

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

5. Lease Serial No. NMNM36943
6. If Indian, Allottee or Tribe Name EASTERN NAVAJO
7. If Unit or CA/Agreement, Name and/or No. NMNM135229A
8. Well Name and No. NORTH ALAMITO UNIT 240H
9. API Well No. 30-043-21267-00-X1
10. Field and Pool or Exploratory Area ALAMITO GALLUP BASIN MANCOS
11. County or Parish, State SANDOVAL COUNTY, NM

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well ☒ Oil Well ☒ Gas Well ☐ Other	
2. Name of Operator DJR OPERATING LLC Contact: SHAW-MARIE FORD E-Mail: sford@djrlc.com	
3a. Address 1 ROAD 3263 AZTEC, NM 87410	3b. Phone No. (include area code) Ph: 505-632-3476
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 30 T23N R7W SESE 429FSL 1293FEL 36.191782 N Lat, 107.611914 W Lon	

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Drilling Operations
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

DJR Operating, LLC. has an approved APD for the subject well. DJR is submitting this sundry changing the BHL and Drilling Plan. Attachments include a revised C-102 package reflecting the revised BHL and new Drilling Plan.

ADHERE TO PREVIOUS NMOC
CONDITIONS OF APPROVAL

NMOC

DEC 17 2019

DISTRICT III

14. I hereby certify that the foregoing is true and correct. Electronic Submission #495726 verified by the BLM Well Information System For DJR OPERATING LLC, sent to the Farmington Committed to AFMSS for processing by JOE KILLINS on 12/16/2019 (20JK0048SE)	
Name (Printed/Typed) SHAW-MARIE FORD	Title REGULATORY SPECIALIST
Signature (Electronic Submission)	Date 12/13/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By JOE KILLINS	Title PETROLEUM ENGINEER	Date 12/16/2019
Conditions of approval, if any, are attached. Approval of this notice 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.		Office Farmington

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.

(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

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DEC 17 2019

DISTRICT III

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) 478-3460 Fax: (505) 478-3462State of New Mexico
Energy, Minerals & Natural Resources DepartmentForm C-102
Revised August 1, 2011Submit one copy to appropriate
District Office

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, NM 87505☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-043-21267	² Pool Code 98174	³ Pool Name NORTH ALAMITO UNIT MANCOS OIL POOL
⁴ Property Code 325267	⁵ Property Name NORTH ALAMITO UNIT	⁶ Well Number 240H
⁷ OGRID No. 371838	⁸ Operator Name DJR OPERATING, LLC	⁹ Elevation 7029'

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
P	30	23N	7W		429'	SOUTH	1293'	EAST	SANDOVAL

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
A	25	23N	8W		349'	NORTH	501'	EAST	SAN JUAN

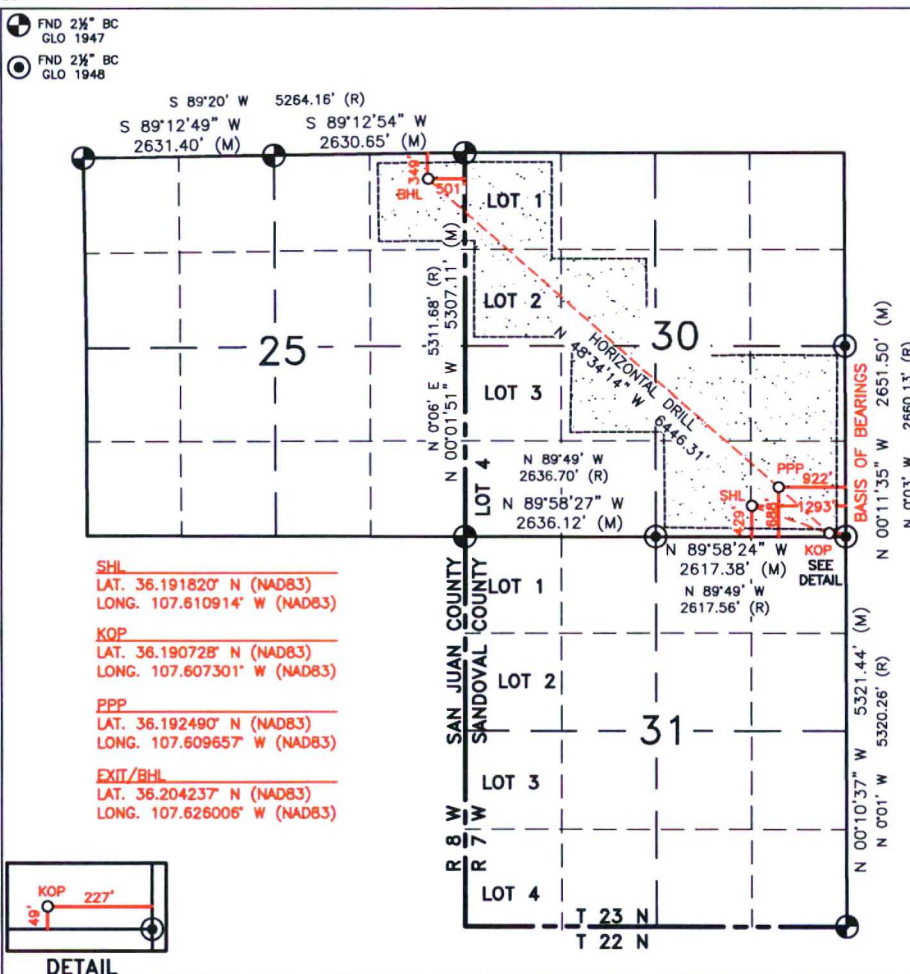
¹² Dedicated Acres PENETRATED SPACING UNIT:
SEC 30: SE/4, NE/SW, SE/NW, SW/NW, NW/NW
(321.38 AC.); SEC 25: NE/NE (40 AC.) =
361.38 ACRES TOTAL

¹³ Joint or Infill¹⁴ Consolidation Code¹⁵ Order No.

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

16



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 12/13/19
Signature Date

Shaw-Marie Ford

Printed Name

sford@djrlc.com

E-mail Address

SURVEYOR CERTIFICATION

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

FEBRUARY 14, 2017

Date of Survey

Signature and Seal of Professional Surveyor:



Certificate Number

11393

DISTRICT I

1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-6161 Fax: (575) 393-0780

DISTRICT II

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Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV

1220 S. St. Francis Dr., Santa Fe, NM 87506
Phone: (505) 478-3480 Fax: (505) 478-3482

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

DRJ OPERATING, LLC
NORTH ALAMITO UNIT #240H

N/4 CORNER SEC. 25
LAT. 36.205127° N (NAD83)
LONG. 107.633221° W (NAD83)

SE CORNER SEC. 25
LAT. 36.190632° N (NAD83)
LONG. 107.624334° W (NAD83)

E/4 CORNER SEC. 30
LAT. 36.197877° N (NAD83)
LONG. 107.606539° W (NAD83)

S/4 CORNER SEC. 30
LAT. 36.190612° N (NAD83)
LONG. 107.615400° W (NAD83)

NE CORNER SEC. 25
LAT. 36.205211° N (NAD83)
LONG. 107.624305° W (NAD83)

NW CORNER SEC. 25
LAT. 36.205042° N (NAD83)
LONG. 107.642140° W (NAD83)

