072.07	-9.11	4,612.57	4,565.33	47.24	97.637	
9,700.00	4,917.87	4,550.00	4,394.34	131.47	26.02	10.00	-1,072.07	-9.11	4,711.89	4,664.59	47.29	99.629	
9,800.00	4,917.61	4,550.00	4,394.34	133.96	26.02	10.00	-1,072.07	-9.11	4,811.23	4,763.89	47.35	101.617	
9,900.00	4,917.35	4,550.00	4,394.34	136.46	26.02	10.00	-1,072.07	-9.11	4,910.60	4,863.21	47.40	103.602	
10,000.00	4,917.09	4,527.66	4,372.75	138.95	25.94	9.11	-1,069.99	-3.71	5,009.56	4,962.34	47.22	106.090	
10,036.73	4,917.00	4,527.23	4,372.34	139.87	25.94	9.09	-1,069.95	-3.61	5,046.06	4,998.83	47.24	106.828	

DJR Operating

Scientific Drilling, Intl

Anticollision Report

Company:	DJR Operating	**Local Co-ordinate Reference:**	Well # 408H - Slot 1
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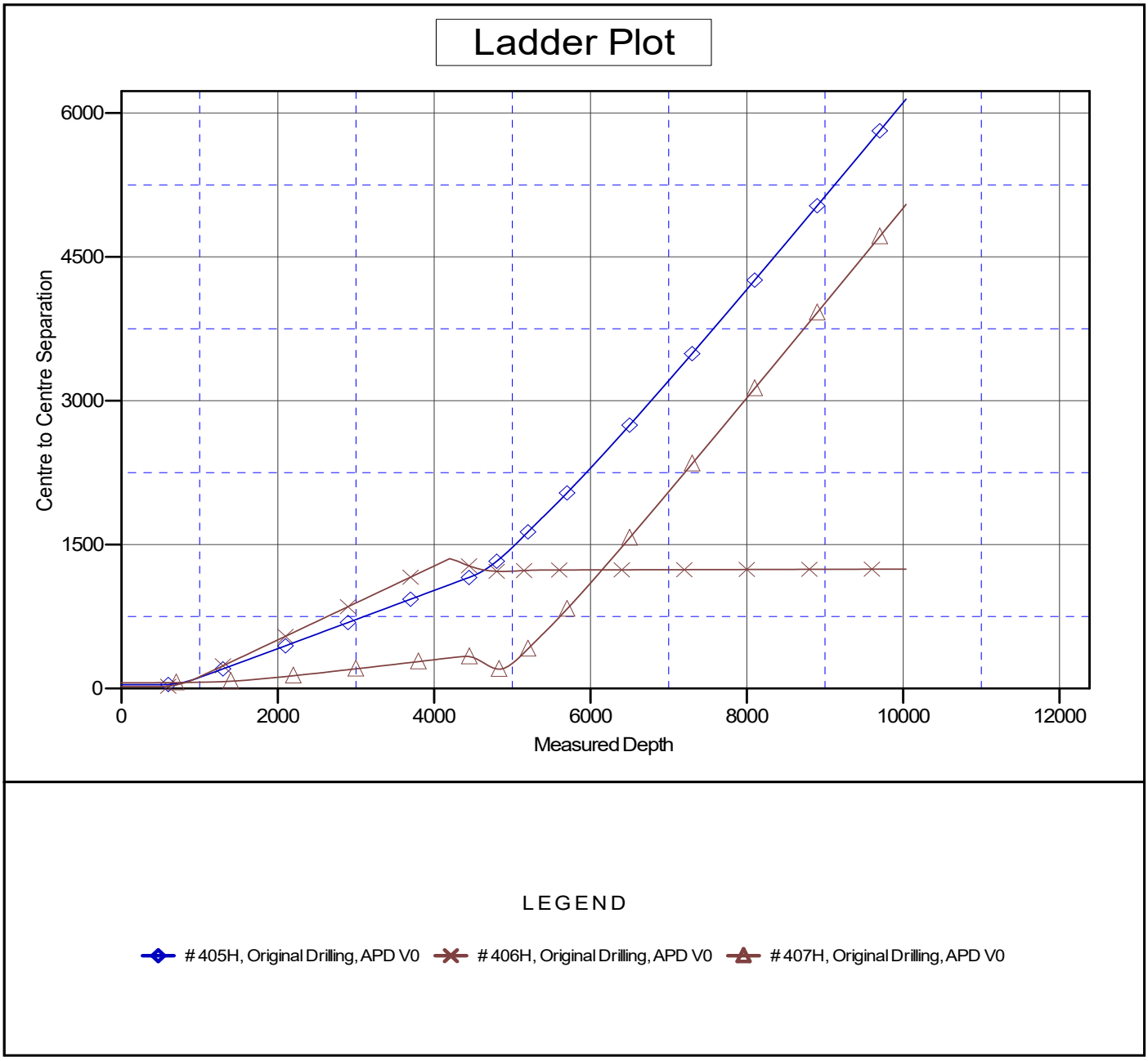
Site Error:	0.00 usft	**North Reference:**	True
Reference Well:	# 408H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Original Drilling	**Database:**	Grand Junction
Reference Design:	APD	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to GL 6917' & RKB 14' @ 6931.00usft (A
Offset Depths are relative to Offset Datum
Central Meridian is -107.8333334

Coordinates are relative to: # 408H - Slot 1
Coordinate System is US State Plane 1983, New Mexico Western Zone
Grid Convergence at Surface is: 0.12°



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

DJR Operating

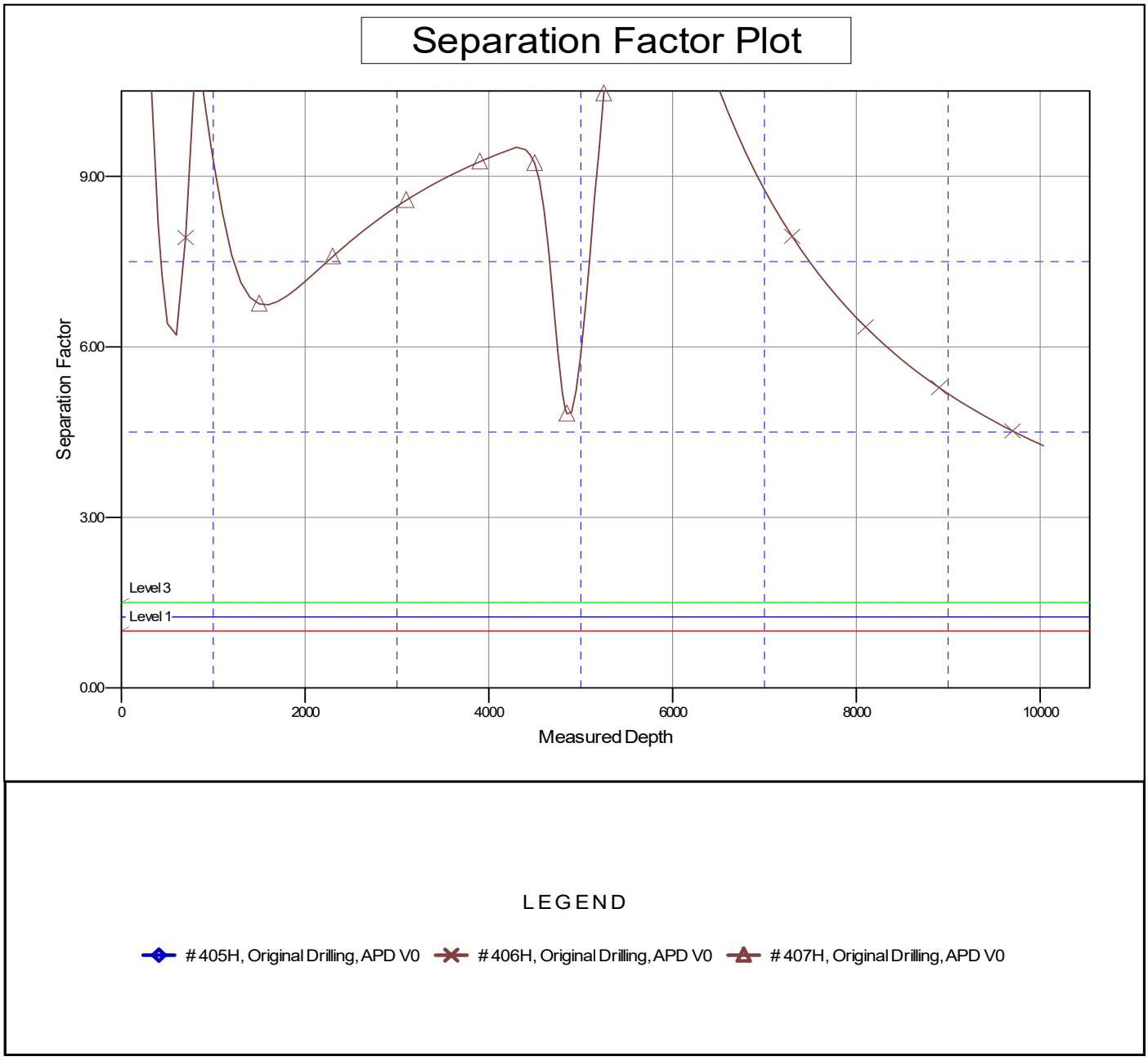
Scientific Drilling, Intl

Anticollision Report

Company:	DJR Operating	**Local Co-ordinate Reference:**	Well # 408H - Slot 1
Project:	North Alamito Unit	**TVD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Reference Site:	I01 2208	**MD Reference:**	GL 6917' & RKB 14' @ 6931.00usft (Aztec 920)
Site Error:	0.00 usft	**North Reference:**	True
Reference Well:	# 408H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**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 6917' & RKB 14' @ 6931.00usft (A
Offset Depths are relative to Offset Datum
Central Meridian is -107.8333334