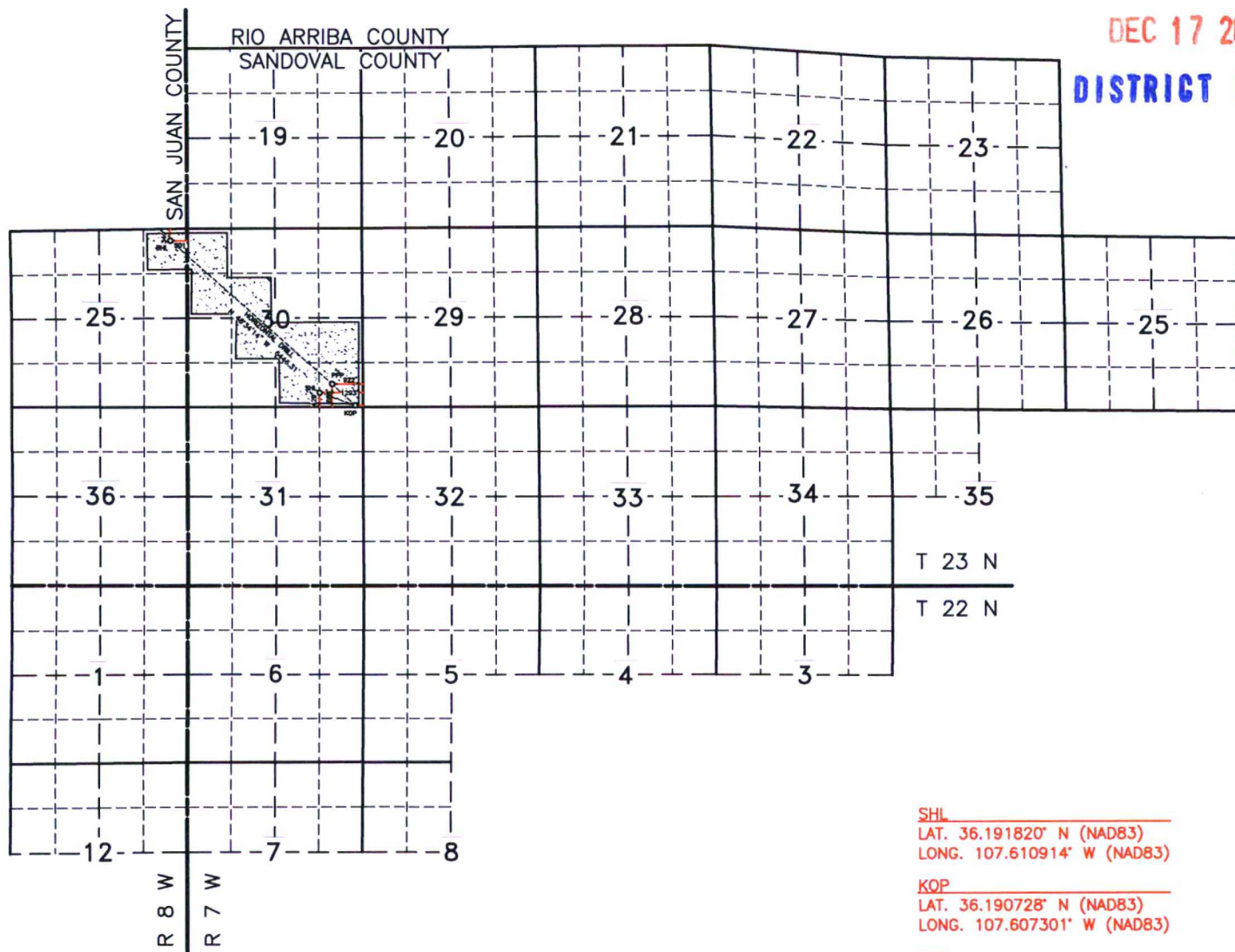
SE CORNER SEC. 30
LAT. 36.190593° N (NAD83)
LONG. 107.606530° W (NAD83)

SW CORNER SEC. 32
LAT. 36.175974° N (NAD83)
LONG. 107.606516° W (NAD83)

NMOC

DEC 17 2019

DISTRICT III



SHL
LAT. 36.191820° N (NAD83)
LONG. 107.610914° W (NAD83)

KOP
LAT. 36.190728° N (NAD83)
LONG. 107.607301° W (NAD83)

PPP
LAT. 36.192490° N (NAD83)
LONG. 107.609657° W (NAD83)

EXIT/BHL
LAT. 36.204237° N (NAD83)
LONG. 107.626006° W (NAD83)

PENETRATED SPACING UNIT; SEC 30: SE/4, NE/SW, SE/NW,
SW/NW, NW/NW (321.38 AC.); SEC 25: NE/NE (40 AC.) =
361.38 ACRES TOTAL

TOTAL 14,282.78 ACRES: T23N R7W SEC. 19-23, 25, 28-34 (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



Company: DJR Operating
Project: North Alamito Unit
Site: O30 2307
Well: NAU 240H
Wellbore: Original drilling
Design: Pre-Drill Rev B

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



Azimuths to True North
Magnetic North: 8.95°

Magnetic Field
Strength: 49546.9nT
Dip Angle: 62.88°
Date: 4/7/2019
Model: IGRF2015

WELL DETAILS: NAU 240H

GL 7028' & RKB 14' @ 7042.00usft (Aztec 920)
+N/-S +E/-W Northing Easting Latitude Longitude
0.00 0.00 1889181.15 2788720.89 36.1917820 -107.6109140

Plan: Pre-Drill Rev B (NAU 240H/Original drilling)

Created By: Janie Collins Date: 19:59, December 05 2019

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
240H heel rev B	5235.00	257.77	370.90	1889439.77	2789091.20	36.1924901	-107.6096570
240H toe rev B	5259.00	4534.34	-4452.56	1893705.27	2784257.94	36.2042373	-107.6260062

SECTION DETAILS

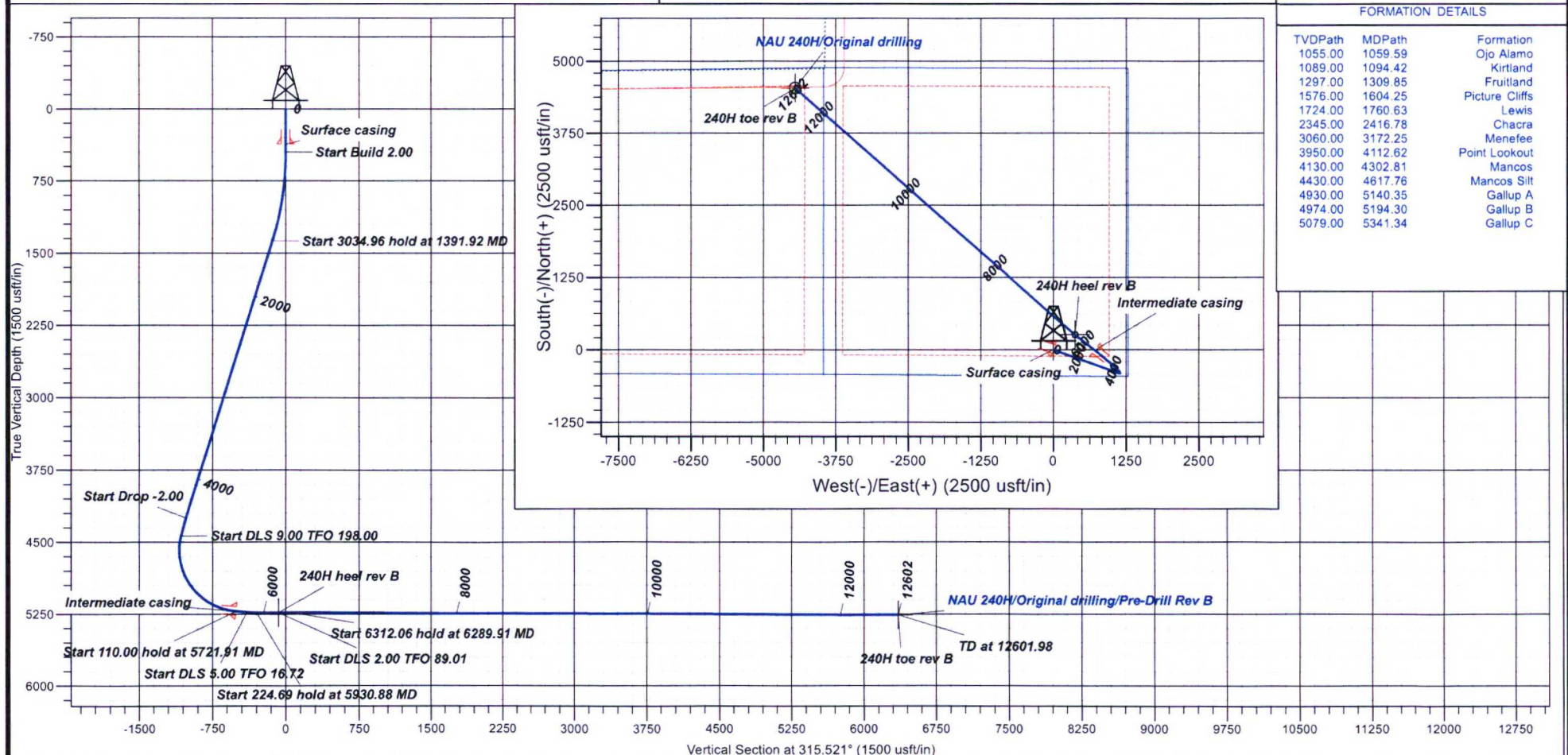
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VFace	Target
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	
450.00	0.00	0.000	450.00	0.00	0.00	0.00	0.00	0.00	
1391.92	18.84	109.654	1375.04	-51.61	144.52	2.00	109.65	-138.08	
4426.88	18.84	109.654	4247.42	-381.22	1067.41	0.00	0.00	-1019.88	
4618.79	15.00	109.654	4431.00	-400.00	1120.00	2.00	180.00	-1070.13	
5721.91	85.00	307.480	5219.85	-11.13	710.40	9.00	198.00	-505.67	
5831.91	85.00	307.480	5229.44	55.55	623.44	0.00	0.00	-397.17	
5930.88	89.74	308.902	5233.98	116.66	545.76	5.00	16.72	-299.14	
6155.57	89.74	308.902	5235.00	257.77	370.90	0.00	0.00	-75.95	240H heel rev B
6289.91	89.79	311.589	5235.55	344.55	268.37	2.00	89.01	57.81	
12601.98	89.79	311.589	5259.00	4534.34	-4452.56	0.00	0.00	6354.97	240H toe rev B

CASING DETAILS

TVD	MD	Name
368.00	368.00	Surface casing
5219.85	721.91	Intermediate casing

FORMATION DETAILS

TVDPath	MDPath	Formation
1055.00	1059.59	Ojo Alamo
1089.00	1094.42	Kirtland
1297.00	1309.85	Fruitland
1576.00	1604.25	Picture Cliffs
1724.00	1760.63	Lewis
2345.00	2416.78	Chacra
3060.00	3172.25	Menefee
3950.00	4112.62	Point Lookout
4130.00	4302.81	Mancos
4430.00	4617.76	Mancos Silt
4930.00	5140.35	Gallup A
4974.00	5194.30	Gallup B
5079.00	5341.34	Gallup C



DJR Operating

North Alamito Unit

O30 2307

NAU 240H

Original drilling

Plan: Pre-Drill Rev B

Standard Planning Report

05 December, 2019



www.scientificdrilling.com



Scientific Drilling, Intl

Planning Report

Database:	Grand Junction	Local Co-ordinate Reference:	Well NAU 240H
Company:	DJR Operating	TVD Reference:	GL 7028' & RKB 14' @ 7042.00usft (Aztec 920)
Project:	North Alamito Unit	MD Reference:	GL 7028' & RKB 14' @ 7042.00usft (Aztec 920)
Site:	O30 2307	North Reference:	True
Well:	NAU 240H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original drilling		
Design:	Pre-Drill Rev B		

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	O30 2307				
Site Position:		Northing:	1,889,181.15 usft	Latitude:	36.1917820
From:	Lat/Long	Easting:	2,788,720.89 usft	Longitude:	-107.6109140
Position Uncertainty:	0.00 usft	Slot Radius:	72.00 in	Grid Convergence:	0.13 °

Well	NAU 240H					
Well Position	+N/-S	0.00 usft	Northing:	1,889,181.15 usft	Latitude:	36.1917820
	+E/-W	0.00 usft	Easting:	2,788,720.89 usft	Longitude:	-107.6109140
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	7,028.00 usft

Wellbore	Original drilling				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	4/7/2019	8.95	62.88	49,546.91146009

Design	Pre-Drill Rev B			
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	315.521

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	
450.00	0.00	0.000	450.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,391.92	18.84	109.654	1,375.04	-51.61	144.52	2.00	2.00	0.00	109.65	
4,426.88	18.84	109.654	4,247.42	-381.22	1,067.41	0.00	0.00	0.00	0.00	
4,618.79	15.00	109.654	4,431.00	-400.00	1,120.00	2.00	-2.00	0.00	180.00	
5,721.91	85.00	307.480	5,219.86	-11.13	710.40	9.00	6.35	-14.70	198.00	
5,831.91	85.00	307.480	5,229.44	55.55	623.44	0.00	0.00	0.00	0.00	
5,930.88	89.74	308.902	5,233.98	116.66	545.76	5.00	4.79	1.44	16.72	
6,155.57	89.74	308.902	5,235.00	257.77	370.90	0.00	0.00	0.00	0.00	240H heel rev B
6,289.91	89.79	311.589	5,235.55	344.55	268.37	2.00	0.03	2.00	89.01	
12,601.98	89.79	311.589	5,259.00	4,534.34	-4,452.56	0.00	0.00	0.00	0.00	240H toe rev B

Scientific Drilling, Intl

Planning Report

Database: Grand Junction
Company: DJR Operating

Project: North Alamito Unit

Site: O30 2307

Well: NAU 240H

Wellbore: Original drilling

Design: Pre-Drill Rev B

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Well NAU 240H

GL 7028' & RKB 14' @ 7042.00usft (Aztec 920)

GL 7028' & RKB 14' @ 7042.00usft (Aztec 920)