Coordinates are relative to: # 408H - Slot 1
Coordinate System is US State Plane 1983, New Mexico Western Zone
Grid Convergence at Surface is: 0.12°



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

#408H North Alamito Unit

Lease: NMNM117143 Unit: NMNM135229A
SH: NE¼SE¼ Section 1, T.22 N., R.8 W.
San Juan County, New Mexico
BH: SW¼NE¼ Section 7, T.22 N., R.7 W.
Sandoval County, New Mexico
***Above Data Required on Well Sign**

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

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

A. ☒ Note all surface/drilling conditions of approval attached.

B. ☒ The required wait on cement (WOC) time will be a minimum of 500 psi compressive strength at 60 degrees. Blowout preventor (BOP) nipple-up operations may then be initiated

C. ☐ Test the surface casing to a minimum of _____ psi for 30 minutes.

D. ☐ Test all casing strings below the surface casing to .22 psi/ft. of casing string length or 1500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield burst) for a minimum of 30 minutes.

E. ☒ Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the Bureau of Land Management, Farmington District Office, Branch of Reservoir Management, 6251 College Blvd. Suite A, Farmington, New Mexico 87402. The effective date of the agreement must be **prior** to any sales.

F. ☒ The use of co-flex hose is authorized contingent upon the following:
1. From the BOP to the choke manifold: the co-flex hose must be hobbled on both ends and saddle to prevent whip.
2. From the choke manifold to the discharge tank: the co-flex hoses must be as straight as practical, hobbled on both ends and anchored to prevent whip.
3. The co-flex hose pressure rating must be at least commensurate with approved BOPE.

I. GENERAL

A. Full compliance with all applicable laws, regulations, and Onshore Orders, with the approved Permit to drill, and with the approved Surface Use and Operations Plan is required. Lessees and/or operators are fully accountable for the actions of their contractors and subcontractors. Failure to comply with these requirements and the filing of required reports will result in strict enforcement pursuant to 43 CFR 3163.1 or 3163.2.

B. Each well shall have a well sign in legible condition from spud date to final abandonment. The sign should show the operator's name, lease serial number, or unit name, well number, location of the well, and whether lease is Tribal or Allotted, (See 43 CFR 3162.6(b)).

C. A complete copy of the approved Application for Permit to Drill, along with any conditions of approval, shall be available to authorized personnel at the drill site whenever active drilling operations are under way.

D. For Wildcat wells only, a drilling operations progress report is to be submitted, to the BLM-Field Office, weekly from the spud date until the well is completed and the Well Completion Report (Form 3160-4) is filed. The report should be on 8-1/2 x 11 inch paper, and each page should identify the well by; operator's name, well number, location and lease number.

E. As soon as practical, notice is required of all blowouts, fires and accidents involving life-threatening injuries or loss of life. (See NTL-3A).

F. Prior approval by the BLM-Authorized Office (Drilling and Production Section) is required for variance from the approved drilling program and before commencing plugging operations, plug back work casing repair work, corrective cementing operations, or suspending drilling operations indefinitely. Emergency approval may be obtained orally, but such approval is contingent upon filing of a notice of intent (on a Sundry Notice, Form 3160-5) within three business days (original and three copies of Federal leases and an original and four copies on Indian leases). **Any changes to the approved plan or any questions regarding drilling operations should be directed to BLM during regular business hours at 505-564-7600. Emergency program changes after hours should be directed to at Virgil Lucero at 505-793-1836.**

G. The Inspection and Enforcement Section (I&E), phone number (505-564-7750) is to be notified at least 24 hours in advance of BOP test, spudding, cementing, or plugging operations so that a BLM representative may witness the operations.

H. Unless drilling operations are commenced within two years, approval of the Application for Permit to Drill will expire. A written request for a two years extension may be granted if submitted prior to expiration.

I. From the time drilling operations are initiated and until drilling operations are completed, a member of the drilling crew or the tool pusher shall maintain rig surveillance at all time, unless the well is secured with blowout preventers or cement plugs.

J. If for any reason, drilling operations are suspended for more than 90 days, a written notice must be provided to this office outlining your plans for this well.

II. REPORTING REQUIREMENTS

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

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

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

a. Setting of each string of casing. Show size and depth of hole, grade and weight of casing, depth set, depth of any and all cementing tools that are used, amount (in cubic feet) and types of cement used, whether cement circulated to surface and all cement tops in the casing annulus, casing test method and results, and the date work was done. Show spud date on first report submitted.

b. Intervals tested, perforated (include; size, number and location of perforations), acidized, or fractured; and results obtained. Provide date work was done on well completion report and completion sundry notice.

c. Subsequent Report of Abandonment, show the manner in which the well was plugged, including depths where casing was cut and pulled, intervals (by depths) where cement plugs were replaced, and dates of the operations.

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

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

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

III. DRILLER'S LOG

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

IV. GAS FLARING

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

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

V. SAFETY

A. All rig heating stoves are to be of the explosion-proof type.

B. Rig safety lines are to be installed.

C. Hard hats and other Personal Protective Equipment (PPE) must be utilized.

VI. CHANGE OF PLANS OR ABANDONMENT

A. Any changes of plans required in order to mitigate unanticipated conditions encountered during drilling operations, will require approval as set forth in Section 1.F.

B. If the well is dry, it is to be plugged in accordance with 43 CFR 3162.3-4, approval of the proposed plugging program is required as set forth in Section 1.F. The report should show the total depth reached, the reason for plugging, and the proposed intervals, by depths, where cement plugs are to be placed, type of plugging mud, etc. A Subsequent Report of Abandonment is required as set forth in Section II.B.1c.

C. Unless a well has been properly cased and cemented, or properly plugged, the drilling rig must not be moved from the drill site without prior approval from the BLM-Authorized Officer.

VII. PHONE NUMBERS

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

B. Emergency program changes after hours contact:

Virgil Lucero (505) 793-1836
Joe Killins (505) 564-7736
John Hoffman (505) 564-7742

North Alamito Unit 2208 and Betonnie Tsosie Wash Unit 2308 Cluster Oil and Natural Gas Wells Project

DOI-BLM-NM-F010-2021-0003-EA

Conditions of Approval

NAU I01-2208 Well Pad, Well Nos. 405H, 406H, 407H, 408H, 509H, 510H, 511H, and 512H (NAU I01)

NAU E01-2208 Well Pad, Well Nos. 502H, 504H, 507H, and 508H (NAU E01)

BTWU G34-2308 Well Pad, Well Nos. 506H, 507H, 508H, and 509H (BTWU G34)

BTWU A35-2308 Well Pad, Well Nos. 213H, 214H, and 501H (BTWU A35)

BTWU E35-2308 Well Pad, Well Nos. 502H, 503H, 504H and 505H (BTWU E35)

Associated Pipelines, Staging Areas, Access Roads, and Appurtenances

Construction & Reclamation Notification: The operator or their contractor will contact the Bureau of Land Management Farmington Field Office (BLM-FFO), Surface and Environmental Protection Staff, (505) 564-7600 at least 48 hours prior to any construction or reclamation on this project.

Weather: No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of 6 inches deep, the soil shall be deemed too wet.

Culverts: Silt traps/bell holes will be built at the upstream end of all culvert locations. The features must be maintained throughout their life span. Armoring may be required for culverts that experience negative erosional impacts. The approved minimum culvert diameter is 24 inches.

Grazing Permittee Notification and Concerns: The operator will notify the grazing lease operator(s) at least ten business days prior to beginning any construction activity to ensure there will be no conflicts between construction activities and livestock grazing operations. The operator is not obligated to cease or delay construction unless directed by the AO. Any range improvement (fences, pipelines, ponds, etc.) disturbed by construction activities will be repaired immediately following construction and will be repaired to the condition the improvement was in prior to disturbance. Cattle guards will be installed to replace any livestock fencing or gates removed for road construction.

Air Quality: Operator must control fugitive dust and particulate matter through the use of freshwater spraying during construction and reclamation of the proposed action disturbance.

Groundwater Quality and Quantity: Operator shall only use freshwater and/or magnesium chloride for dust abatement purposes. Operator shall not discharge any water used in drilling of the wellbore to the surface of the location.

Cultural Resources: Four Class III Archaeological Surveys (NMCRIS No. 146574; BLM Report No. 2021(I)002F, & NMCRIS No. 146998; BLM Report No. 2021(I)002.1F, NMCRIS No. 145984; BLM Report No.2020(III)014F, NMCRIS No. 145985; BLM Report No. 2020(IV)001F) were conducted in the proposed project areas and during these surveys eight cultural sites (LA178234, LA82880, LA82881, LA197578, LA197579, LA197580, LA197581, & LA197582) were discovered. Two sites (LA82880, &

LA178234) were determined to be Eligible for listing on the NRHP, three sites (LA82881, LA197578, & LA197580) were determined to be Not Eligible for listing, and three sites (LA197579, LA197581, & LA197582) were given an Undetermined eligibility status. The sites that were given an Eligible and Undetermined eligibility status will require protective fencing and the presence of an archaeological monitor.

Paleontology: Any paleontological resource discovered by the Operator, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant scientific values. The Holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the Holder.

Public Safety: The Operator will instruct employees and contractors to obey all speed limits, traffic laws, and to use caution while driving when school busses, school bus stops, and children are present.

Wildlife: Migratory Bird Nest Survey: For any construction activities that exceed 4.0 acres of ground disturbance from 5/15 to 7/31 within the same lease, a migratory bird nest survey is required prior to any new ground disturbance.
Nest surveys will be conducted within 48 hours of scheduled construction by BLM/FFO personnel or approved biologist. Any active nests will require a disturbance buffer to eliminate impacts to nesting birds. Active nests will be avoided.
A burrowing owl and prairie dog survey required for any new ground disturbing activity between 4/1-8/15.

Any open water containing fluids that could harm birds, bats, and other mammals will require netting or some type of covering to prevent wildlife from entering.

Applicant will adhere to timing limitations and management measures if any new raptor nests are discovered within the project area. These timing limitations are species specific depending on the raptor that is discovered. The following timing limitations may apply:

Raptor Species of Nest Discovered	**Timing Limitation**
Bald Eagle	March 1-June 30
Burrowing Owl	April 1-August 15
Golden Eagle	February 1-June 30
Other Raptors	March 1- June 30

Noxious/Invasive Weeds: DJR is responsible for the life of the wells and associated permitted pipelines, facilities, and roads, to treat any and all Class A and B species and to minimize and control Class C species. If treatment is needed DJR will provide the BLM FFO with a Pesticide Use Proposal (PUP) prior to treatment. The FFO is not responsible for specific treatment suggestions but will assist DJR when needed.

Disclaimers: BLM's approval of the Applications for Permit to Drill (APD) does not relieve the lessee and operator from obtaining any other authorizations that may be required by the State of New Mexico or other jurisdictional entities.

Copy of Plans: A complete copy of the APD packages, including: Surface Use Plan of Operations, Plan of Development (if required), Conditions of Approval, Cultural Resource Record of Review, Cultural Resources Compliance Form (if required), and Project Stipulations (if required) shall be at the project area at all times and available to all persons.

Review of NEPA documents: It is the responsibility of the operator to follow all the design features, best management practices, and mitigation measures as contained in DOI-BLM-NM-F010-2021-0003-EA entitled "North Alamito Unit Unit 2208 and Betonnie Tsosie Wash Unit 2308 Cluster Oil and Natural Gas Wells Project". Copies of the EA, Decision Record, and Finding of No Significant Impact may be obtained from the BLM FFO public room, or online at eplanning.blm.gov.

Best Management Practices (BMPs): Farmington Field Office established environmental Best Management Practices (BMPs) will be followed during construction and reclamation of well site pads, access roads, pipeline ties, facility placement or any other surface disturbing activity associated with this project. Bureau wide standard BMPs are found in the Gold Book, Fourth Edition-Revised 2007 and at http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/best_management_practices.html

BLM Report Number: 2020(III)014F
USGS Map: Lybrook, & Lybrook NW, NM
Activity Code: 1310
NMCRIS No: 145984

CULTURAL RESOURCE RECORD OF REVIEW
BUREAU OF LAND MANAGEMENT
FARMINGTON FIELD OFFICE

11

1. Description of Report/Project:
Project Name: North Alamito Unit #405/406/407/408H Multiple Well Pad, Access Road, Pipeline, and Staging Area.
Project Sponsor: DJR Operating LLC.
Arch. Firm & Report No.: La Plata Archaeological Consultants; LAC Report No. 2020-8a.
Location: T22N R8W Section 1.
Well Footages: 405H: 2,047' FSL; 517' FEL.
Split Estate: No.
Project Dimensions: 540 ft x 435 ft – well pad (640 ft x 535 ft w/ 50 ft construction zone).
3,327 ft x 50 ft –access road/pipeline.
1,623 ft x 40 ft – Pipeline (continues beyond shared road/pipeline ROW).
200 ft x 300 ft – Staging area.
100 ft x10 ft - Pull out
100 ft x 10 ft - Pull out
0.24 acres - Temporary use area.
0.17 acres - Temporary use area.
Sites Located: LA178234/NM-210-48093 (NRHP: Eligible; Update; Avoided).
Determination: No Effect to Historic Properties.
2. Field Check: No.
3. Cultural ACEC: No.
4. Sensitive Cultural Area: No.
5. Recommendation: *PROCEED WITH ACTION:* X *STIPULATIONS ATTACHED:* X
6. Reviewer /Archaeologist: Kim Adams **Date:** 7/2/2020

Report Summary	BLM	Other	Total
Acres Inventoried	34.44	0.00	34.44
Sites Recorded	0	0	0
Prev. Recorded Sites	1	0	1
Sites Avoided	1	0	1
Sites Treated	0	0	0

Discovery of Cultural Resources in the Presence or Absence of Monitoring: If any previously unidentified historic or prehistoric cultural resources are discovered during construction or project operations, work in the vicinity of the discovery will be suspended and the discovery will promptly be reported to the BLM Field Manager.

Note: If there are questions about these stipulations, contact Kim Adams (BLM) at 505.564.7683 or kadams@blm.gov.

1

CULTURAL RESOURCE STIPULATIONS
Farmington Field Office
BLM Report Number: 2020(III)014F

Project Name: North Alamito Unit #405/406/407/408H Multiple Well Pad, Access Road, Pipeline, and Staging Area.
Project Sponsor: DJR Operating LLC.

1. SITE PROTECTION AND EMPLOYEE EDUCATION:
All employees of the project, including the Project Sponsor and its contractors and sub-contractors will be informed that cultural sites are to be avoided by all personnel, personal vehicles and company equipment. They will also be notified that it is illegal to collect, damage, or disturb cultural resources, and that such activities are punishable by criminal and or administrative penalties under the provisions of the Archaeological Resources Protection Act (16 U.S.C. 470aa-mm) when on federal land and the New Mexico Cultural Properties Act NMSA 1978 when on state land.

2. ARCHAEOLOGICAL MONITORING IS REQUIRED:
A copy of these stipulations will be supplied to the archeological monitor at least two working days prior to the start of construction activities. No construction activities, including vegetation removal, may begin before the arrival of the archaeological monitor.

The monitor will:

- Ensure that a site protection barrier is located as indicated on the attached map in the vicinity of LA178234.
- Observe all surface disturbing activities within 100'of LA178234.
- Submit a report of the monitoring activities within 30 days of completion of monitoring unless other arrangements are made with the BLM. These stipulations must be attached to the report.