True

Minimum Curvature

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
450.00	0.00	0.000	450.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	1.00	109.654	500.00	-0.15	0.41	-0.39	2.00	2.00	0.00
600.00	3.00	109.654	599.93	-1.32	3.70	-3.53	2.00	2.00	0.00
700.00	5.00	109.654	699.68	-3.67	10.27	-9.81	2.00	2.00	0.00
800.00	7.00	109.654	799.13	-7.18	20.11	-19.21	2.00	2.00	0.00
900.00	9.00	109.654	898.15	-11.86	33.22	-31.74	2.00	2.00	0.00
1,000.00	11.00	109.654	996.63	-17.70	49.57	-47.36	2.00	2.00	0.00
1,100.00	13.00	109.654	1,094.44	-24.70	69.15	-66.07	2.00	2.00	0.00
1,200.00	15.00	109.654	1,191.46	-32.83	91.93	-87.83	2.00	2.00	0.00
1,300.00	17.00	109.654	1,287.58	-42.10	117.89	-112.64	2.00	2.00	0.00
1,391.92	18.84	109.654	1,375.04	-51.61	144.52	-138.08	2.00	2.00	0.00
1,400.00	18.84	109.654	1,382.69	-52.49	146.97	-140.43	0.00	0.00	0.00
1,500.00	18.84	109.654	1,477.33	-63.35	177.38	-169.48	0.00	0.00	0.00
1,600.00	18.84	109.654	1,571.97	-74.21	207.79	-198.54	0.00	0.00	0.00
1,700.00	18.84	109.654	1,666.62	-85.07	238.20	-227.59	0.00	0.00	0.00
1,800.00	18.84	109.654	1,761.26	-95.93	268.61	-256.65	0.00	0.00	0.00
1,900.00	18.84	109.654	1,855.90	-106.79	299.02	-285.70	0.00	0.00	0.00
2,000.00	18.84	109.654	1,950.55	-117.65	329.43	-314.76	0.00	0.00	0.00
2,100.00	18.84	109.654	2,045.19	-128.51	359.84	-343.81	0.00	0.00	0.00
2,200.00	18.84	109.654	2,139.83	-139.37	390.25	-372.87	0.00	0.00	0.00
2,300.00	18.84	109.654	2,234.48	-150.23	420.65	-401.92	0.00	0.00	0.00
2,400.00	18.84	109.654	2,329.12	-161.09	451.06	-430.98	0.00	0.00	0.00
2,500.00	18.84	109.654	2,423.76	-171.95	481.47	-460.03	0.00	0.00	0.00
2,600.00	18.84	109.654	2,518.41	-182.81	511.88	-489.09	0.00	0.00	0.00
2,700.00	18.84	109.654	2,613.05	-193.67	542.29	-518.14	0.00	0.00	0.00
2,800.00	18.84	109.654	2,707.69	-204.54	572.70	-547.20	0.00	0.00	0.00
2,900.00	18.84	109.654	2,802.34	-215.40	603.11	-576.25	0.00	0.00	0.00
3,000.00	18.84	109.654	2,896.98	-226.26	633.52	-605.30	0.00	0.00	0.00
3,100.00	18.84	109.654	2,991.62	-237.12	663.92	-634.36	0.00	0.00	0.00
3,200.00	18.84	109.654	3,086.27	-247.98	694.33	-663.41	0.00	0.00	0.00
3,300.00	18.84	109.654	3,180.91	-258.84	724.74	-692.47	0.00	0.00	0.00
3,400.00	18.84	109.654	3,275.55	-269.70	755.15	-721.52	0.00	0.00	0.00
3,500.00	18.84	109.654	3,370.20	-280.56	785.56	-750.58	0.00	0.00	0.00
3,600.00	18.84	109.654	3,464.84	-291.42	815.97	-779.63	0.00	0.00	0.00
3,700.00	18.84	109.654	3,559.48	-302.28	846.38	-808.69	0.00	0.00	0.00
3,800.00	18.84	109.654	3,654.13	-313.14	876.79	-837.74	0.00	0.00	0.00
3,900.00	18.84	109.654	3,748.77	-324.00	907.19	-866.80	0.00	0.00	0.00
4,000.00	18.84	109.654	3,843.41	-334.86	937.60	-895.85	0.00	0.00	0.00
4,100.00	18.84	109.654	3,938.06	-345.72	968.01	-924.91	0.00	0.00	0.00
4,200.00	18.84	109.654	4,032.70	-356.58	998.42	-953.96	0.00	0.00	0.00
4,300.00	18.84	109.654	4,127.34	-367.44	1,028.83	-983.02	0.00	0.00	0.00
4,400.00	18.84	109.654	4,221.99	-378.30	1,059.24	-1,012.07	0.00	0.00	0.00
4,426.88	18.84	109.654	4,247.42	-381.22	1,067.41	-1,019.88	0.00	0.00	0.00
4,500.00	17.38	109.654	4,316.92	-388.86	1,088.81	-1,040.33	2.00	-2.00	0.00
4,600.00	15.38	109.654	4,412.86	-398.34	1,115.36	-1,065.70	2.00	-2.00	0.00
4,618.79	15.00	109.654	4,431.00	-400.00	1,120.00	-1,070.13	2.00	-2.00	0.00
4,700.00	8.35	93.954	4,510.50	-403.95	1,135.80	-1,084.01	9.00	-8.19	-19.33

Scientific Drilling, Intl

Planning Report

Database: Grand Junction
Company: DJR Operating

Local Co-ordinate Reference: Well NAU 240H
TVD Reference: GL 7028' & RKB 14' @ 7042.00usft (Aztec 920)

Project: North Alamito Unit

MD Reference: GL 7028' & RKB 14' @ 7042.00usft (Aztec 920)