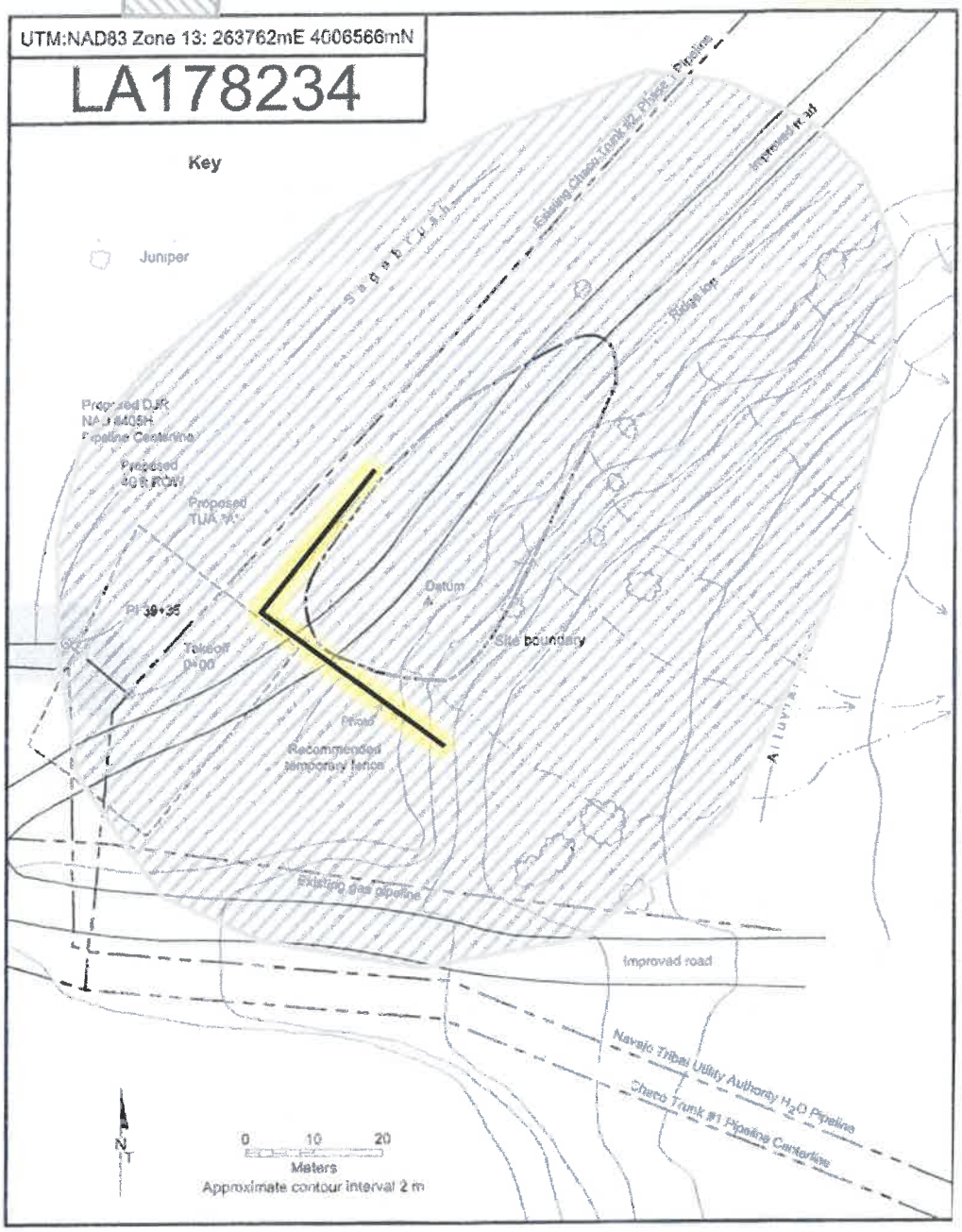
3. SITE PROTECTION BARRIER:
- The temporary site protection barrier will be erected prior to construction. The barrier will consist of upright wooden survey lath spaced no more than 10 feet apart and marked with blue flagging or blue paint. The barrier will remain in place through reclamation and reseeding and shall be promptly removed after reclamation.
- The barrier will be placed as indicated on the attached map.
- There will be no surface-disturbing activities or vehicle traffic past the barrier.

Note: If there are questions about these stipulations, contact Kim Adams (BLM) at 505.564.7683 or kadams@blm.gov.

For Official Use Only: Disclosure of site locations prohibited (43 CFR 7.18)
CULTURAL RESOURCE STIPULATIONS
Farmington Field Office
BLM Report Number: 2020(III)014F

Project Name: North Alamito Unit #405/406/407/408H Multiple Well Pad, Access Road, Pipeline, and Staging Area.
Project Sponsor: DJR Operating LLC.

MONITOR ZONE = SITE PROTECTION BARRIER =



BLM Report Number: 2020(IV)001F
USGS Map: Lybrook NW, NM
Activity Code: 1310
NMCRIS No: 145985

E1

CULTURAL RESOURCE RECORD OF REVIEW
BUREAU OF LAND MANAGEMENT
FARMINGTON FIELD OFFICE

1. Description of Report/Project:
Project Name: North Alamito Unit #502/507H Dual Well Pad, Access Road, Pipeline, and Staging Area.
Project Sponsor: DJR Operating LLC.
Arch. Firm & Report No.: La Plata Archaeological Consultants; LAC Report No. 2020-8b.
Location: T22N R8W Section 1.
Well Footages: 502H: 2,492' FNL; 567' FWL.
Split Estate: No.
Project Dimensions: 460 ft x 435 ft – well pad (560 ft x 535 ft w/ 50 ft construction zone).
3,391 ft x 50 ft –access road/pipeline.
1,684 ft x 40 ft – Pipeline (continues beyond shared road/pipeline ROW).
200 ft x 300 ft – Staging area.
150 ft x10 ft - Pull out
150 ft x 10 ft - Pull out
0.24 acres - Temporary use area.
0.17 acres - Temporary use area.
Sites Located: LA178234/NM-210-48093 (NRHP: Eligible; Update; Avoided).
Determination: No Effect to Historic Properties.

2. **Field Check:** No.
3. **Cultural ACEC:** No.
4. **Sensitive Cultural Area:** No.
5. **Recommendation:** *PROCEED WITH ACTION:* X *STIPULATIONS ATTACHED:* X
6. **Reviewer /Archaeologist:** Kim Adams **Date**: 7/6/2020

Report Summary	BLM	Other	Total
Acres Inventoried	33.64	0.00	33.64
Sites Recorded	0	0	0
Prev. Recorded Sites	1	0	1
Sites Avoided	1	0	1
Sites Treated	0	0	0

Discovery of Cultural Resources in the Presence or Absence of Monitoring: If any previously unidentified historic or prehistoric cultural resources are discovered during construction or project operations, work in the vicinity of the discovery will be suspended and the discovery will promptly be reported to the BLM Field Manager.

Note: If there are questions about these stipulations, contact Kim Adams (BLM) at 505.564.7683 or kadams@blm.gov.

CULTURAL RESOURCE STIPULATIONS
Farmington Field Office
BLM Report Number: 2020(IV)001F

Project Name: North Alamito Unit #502/507H Dual Well Pad, Access Road, Pipeline, and Staging Area.
Project Sponsor: DJR Operating LLC.

1. SITE PROTECTION AND EMPLOYEE EDUCATION:
All employees of the project, including the Project Sponsor and its contractors and sub-contractors will be informed that cultural sites are to be avoided by all personnel, personal vehicles and company equipment. They will also be notified that it is illegal to collect, damage, or disturb cultural resources, and that such activities are punishable by criminal and or administrative penalties under the provisions of the Archaeological Resources Protection Act (16 U.S.C. 470aa-mm) when on federal land and the New Mexico Cultural Properties Act NMSA 1978 when on state land.

2. ARCHAEOLOGICAL MONITORING IS REQUIRED:
A copy of these stipulations will be supplied to the archeological monitor at least two working days prior to the start of construction activities. No construction activities, including vegetation removal, may begin before the arrival of the archaeological monitor.

The monitor will:

- Ensure that a site protection barrier is located as indicated on the attached map in the vicinity of LA178234.
- Observe all surface disturbing activities within 100'of LA178234.
- Submit a report of the monitoring activities within 30 days of completion of monitoring unless other arrangements are made with the BLM. These stipulations must be attached to the report.