Site: O30 2307

North Reference: True

Well: NAU 240H

Survey Calculation Method: Minimum Curvature

Wellbore: Original drilling
Design: Pre-Drill Rev B

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)
4,800.00	5.01	13.366	4,609.98	-400.19	1,144.07	-1,087.13	9.00	-3.34	-80.59
4,900.00	11.92	329.421	4,708.92	-387.03	1,139.82	-1,074.76	9.00	6.91	-43.94
5,000.00	20.51	319.464	4,804.87	-364.78	1,123.15	-1,047.20	9.00	8.59	-9.96
5,100.00	29.34	315.285	4,895.47	-333.99	1,094.47	-1,005.14	9.00	8.83	-4.18
5,200.00	38.25	312.921	4,978.50	-295.42	1,054.48	-949.60	9.00	8.90	-2.36
5,300.00	47.18	311.342	5,051.90	-250.03	1,004.17	-881.96	9.00	8.94	-1.58
5,400.00	56.14	310.165	5,113.87	-198.92	944.79	-803.89	9.00	8.95	-1.18
5,500.00	65.10	309.213	5,162.89	-143.35	877.78	-717.30	9.00	8.96	-0.95
5,600.00	74.06	308.391	5,197.74	-84.70	804.81	-624.32	9.00	8.97	-0.82
5,700.00	83.03	307.640	5,217.57	-24.41	727.67	-527.25	9.00	8.97	-0.75
5,721.91	85.00	307.480	5,219.86	-11.13	710.40	-505.67	9.00	8.97	-0.73
5,800.00	85.00	307.480	5,226.66	36.21	648.66	-428.65	0.00	0.00	0.00
5,831.91	85.00	307.480	5,229.44	55.55	623.44	-397.17	0.00	0.00	0.00
5,900.00	88.26	308.460	5,233.44	97.37	569.86	-329.80	5.00	4.79	1.44
5,930.88	89.74	308.902	5,233.98	116.66	545.76	-299.14	5.00	4.79	1.43
6,000.00	89.74	308.902	5,234.30	160.07	491.97	-230.48	0.00	0.00	0.00
6,100.00	89.74	308.902	5,234.75	222.87	414.15	-131.15	0.00	0.00	0.00
6,155.57	89.74	308.902	5,235.00	257.77	370.90	-75.95	0.00	0.00	0.00
6,200.00	89.76	309.791	5,235.20	285.93	336.54	-31.78	2.00	0.03	2.00
6,289.91	89.79	311.589	5,235.55	344.55	268.37	57.81	2.00	0.03	2.00
6,300.00	89.79	311.589	5,235.59	351.25	260.83	67.87	0.00	0.00	0.00
6,400.00	89.79	311.589	5,235.96	417.62	186.04	167.63	0.00	0.00	0.00
6,500.00	89.79	311.589	5,236.33	484.00	111.24	267.40	0.00	0.00	0.00
6,600.00	89.79	311.589	5,236.71	550.38	36.45	367.16	0.00	0.00	0.00
6,700.00	89.79	311.589	5,237.08	616.76	-38.34	466.93	0.00	0.00	0.00
6,800.00	89.79	311.589	5,237.45	683.13	-113.13	566.69	0.00	0.00	0.00
6,900.00	89.79	311.589	5,237.82	749.51	-187.93	666.45	0.00	0.00	0.00
7,000.00	89.79	311.589	5,238.19	815.89	-262.72	766.22	0.00	0.00	0.00
7,100.00	89.79	311.589	5,238.56	882.27	-337.51	865.98	0.00	0.00	0.00
7,200.00	89.79	311.589	5,238.93	948.64	-412.30	965.75	0.00	0.00	0.00
7,300.00	89.79	311.589	5,239.31	1,015.02	-487.10	1,065.51	0.00	0.00	0.00
7,400.00	89.79	311.589	5,239.68	1,081.40	-561.89	1,165.27	0.00	0.00	0.00
7,500.00	89.79	311.589	5,240.05	1,147.78	-636.68	1,265.04	0.00	0.00	0.00
7,600.00	89.79	311.589	5,240.42	1,214.15	-711.47	1,364.80	0.00	0.00	0.00
7,700.00	89.79	311.589	5,240.79	1,280.53	-786.26	1,464.56	0.00	0.00	0.00
7,800.00	89.79	311.589	5,241.16	1,346.91	-861.06	1,564.33	0.00	0.00	0.00
7,900.00	89.79	311.589	5,241.53	1,413.29	-935.85	1,664.09	0.00	0.00	0.00
8,000.00	89.79	311.589	5,241.91	1,479.66	-1,010.64	1,763.86	0.00	0.00	0.00
8,100.00	89.79	311.589	5,242.28	1,546.04	-1,085.43	1,863.62	0.00	0.00	0.00
8,200.00	89.79	311.589	5,242.65	1,612.42	-1,160.23	1,963.38	0.00	0.00	0.00
8,300.00	89.79	311.589	5,243.02	1,678.80	-1,235.02	2,063.15	0.00	0.00	0.00
8,400.00	89.79	311.589	5,243.39	1,745.17	-1,309.81	2,162.91	0.00	0.00	0.00
8,500.00	89.79	311.589	5,243.76	1,811.55	-1,384.60	2,262.68	0.00	0.00	0.00
8,600.00	89.79	311.589	5,244.13	1,877.93	-1,459.40	2,362.44	0.00	0.00	0.00
8,700.00	89.79	311.589	5,244.51	1,944.31	-1,534.19	2,462.20	0.00	0.00	0.00
8,800.00	89.79	311.589	5,244.88	2,010.68	-1,608.98	2,561.97	0.00	0.00	0.00
8,900.00	89.79	311.589	5,245.25	2,077.06	-1,683.77	2,661.73	0.00	0.00	0.00
9,000.00	89.79	311.589	5,245.62	2,143.44	-1,758.56	2,761.49	0.00	0.00	0.00
9,100.00	89.79	311.589	5,245.99	2,209.82	-1,833.36	2,861.26	0.00	0.00	0.00
9,200.00	89.79	311.589	5,246.36	2,276.19	-1,908.15	2,961.02	0.00	0.00	0.00
9,300.00	89.79	311.589	5,246.73	2,342.57	-1,982.94	3,060.79	0.00	0.00	0.00
9,400.00	89.79	311.589	5,247.11	2,408.95	-2,057.73	3,160.55	0.00	0.00	0.00

Scientific Drilling, Intl

Planning Report

Database:	Grand Junction	Local Co-ordinate Reference:	Well NAU 240H
Company:	DJR Operating	TVD Reference:	GL 7028' & RKB 14' @ 7042.00usft (Aztec 920)
Project:	North Alamito Unit	MD Reference:	GL 7028' & RKB 14' @ 7042.00usft (Aztec 920)
Site:	O30 2307	North Reference:	True
Well:	NAU 240H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original drilling		
Design:	Pre-Drill Rev B		

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)
9,500.00	89.79	311.589	5,247.48	2,475.33	-2,132.53	3,260.31	0.00	0.00	0.00
9,600.00	89.79	311.589	5,247.85	2,541.70	-2,207.32	3,360.08	0.00	0.00	0.00
9,700.00	89.79	311.589	5,248.22	2,608.08	-2,282.11	3,459.84	0.00	0.00	0.00
9,800.00	89.79	311.589	5,248.59	2,674.46	-2,356.90	3,559.61	0.00	0.00	0.00
9,900.00	89.79	311.589	5,248.96	2,740.84	-2,431.70	3,659.37	0.00	0.00	0.00
10,000.00	89.79	311.589	5,249.34	2,807.21	-2,506.49	3,759.13	0.00	0.00	0.00
10,100.00	89.79	311.589	5,249.71	2,873.59	-2,581.28	3,858.90	0.00	0.00	0.00
10,200.00	89.79	311.589	5,250.08	2,939.97	-2,656.07	3,958.66	0.00	0.00	0.00
10,300.00	89.79	311.589	5,250.45	3,006.35	-2,730.86	4,058.43	0.00	0.00	0.00
10,400.00	89.79	311.589	5,250.82	3,072.72	-2,805.66	4,158.19	0.00	0.00	0.00
10,500.00	89.79	311.589	5,251.19	3,139.10	-2,880.45	4,257.95	0.00	0.00	0.00
10,600.00	89.79	311.589	5,251.56	3,205.48	-2,955.24	4,357.72	0.00	0.00	0.00
10,700.00	89.79	311.589	5,251.94	3,271.86	-3,030.03	4,457.48	0.00	0.00	0.00
10,800.00	89.79	311.589	5,252.31	3,338.23	-3,104.83	4,557.24	0.00	0.00	0.00
10,900.00	89.79	311.589	5,252.68	3,404.61	-3,179.62	4,657.01	0.00	0.00	0.00
11,000.00	89.79	311.589	5,253.05	3,470.99	-3,254.41	4,756.77	0.00	0.00	0.00
11,100.00	89.79	311.589	5,253.42	3,537.37	-3,329.20	4,856.54	0.00	0.00	0.00
11,200.00	89.79	311.589	5,253.79	3,603.74	-3,403.99	4,956.30	0.00	0.00	0.00
11,300.00	89.79	311.589	5,254.16	3,670.12	-3,478.79	5,056.06	0.00	0.00	0.00
11,400.00	89.79	311.589	5,254.54	3,736.50	-3,553.58	5,155.83	0.00	0.00	0.00
11,500.00	89.79	311.589	5,254.91	3,802.88	-3,628.37	5,255.59	0.00	0.00	0.00
11,600.00	89.79	311.589	5,255.28	3,869.25	-3,703.16	5,355.36	0.00	0.00	0.00
11,700.00	89.79	311.589	5,255.65	3,935.63	-3,777.96	5,455.12	0.00	0.00	0.00
11,800.00	89.79	311.589	5,256.02	4,002.01	-3,852.75	5,554.88	0.00	0.00	0.00
11,900.00	89.79	311.589	5,256.39	4,068.39	-3,927.54	5,654.65	0.00	0.00	0.00
12,000.00	89.79	311.589	5,256.76	4,134.76	-4,002.33	5,754.41	0.00	0.00	0.00
12,100.00	89.79	311.589	5,257.14	4,201.14	-4,077.13	5,854.17	0.00	0.00	0.00
12,200.00	89.79	311.589	5,257.51	4,267.52	-4,151.92	5,953.94	0.00	0.00	0.00
12,300.00	89.79	311.589	5,257.88	4,333.90	-4,226.71	6,053.70	0.00	0.00	0.00
12,400.00	89.79	311.589	5,258.25	4,400.27	-4,301.50	6,153.47	0.00	0.00	0.00
12,500.00	89.79	311.589	5,258.62	4,466.65	-4,376.29	6,253.23	0.00	0.00	0.00
12,600.00	89.79	311.589	5,258.99	4,533.03	-4,451.09	6,352.99	0.00	0.00	0.00
12,601.98	89.79	311.589	5,259.00	4,534.34	-4,452.56	6,354.97	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
240H heel rev B - plan hits target center - Circle (radius 50.00)	0.00	0.000	5,235.00	257.77	370.90	1,889,439.77	2,789,091.20	36.1924901	-107.6096570
240H toe rev B - plan hits target center - Circle (radius 100.00)	0.00	0.000	5,259.00	4,534.34	-4,452.56	1,893,705.28	2,784,257.95	36.2042373	-107.6260062