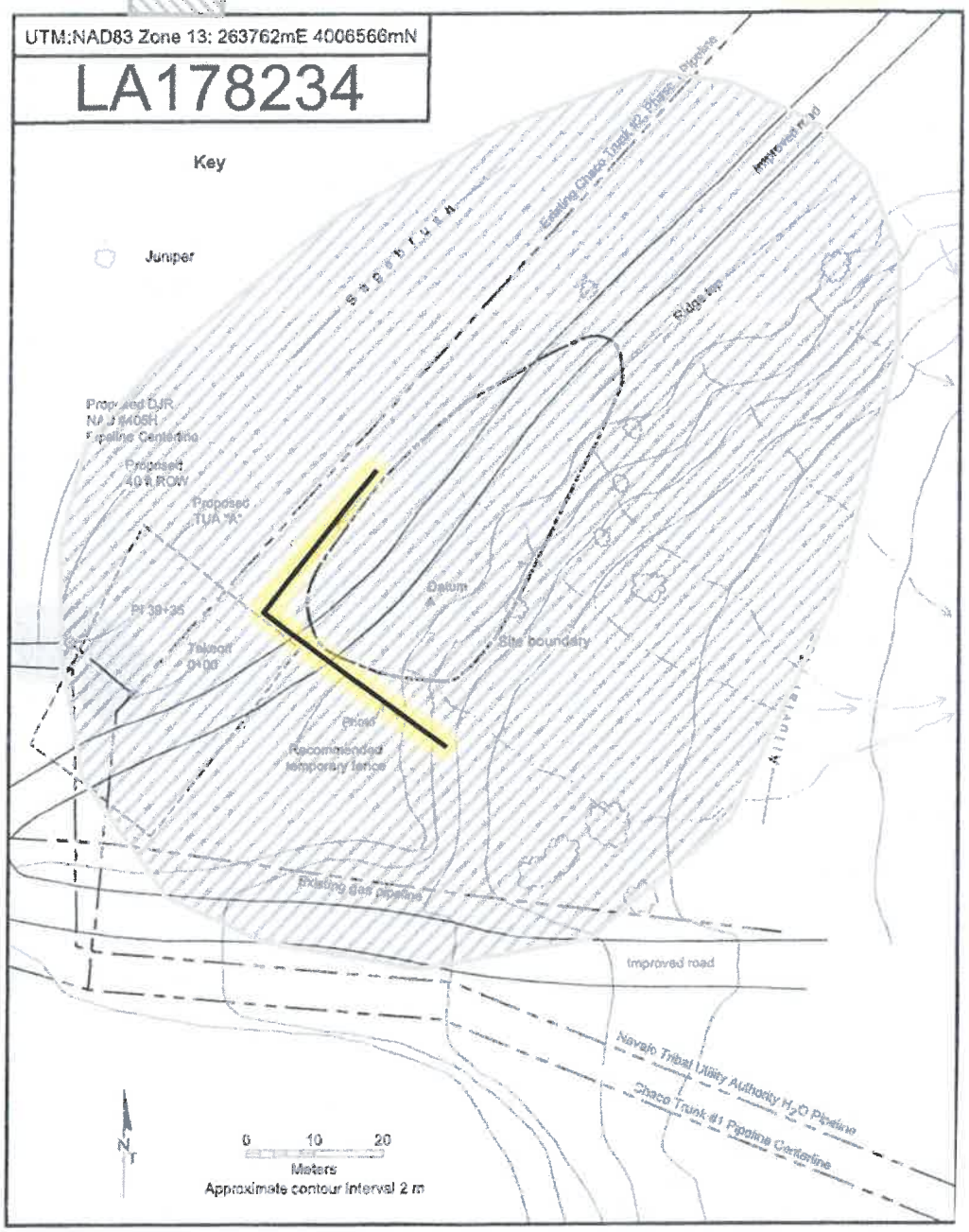
3. SITE PROTECTION BARRIER:
- The temporary site protection barrier will be erected prior to construction. The barrier will consist of upright wooden survey lath spaced no more than 10 feet apart and marked with blue flagging or blue paint. The barrier will remain in place through reclamation and reseeding and shall be promptly removed after reclamation.
- The barrier will be placed as indicated on the attached map.
- There will be no surface-disturbing activities or vehicle traffic past the barrier.

Note: If there are questions about these stipulations, contact Kim Adams (BLM) at 505.564.7683 or kadams@blm.gov.

For Official Use Only: Disclosure of site locations prohibited (43 CFR 7.18)
CULTURAL RESOURCE STIPULATIONS
Farmington Field Office
BLM Report Number: 2020(IV)001F

Project Name: North Alamito Unit #502/507H Dual Well Pad, Access Road, Pipeline, and Staging Area.
Project Sponsor: DJR Operating LLC.

MONITOR ZONE = SITE PROTECTION BARRIER =



BLM Report Number: 2021(I)002F
USGS Map: Lybrook, & Lybrook NW, NM
Activity Code: 1310
NMCRIS No: 146574

CULTURAL RESOURCE RECORD OF REVIEW
BUREAU OF LAND MANAGEMENT
FARMINGTON FIELD OFFICE

1. Description of Report/Project:
Project Name: BTWU G34-2308, BTWU A35-2308, and BTWU E35-2308 Well Pads, Pipelines, Access Roads, G-Tank and Staging Area, and Surface Water Line.
Project Sponsor: DJR Operating LLC.
Arch. Firm & Report No.: La Plata Archaeological Consultants; LAC Report No. 2020-8m.
Location: T22N R8W Sections 1, & 2.
T23N R7W Section 31.
T23N R8W Sections 34, 35, 36.
Well Footages: 207H: 808' FSL; 1,781' FWL.
206H: 2,467' FSL; 128' FWL.
Split Estate: No.
Project Dimensions: 435 ft x 460 ft – well pad (535 ft x 560 ft w/ 50 ft construction zone).
435 ft x 440 ft – well pad (535 ft x 540 ft w/ 50 ft construction zone).
435 ft x 460 ft – well pad (535 ft x 560 ft w/ 50 ft construction zone).
300 ft x 200 ft – g tank and staging area.
7489 ft x 40 ft – E35 pipeline.
11733 ft x 40 ft - E35 Liquids Pipeline.
7557 ft x 30 ft - E35 access.
8001 ft x 30 ft - A35 access.
12313 ft x 40 ft - A35 liquids pipeline.
8069 ft x 40 ft - A35 pipeline.
10718 ft x 30 ft - G34 Access.
10742 ft x 40 ft - G34 pipeline.
14986 ft x 40 ft - G34 liquids pipeline.
NOTE: Many of the pipelines/access roads overlap. And A portion of this proposed project has already recently been subjected to an adequate Class III Inventory.

Sites Located: LA82880/NM-01-37354 (NRHP: Eligible; Update; Avoided).
LA82881/NM-01-37355 (NRHP: Not Eligible; Update; Avoided; No Further Work).
LA178234/NM-210-48093 (NRHP: Eligible; Update; Avoided).
LA197578/NM-210-49301 (NRHP: Not Eligible; No Further Work; Avoided).
LA197579/NM-210-49302 (NRHP: Not Determined; Avoided).
LA197580/NM-210-49303 (NRHP: Not Eligible; Partially Avoided; No Further Work).
LA197581/NM-210-49300 (NRHP: Not Determined; Avoided). (See Report 2021(I)002.1F).
LA197582/NM-210-49304 (NRHP: Not Determined; Avoided).

Determination: No Effect to Historic Properties.
2. Field Check: No.
3. Cultural ACEC: No.

1

4. **Sensitive Cultural Area:** No.
5. **Recommendation:** *PROCEED WITH ACTION:* X *STIPULATIONS ATTACHED:* X
6. **Reviewer /Archaeologist:** Kim Adams **Date**: 12/10/2020

Report Summary	BLM	Other	Total
Acres Inventoried	107.09	0.00	107.09
Sites Recorded	5	0	5
Prev. Recorded Sites	3	0	3
Sites Avoided	7	0	7
Sites Treated	0	0	0

Discovery of Cultural Resources in the Presence or Absence of Monitoring: If any previously unidentified historic or prehistoric cultural resources are discovered during construction or project operations, work in the vicinity of the discovery will be suspended and the discovery will promptly be reported to the BLM Field Manager.

Note: If there are questions about these stipulations, contact Kim Adams (BLM) at 505.564.7683 or kadams@blm.gov.

CULTURAL RESOURCE STIPULATIONS
Farmington Field Office
BLM Report Number: 2021(I)002F

Project Name: BTWU G34-2308, BTWU A35-2308, and BTWU E35-2308 Well Pads, Pipelines, Access Roads, G-Tank and Staging Area, and Surface Water Line.
Project Sponsor: DJR Operating LLC.

1. SITE PROTECTION AND EMPLOYEE EDUCATION:
All employees of the project, including the Project Sponsor and its contractors and sub-contractors will be informed that cultural sites are to be avoided by all personnel, personal vehicles and company equipment. They will also be notified that it is illegal to collect, damage, or disturb cultural resources, and that such activities are punishable by criminal and or administrative penalties under the provisions of the Archaeological Resources Protection Act (16 U.S.C. 470aa-mm) when on federal land and the New Mexico Cultural Properties Act NMSA 1978 when on state land.

2. ARCHAEOLOGICAL MONITORING IS REQUIRED:
A copy of these stipulations will be supplied to the archeological monitor at least two working days prior to the start of construction activities. No construction activities, including vegetation removal, may begin before the arrival of the archaeological monitor.