Scientific Drilling, Intl

Planning Report

Database: Grand Junction	Local Co-ordinate Reference: Well NAU 240H
Company: DJR Operating	TVD Reference: GL 7028' & RKB 14' @ 7042.00usft (Aztec 920)
Project: North Alamito Unit	MD Reference: GL 7028' & RKB 14' @ 7042.00usft (Aztec 920)
Site: O30 2307	North Reference: True
Well: NAU 240H	Survey Calculation Method: Minimum Curvature
Wellbore: Original drilling	
Design: Pre-Drill Rev B	

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)
368.00	368.00	Surface casing	9.63	12.25
5,721.91	5,219.86	Intermediate casing	7.00	8.75

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,059.59	1,055.00	Ojo Alamo		0.00	0.000
1,094.42	1,089.00	Kirtland		0.00	0.000
1,309.85	1,297.00	Fruitland		0.00	0.000
1,604.25	1,576.00	Picture Cliffs		0.00	0.000
1,760.63	1,724.00	Lewis		0.00	0.000
2,416.78	2,345.00	Chacra		0.00	0.000
3,172.25	3,060.00	Menefee		0.00	0.000
4,112.62	3,950.00	Point Lookout		0.00	0.000
4,302.81	4,130.00	Mancos		0.00	0.000
4,617.76	4,430.00	Mancos Silt		0.00	0.000
5,140.35	4,930.00	Gallup A		0.00	0.000
5,194.30	4,974.00	Gallup B		0.00	0.000
5,341.35	5,079.00	Gallup C		0.00	0.000

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
450.00	450.00	0.00	0.00	Start Build 2.00
1,391.92	1,375.04	-51.61	144.52	Start 3034.96 hold at 1391.92 MD
4,426.88	4,247.42	-381.22	1,067.41	Start Drop -2.00
4,618.79	4,431.00	-400.00	1,120.00	Start DLS 9.00 TFO 198.00
5,721.91	5,219.86	-11.13	710.40	Start 110.00 hold at 5721.91 MD
5,831.91	5,229.44	55.55	623.44	Start DLS 5.00 TFO 16.72
5,930.88	5,233.98	116.66	545.76	Start 224.69 hold at 5930.88 MD
6,155.57	5,235.00	257.77	370.90	Start DLS 2.00 TFO 89.01
6,289.91	5,235.55	344.55	268.37	Start 6312.06 hold at 6289.91 MD
12,601.98	5,259.00	4,534.34	-4,452.56	TD at 12601.98

DJR Operating

North Alamito Unit

O30 2307

NAU 240H

Original drilling

Pre-Drill Rev B

Anticollision Report

05 December, 2019



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Scientific Drilling, Intl

Anticollision Report

Company: DJR Operating	Local Co-ordinate Reference: Well NAU 240H
Project: North Alamito Unit	TVD Reference: GL 7028' & RKB 14' @ 7042.00usft (Aztec 920)
Reference Site: O30 2307	MD Reference: GL 7028' & RKB 14' @ 7042.00usft (Aztec 920)
Site Error: 0.00 usft	North Reference: True
Reference Well: NAU 240H	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: Pre-Drill Rev B	Offset TVD Reference: Offset Datum

Reference Pre-Drill Rev B		
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 12/5/2019	
From (usft)	To (usft)	Survey (Wellbore)
0.00	12,601.96	Pre-Drill Rev B (Original drilling)
		Tool Name MWD+HDGM
		Description OWSG MWD + HDGM

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
O30 2307						
NAU 238H - Original drilling - Pre-Drill Rev B	450.00	450.00	60.10	57.28	21.330	CC
NAU 238H - Original drilling - Pre-Drill Rev B	500.00	500.00	60.34	57.17	19.033	ES
NAU 238H - Original drilling - Pre-Drill Rev B	800.00	797.35	77.06	71.82	14.712	SF

Offset Design O30 2307 - NAU 238H - Original drilling - Pre-Drill Rev B													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N-S (usft)	+E-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-126.84	-36.04	-48.10	60.10				
100.00	100.00	100.00	100.00	0.15	0.15	-126.84	-36.04	-48.10	60.10	59.79	0.31	194.949	
200.00	200.00	200.00	200.00	0.51	0.51	-126.84	-36.04	-48.10	60.10	59.07	1.03	58.621	
300.00	300.00	300.00	300.00	0.87	0.87	-126.84	-36.04	-48.10	60.10	58.36	1.74	34.497	
400.00	400.00	400.00	400.00	1.23	1.23	-126.84	-36.04	-48.10	60.10	57.64	2.46	24.440	
450.00	450.00	450.00	450.00	1.41	1.41	-126.84	-36.04	-48.10	60.10	57.28	2.82	21.330	CC
500.00	500.00	500.00	500.00	1.58	1.59	123.84	-36.04	-48.10	60.34	57.17	3.17	19.033	ES
600.00	599.93	599.29	599.27	1.92	1.93	124.94	-37.68	-47.58	62.86	59.01	3.85	16.318	
700.00	699.68	698.45	698.29	2.28	2.26	125.50	-42.59	-46.01	68.44	63.90	4.54	15.090	
800.00	799.13	797.35	796.81	2.64	2.60	125.54	-50.73	-43.42	77.06	71.82	5.24	14.712	SF
900.00	898.15	895.84	894.58	3.01	2.95	125.21	-62.06	-39.82	88.69	82.73	5.96	14.878	
1,000.00	996.63	993.79	991.35	3.41	3.32	124.65	-76.49	-35.23	103.31	96.60	6.71	15.395	
1,100.00	1,094.44	1,091.08	1,086.90	3.83	3.71	123.95	-93.94	-29.67	120.90	113.41	7.49	16.137	
1,200.00	1,191.46	1,187.59	1,181.01	4.28	4.11	123.21	-114.29	-23.20	141.42	133.11	8.31	17.018	
1,300.00	1,287.58	1,283.20	1,273.48	4.76	4.54	122.44	-137.42	-15.84	164.82	155.65	9.17	17.972	
1,391.92	1,375.04	1,370.21	1,356.89	5.25	4.95	121.74	-161.02	-8.33	188.84	178.84	10.01	18.872	
1,400.00	1,382.69	1,377.82	1,364.14	5.29	4.99	121.72	-163.20	-7.64	191.06	180.98	10.08	18.948	
1,500.00	1,477.33	1,472.83	1,454.38	5.85	5.47	121.13	-191.54	1.38	218.94	207.90	11.04	19.832	
1,600.00	1,571.97	1,568.80	1,545.41	6.43	5.97	120.59	-220.49	10.59	246.96	234.92	12.04	20.518	
1,700.00	1,666.62	1,664.77	1,636.45	7.01	6.48	120.15	-249.43	19.80	275.00	261.94	13.05	21.066	
1,800.00	1,761.26	1,760.74	1,727.49	7.61	7.00	119.80	-278.38	29.01	303.04	288.96	14.09	21.510	
1,900.00	1,855.90	1,856.71	1,818.52	8.21	7.52	119.51	-307.33	38.22	331.10	315.96	15.14	21.874	