The monitor will:

- Ensure that site protection barriers are located as indicated on the attached maps in the vicinity of LA82880, LA178234, LA197579, & LA197582.
- Observe all surface disturbing activities within 100'of LA82880, LA178234, LA197579, & LA197582.
- Submit a report of the monitoring activities within 30 days of completion of monitoring unless other arrangements are made with the BLM. These stipulations must be attached to the report.
- **See BLM Report No. 2021(I)002.1F for stipulations for LA197581.**

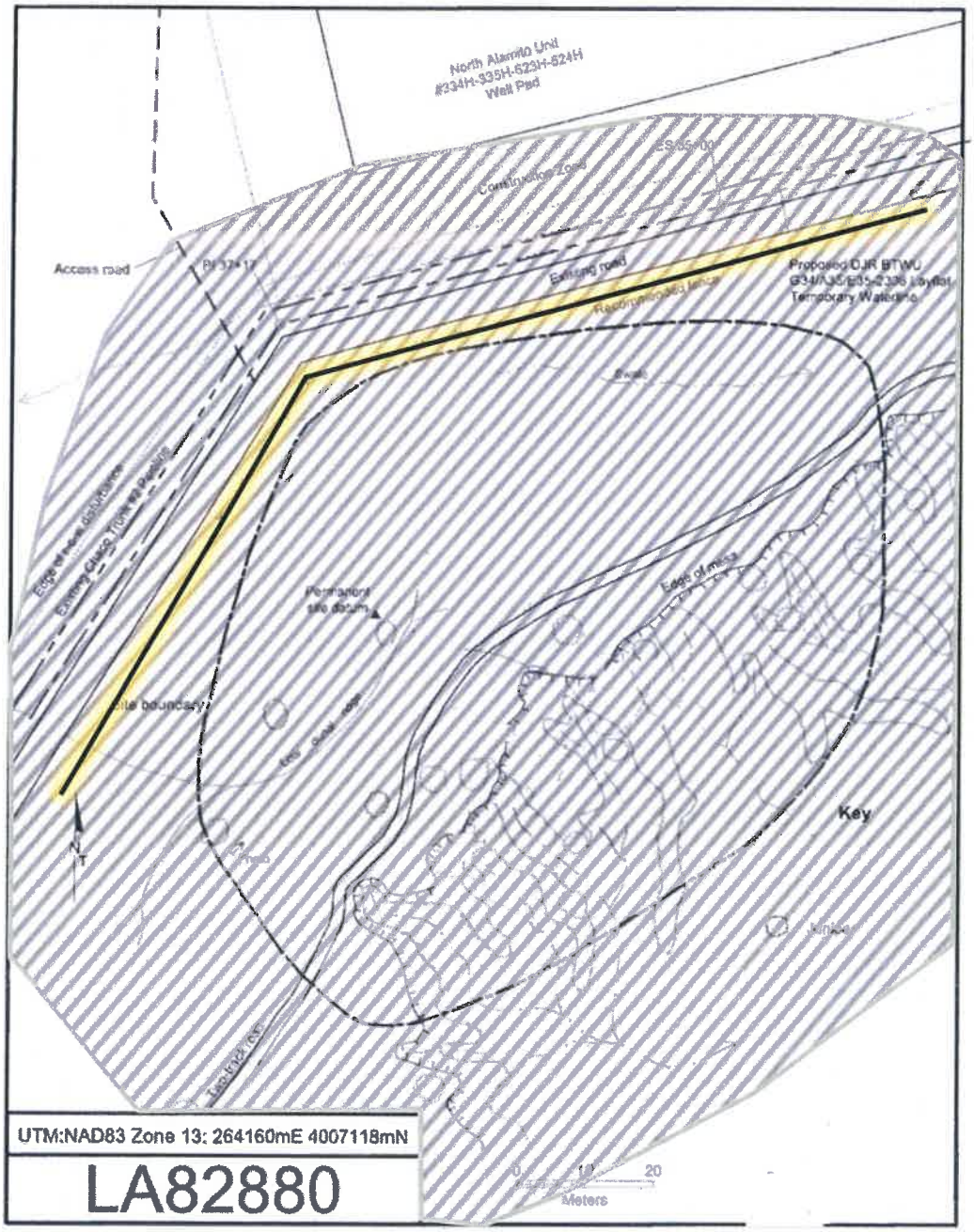
3. SITE PROTECTION BARRIER:
- The temporary site protection barriers will be erected prior to construction. The barriers will consist of upright wooden survey lath spaced no more than 10 feet apart and marked with blue flagging or blue paint. The barriers will remain in place through reclamation and reseeding and shall be promptly removed after reclamation.
- The barriers will be placed as indicated on the attached map.
- There will be no surface-disturbing activities or vehicle traffic past the barriers.

Note: If there are questions about these stipulations, contact Kim Adams (BLM) at 505.564.7683 or kadams@blm.gov.

For Official Use Only: Disclosure of site locations prohibited (43 CFR 7.18)
CULTURAL RESOURCE STIPULATIONS
Farmington Field Office
BLM Report Number: 2021(I)002F

Project Name: BTWU G34-2308, BTWU A35-2308, and BTWU E35-2308 Well Pads, Pipelines, Access Roads, G-Tank and Staging Area, and Surface Water Line.
Project Sponsor: DJR Operating LLC.

MONITOR ZONE = SITE PROTECTION BARRIER =



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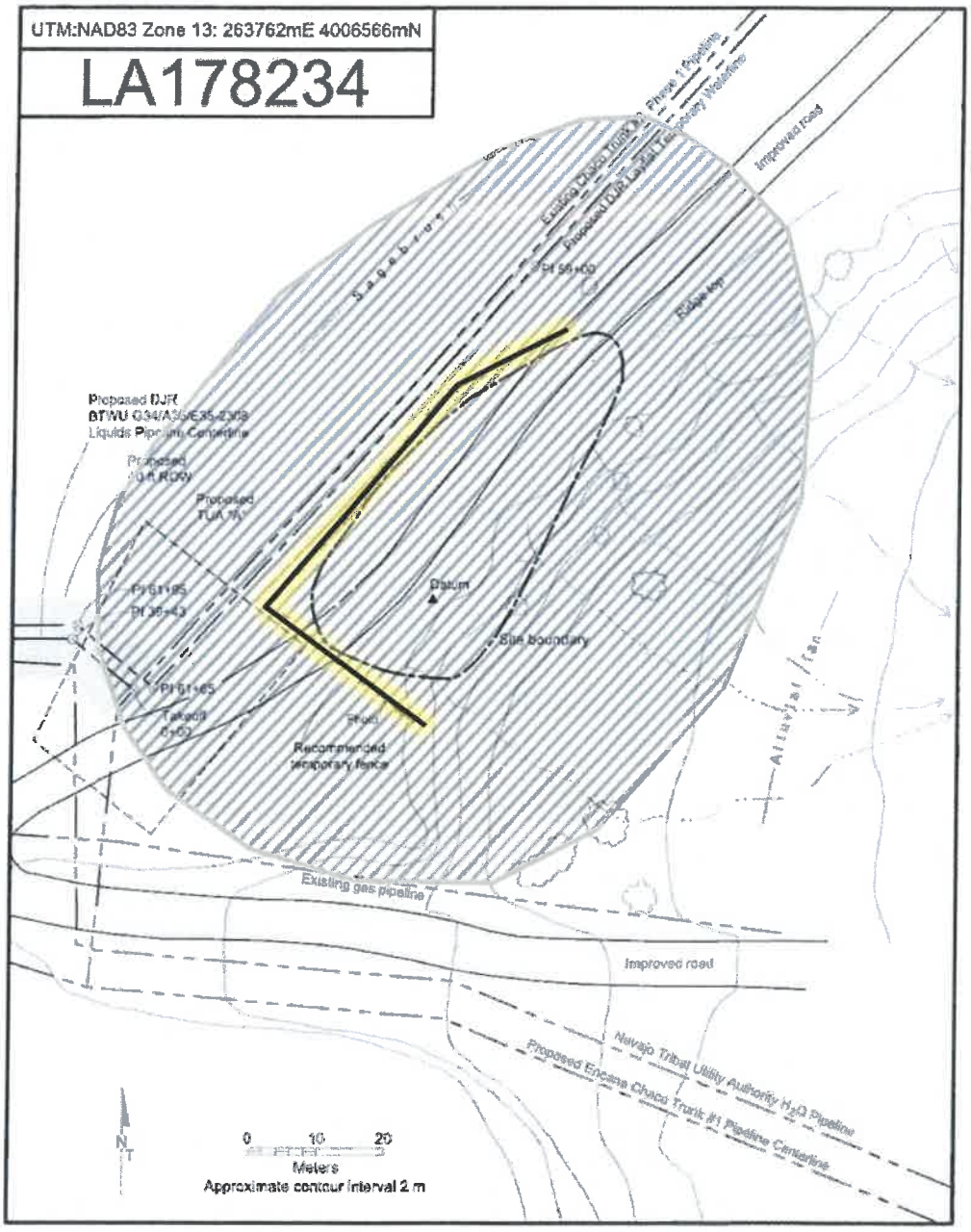
For Official Use Only: Disclosure of site locations prohibited (43 CFR 7.18)
CULTURAL RESOURCE STIPULATIONS
Farmington Field Office
BLM Report Number: 2021(I)002F

Project Name: BTWU G34-2308, BTWU A35-2308, and BTWU E35-2308 Well Pads, Pipelines, Access Roads, G-Tank and Staging Area, and Surface Water Line.
Project Sponsor: DJR Operating LLC.

MONITOR ZONE = SITE PROTECTION BARRIER =



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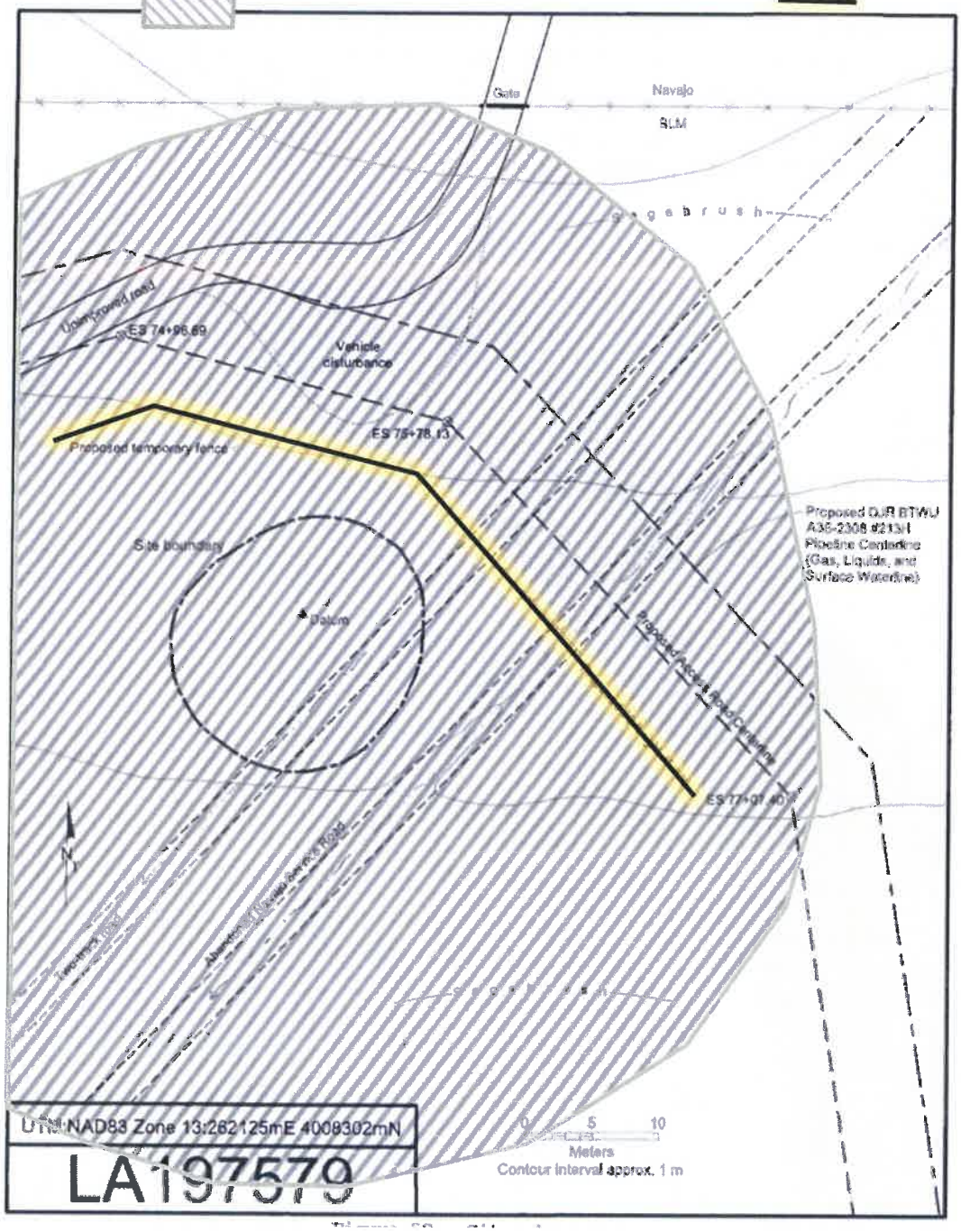
For Official Use Only: Disclosure of site locations prohibited (43 CFR 7.18)
CULTURAL RESOURCE STIPULATIONS
Farmington Field Office
BLM Report Number: 2021(I)002F

Project Name: BTWU G34-2308, BTWU A35-2308, and BTWU E35-2308 Well Pads, Pipelines, Access Roads, G-Tank and Staging Area, and Surface Water Line.
Project Sponsor: DJR Operating LLC.

MONITOR ZONE = SITE PROTECTION BARRIER =



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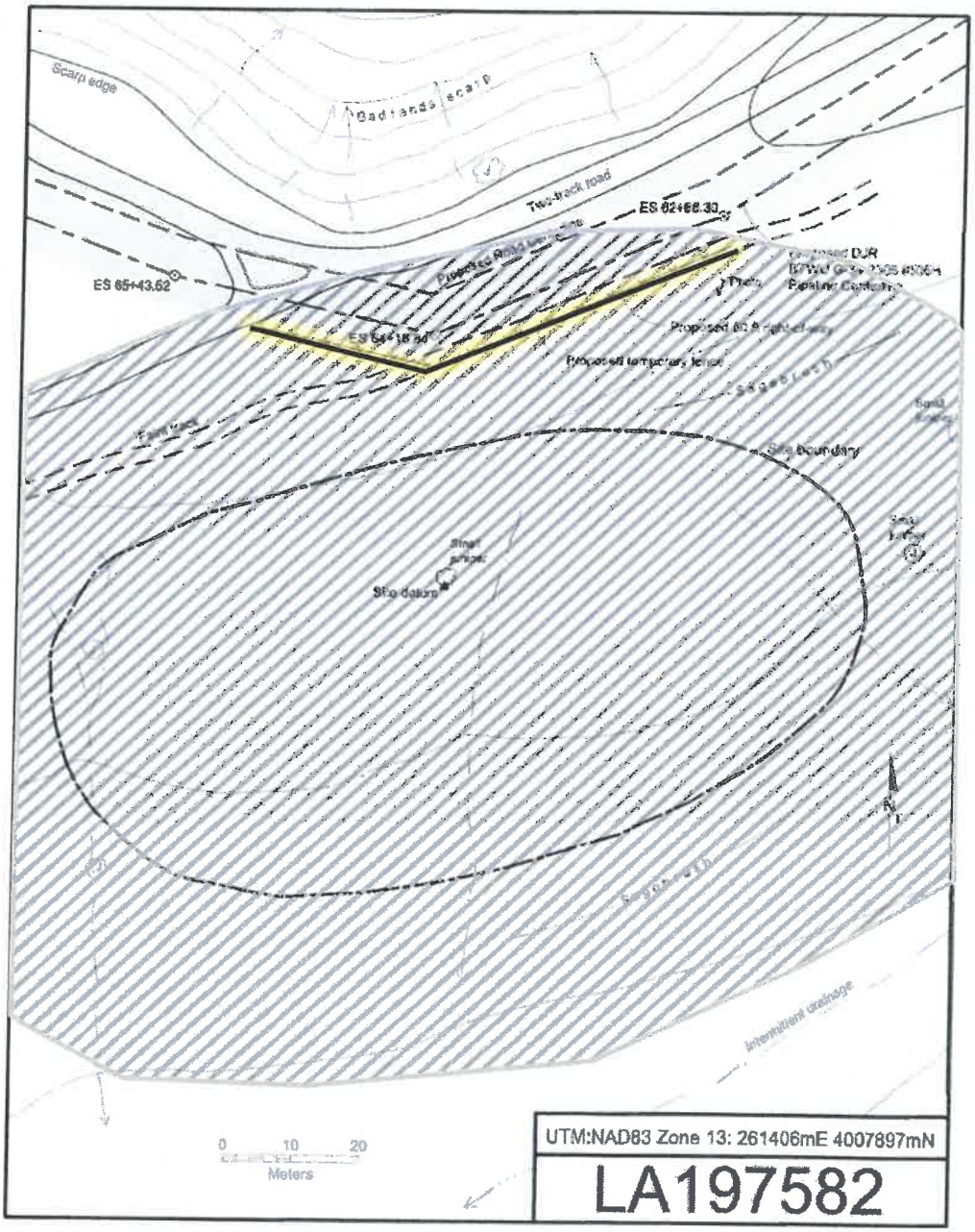
For Official Use Only: Disclosure of site locations prohibited (43 CFR 7.18)
CULTURAL RESOURCE STIPULATIONS
Farmington Field Office
BLM Report Number: 2021(I)002F

Project Name: BTWU G34-2308, BTWU A35-2308, and BTWU E35-2308 Well Pads, Pipelines, Access Roads, G-Tank and Staging Area, and Surface Water Line.
Project Sponsor: DJR Operating LLC.