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

Scientific Drilling, Intl

Anticollision Report

Company:	DJR Operating	Local Co-ordinate Reference:	Well NAU 240H
Project:	North Alamito Unit	TVD Reference:	GL 7028' & RKB 14' @ 7042.00usft (Aztec 920)
Reference Site:	O30 2307	MD Reference:	GL 7028' & RKB 14' @ 7042.00usft (Aztec 920)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	NAU 240H	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:	Pre-Drill Rev B	Offset TVD Reference:	Offset Datum

Offset Design O30 2307 - NAU 238H - Original drilling - Pre-Drill Rev B													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (usft)	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
2,000.00	1,950.55	1,952.68	1,909.56	8.82	8.06	119.26	-336.28	47.43	359.16	342.97	16.20	22.177		
2,100.00	2,045.19	2,048.65	2,000.59	9.43	8.59	119.05	-365.23	56.65	387.23	369.97	17.26	22.432		
2,200.00	2,139.83	2,144.62	2,091.63	10.05	9.13	118.87	-394.18	65.86	415.30	396.97	18.34	22.649		
2,300.00	2,234.48	2,240.59	2,182.67	10.67	9.67	118.71	-423.13	75.07	443.38	423.96	19.42	22.834		
2,400.00	2,329.12	2,336.56	2,273.70	11.29	10.22	118.57	-452.08	84.28	471.46	450.96	20.50	22.995		
2,500.00	2,423.76	2,432.54	2,364.74	11.91	10.77	118.44	-481.03	93.49	499.54	477.95	21.59	23.135		
2,600.00	2,518.41	2,528.51	2,455.77	12.54	11.32	118.33	-509.97	102.70	527.62	504.94	22.69	23.257		
2,700.00	2,613.05	2,624.48	2,546.81	13.16	11.87	118.23	-538.92	111.91	555.71	531.92	23.78	23.366		
2,800.00	2,707.69	2,720.45	2,637.85	13.79	12.42	118.14	-567.87	121.12	583.79	558.91	24.88	23.462		
2,900.00	2,802.34	2,816.42	2,728.88	14.42	12.97	118.06	-596.82	130.33	611.88	585.90	25.98	23.548		
3,000.00	2,896.98	2,912.39	2,819.92	15.05	13.53	117.99	-625.77	139.54	639.97	612.88	27.09	23.625		
3,100.00	2,991.62	3,008.36	2,910.95	15.69	14.08	117.92	-654.72	148.76	668.06	639.86	28.19	23.695		
3,200.00	3,086.27	3,104.33	3,001.99	16.32	14.64	117.85	-683.67	157.97	696.15	666.84	29.30	23.758		
3,300.00	3,180.91	3,200.30	3,093.03	16.95	15.20	117.80	-712.62	167.18	724.24	693.83	30.41	23.815		
3,400.00	3,275.55	3,296.27	3,184.06	17.59	15.75	117.74	-741.57	176.39	752.33	720.81	31.52	23.867		
3,500.00	3,370.20	3,392.25	3,275.10	18.22	16.31	117.69	-770.52	185.60	780.42	747.79	32.63	23.915		
3,600.00	3,464.84	3,488.22	3,366.13	18.86	16.87	117.65	-799.46	194.81	808.51	774.77	33.75	23.959		
3,700.00	3,559.48	3,584.19	3,457.17	19.49	17.43	117.60	-828.41	204.02	836.61	801.75	34.86	23.999		
3,800.00	3,654.13	3,680.16	3,548.21	20.13	17.99	117.56	-857.36	213.23	864.70	828.72	35.97	24.037		
3,900.00	3,748.77	3,776.13	3,639.24	20.77	18.55	117.52	-886.31	222.44	892.79	855.70	37.09	24.071		
4,000.00	3,843.41	3,872.10	3,730.28	21.40	19.11	117.49	-915.26	231.65	920.89	882.68	38.21	24.103		
4,100.00	3,938.06	3,968.07	3,821.31	22.04	19.67	117.45	-944.21	240.87	948.98	909.66	39.32	24.133		
4,200.00	4,032.70	4,064.04	3,912.35	22.68	20.23	117.42	-973.16	250.08	977.07	936.63	40.44	24.161		

Scientific Drilling, Intl

Anticollision Report

Company: DJR Operating
Project: North Alamito Unit

Reference Site: O30 2307

Site Error: 0.00 usft

Reference Well: NAU 240H

Well Error: 0.00 usft

Reference Wellbore: Original drilling

Reference Design: Pre-Drill Rev B

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Output errors are at

Database:

Offset TVD Reference:

Well NAU 240H

GL 7028' & RKB 14' @ 7042.00usft (Aztec 920)

GL 7028' & RKB 14' @ 7042.00usft (Aztec 920)

True

Minimum Curvature

2.00 sigma

Grand Junction

Offset Datum

Reference Depths are relative to GL 7028' & RKB 14' @ 7042.00usft (A)

Offset Depths are relative to Offset Datum

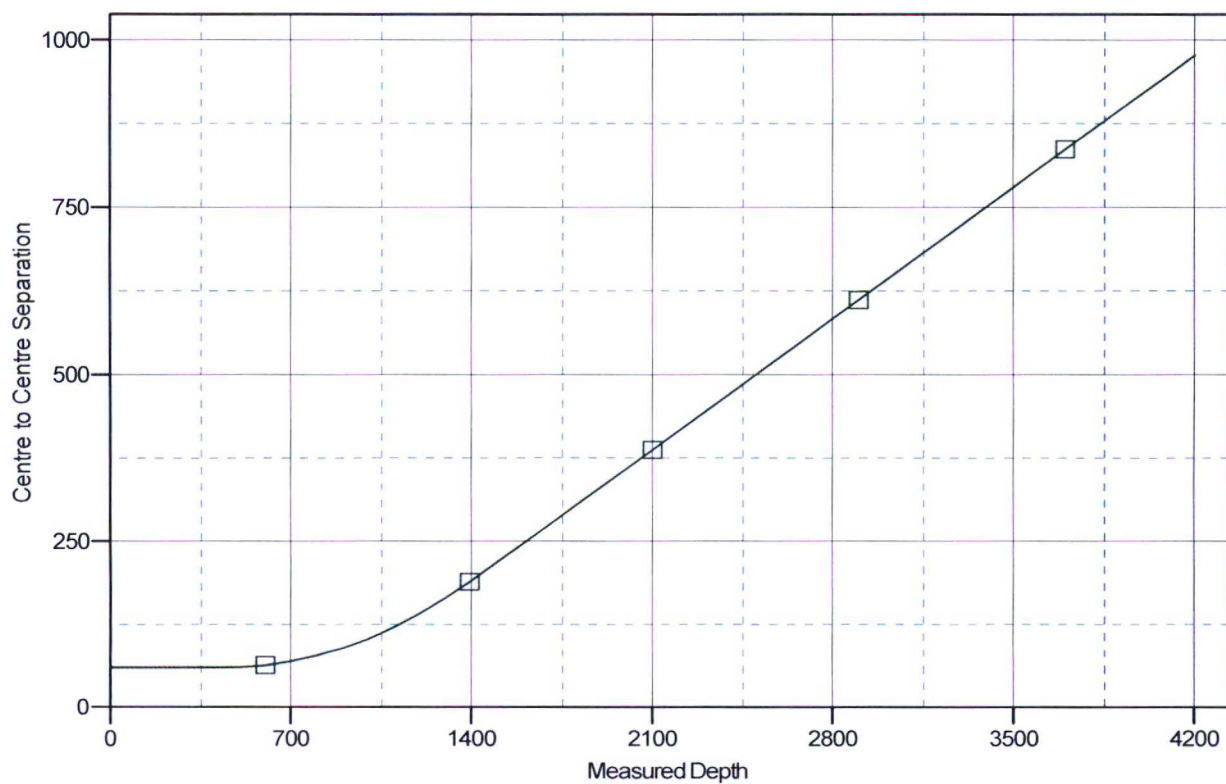
Central Meridian is -107.8333334

Coordinates are relative to: NAU 240H

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

Grid Convergence at Surface is: 0.13°

Ladder Plot



LEGEND

NAU 238H, Original drilling, Pre-Drill Rev B V0

Scientific Drilling, Intl

Anticollision Report

Company: DJR Operating
Project: North Alamito Unit

Reference Site: O30 2307

Site Error: 0.00 usft

Reference Well: NAU 240H

Well Error: 0.00 usft

Reference Wellbore: Original drilling

Reference Design: Pre-Drill Rev B

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Output errors are at

Database:

Offset TVD Reference:

Well NAU 240H

GL 7028' & RKB 14' @ 7042.00usft (Aztec 920)

GL 7028' & RKB 14' @ 7042.00usft (Aztec 920)

True

Minimum Curvature

2.00 sigma

Grand Junction

Offset Datum

Reference Depths are relative to GL 7028' & RKB 14' @ 7042.00usft (A)

Offset Depths are relative to Offset Datum

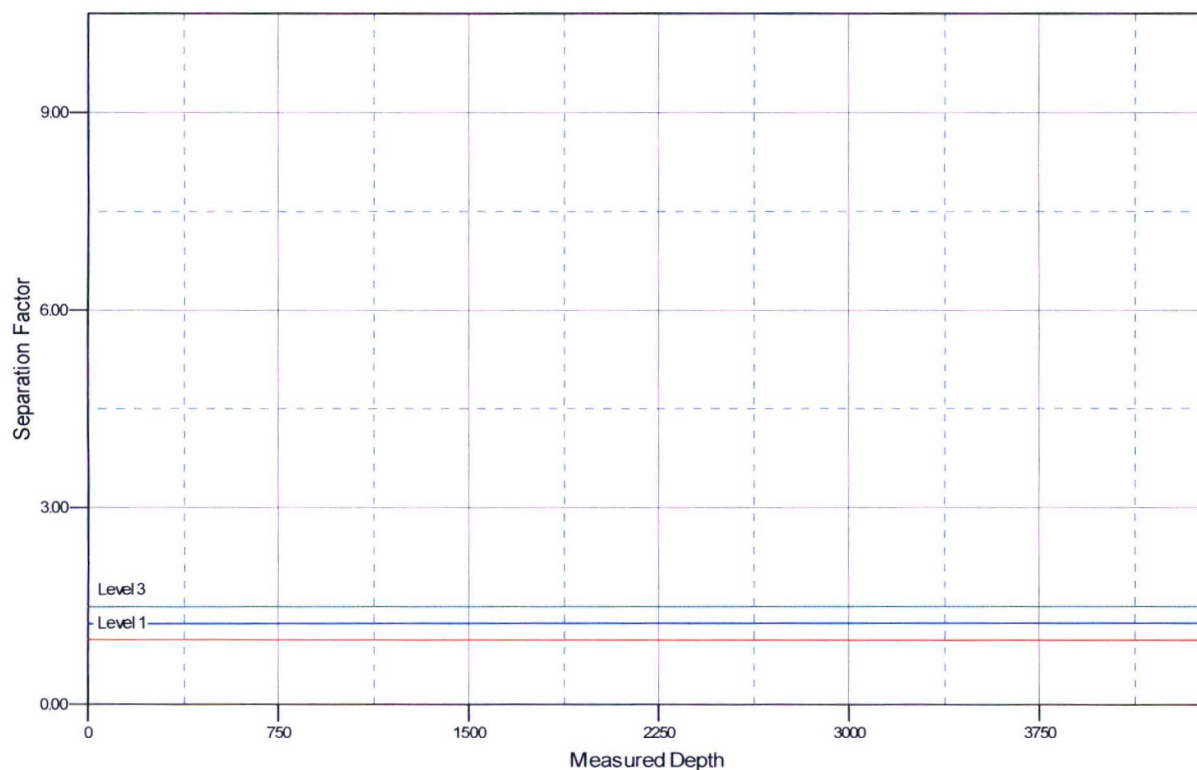
Central Meridian is -107.8333334

Coordinates are relative to: NAU 240H

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

Grid Convergence at Surface is: 0.13°

Separation Factor Plot



LEGEND

NAU 238H, Original drilling, Pre-Drill Rev B V0

DJR OPERATING, LLC
NORTH ALAMITO UNIT #240H

429' FSL & 1293' FEL
LOCATED IN THE SW/4 SE/4 OF SECTION 30,
T23N, R7W, N.M.P.M.,
SANDOVAL COUNTY, NEW MEXICO
(NAU 030-2307)

DIRECTIONS

- 1) FROM THE INTERSECTION OF HWY 64 & HWY 550 IN BLOOMFIELD, GO SOUTH ON HWY 550, 39.0 MILES TO INDIAN ROUTE 7061; AKA COUNTY ROAD 7900 (M.P. 112.7).
- 2) TURN RIGHT ONTO 7061 AND GO 5.4 MILES TO A DIRT ROAD ON LEFT.
- 3) TURN LEFT AND GO 2.8 MILES TO A DIRT ROAD ON THE LEFT ON LEFT.
- 4) TURN LEFT AND GO 2.0 MILES TO THE ACCESS ROAD STAKE ON THE LEFT.

WELL FLAG LOCATED AT LAT. 36.191782° N, LONG. 107.610914° W (NAD 83).

CCI

CHENAULT CONSULTING INC.

4800 COLLEGE BLVD
SUITE 201
FARMINGTON, NM 87402
(505) 325-7707

 **DJR OPERATING, LLC**

DATE: 12/12/19
DRAWN BY: GRR