MONITOR ZONE = SITE PROTECTION BARRIER =



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BLM Report Number: 2021(I)002.1F
USGS Map: Lybrook NW, NM
Activity Code: 1310
NMCRIS No: 146998

CULTURAL RESOURCE RECORD OF REVIEW
BUREAU OF LAND MANAGEMENT
FARMINGTON FIELD OFFICE

1. Description of Report/Project:
Project Name: Rerouted Access and Pipeline to the BTWU G34-2308 Well.
Project Sponsor: DJR Operating LLC.
Arch. Firm & Report No.: La Plata Archaeological Consultants; LAC Report No. 2020-8m #2.

Location: T23N R8W Section 34.

Well Footages: N/A
Split Estate: no.
Project Dimensions: 873 ft x 50 ft – Access/Pipeline Reroute.

Sites Located: LA197581/ NM-210-49300 (NRHP: Not Determined; Avoided).
Determination: No Effect to Historic Properties.

2. **Field Check:** No.
3. **Cultural ACEC:** No.
4. **Sensitive Cultural Area:** No.
5. **Recommendation:** *PROCEED WITH ACTION:* X *STIPULATIONS ATTACHED:* X
6. **Reviewer /Archaeologist:** Kim Adams **Date:** 12/3/2020

Report Summary	BLM	Other	Total
Acres Inventoried	2.8	0.00	2.8
Sites Recorded	0	0	0
Prev. Recorded Sites	1	0	1
Sites Avoided	1	0	1
Sites Treated	0	0	0

Discovery of Cultural Resources in the Presence or Absence of Monitoring: If any previously unidentified historic or prehistoric cultural resources are discovered during construction or project operations, work in the vicinity of the discovery will be suspended and the discovery will promptly be reported to the BLM Field Manager.

Note: If there are questions about these stipulations, contact Kim Adams (BLM) at 505.564.7683 or kadams@blm.gov.

CULTURAL RESOURCE STIPULATIONS
Farmington Field Office
BLM Report Number: 2021(I)002.1F

Project Name: Rerouted Access and Pipeline to the BTWU G34-2308 Well.
Project Sponsor: DJR Operating LLC.

1. SITE PROTECTION AND EMPLOYEE EDUCATION:
All employees of the project, including the Project Sponsor and its contractors and sub-contractors will be informed that cultural sites are to be avoided by all personnel, personal vehicles and company equipment. They will also be notified that it is illegal to collect, damage, or disturb cultural resources, and that such activities are punishable by criminal and or administrative penalties under the provisions of the Archaeological Resources Protection Act (16 U.S.C. 470aa-mm) when on federal land and the New Mexico Cultural Properties Act NMSA 1978 when on state land.

2. ARCHAEOLOGICAL MONITORING IS REQUIRED:
A copy of these stipulations will be supplied to the archeological monitor at least two working days prior to the start of construction activities. No construction activities, including vegetation removal, may begin before the arrival of the archaeological monitor.

The monitor will:

- Observe all surface disturbing activities within 100'of LA197581.
- Ensure that a site protection barrier is located as indicated on the attached map in the vicinity of LA197581.
- Submit a report of the monitoring activities within 30 days of completion of monitoring unless other arrangements are made with the BLM. These stipulations must be attached to the report.

3. SITE PROTECTION BARRIER:

- The temporary site protection barrier will be erected prior to construction. The barrier will consist of upright wooden survey lath spaced no more than 10 feet apart and marked with blue flagging or blue paint. The barrier will remain in place through reclamation and reseeding and shall be promptly removed after reclamation.
- The barrier will be placed as indicated on the attached map.
- There will be no surface-disturbing activities or vehicle traffic past the barrier.

Note: If there are questions about these stipulations, contact Kim Adams (BLM) at 505.564.7683 or kadams@blm.gov.

CULTURAL RESOURCE STIPULATIONS
Farmington Field Office
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Project Name: Rerouted Access and Pipeline to the BTWU G34-2308 Well.
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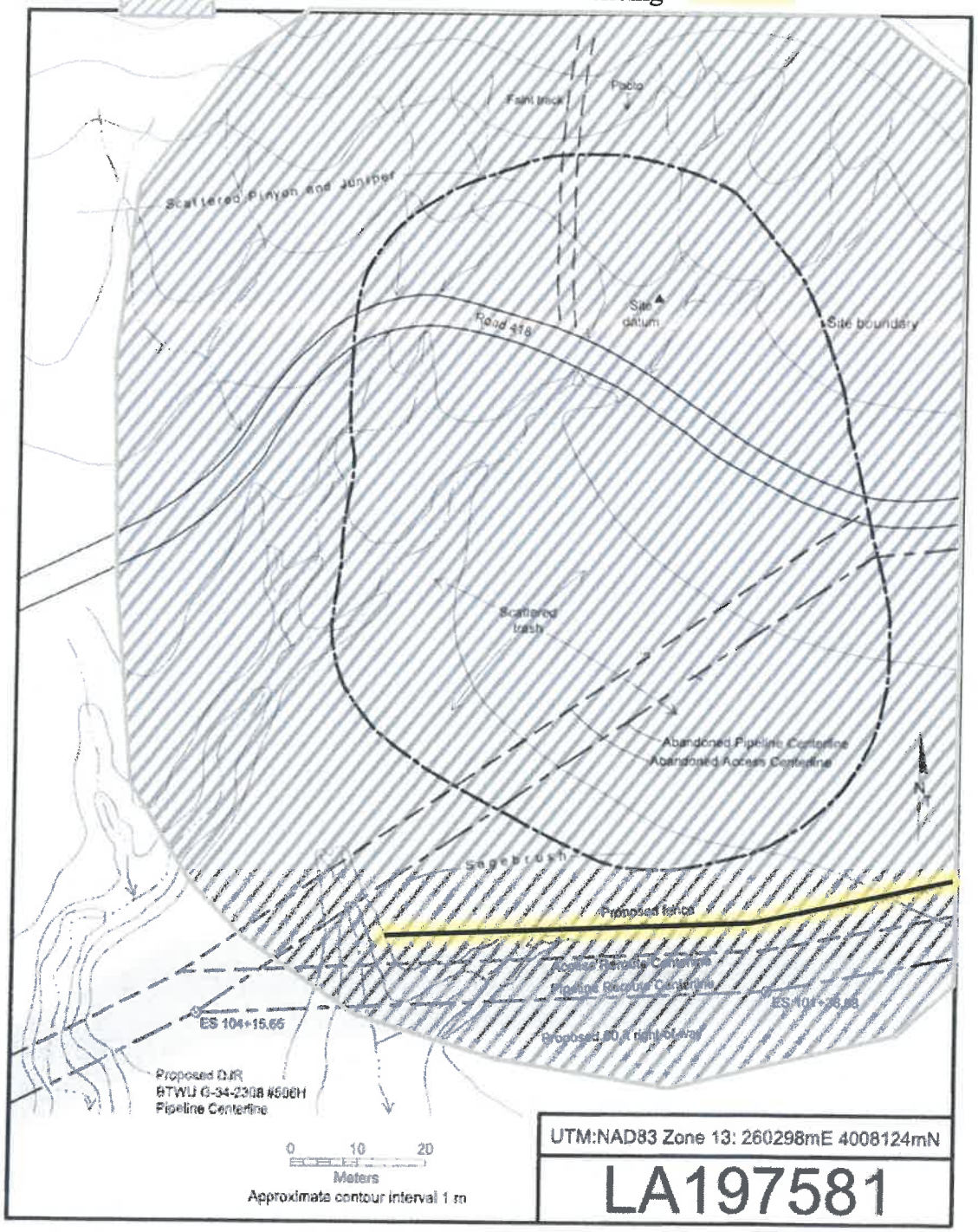
Monitor Zone =

Site Protection Fencing =



3

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

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

COMMENTS

Action 26019

COMMENTS

Operator:	OGRID:	Action Number:	Action Type:
DJR OPERATING, LLC 1 Road 3263 Aztec, NM87410	371838	26019	FORM 3160-3

Created By	Comment	Comment Date
kpickford	KP GEO Review 4/29/2021	04/29/2021

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CONDITIONS

Action 26019

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
DJR OPERATING, LLC 1 Road 3263 Aztec, NM87410	371838	26019	FORM 3160-3

OCD Reviewer	Condition
kpickford	Notify OCD 24 hours prior to casing & cement
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing
kpickford	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system