

District I

1625 N. French Dr., Hobbs, NM 88240

District II

811 S. First St., Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM

87505

State of New Mexico

Energy, Minerals & Natural Resources

Form C-104

Revised August 1, 2011

Oil Conservation Division

1220 South St. Francis Dr.

Santa Fe, NM 87505

Submit one copy to appropriate District Office

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address DJR Operating, LLC 1 Road 3263 Aztec, NM 87410		² OGRID Number 371838	
		³ Reason for Filing Code/ Effective Date RT	
⁴ API Number 30-043-21335	⁵ Pool Name Alamito N; Mancos (Oil)		⁶ Pool Code 98174
⁷ Property Code 325267	⁸ Property Name North Alamito Unit		⁹ Well Number 529H

II. ¹⁰ Surface Location

UL or lot no. J	Section 31	Township 23N	Range 7W	Lot Idn	Feet from the 2229	North/South Line South	Feet from the 2517	East/West line East	County Sandoval
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¹¹ Bottom Hole Location

UL or lot no. E	Section 25	Township 23N	Range 8W	Lot Idn	Feet from the 1934	North/South line North	Feet from the 1000	East/West line West	County San Juan
¹² Lse Code F	¹³ Producing Method Code F		¹⁴ Gas Connection Date ~12/27/2020		¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date		¹⁷ C-129 Expiration Date	

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
248440	Western Refining Company, LP	O
	6500 Townbridge Drive, El Paso, TX 79905	
151618	Enterprise Field Services, LLC	G
	Post Office Box 4503, Houston, TX 77001	

IV. Well Completion Data

²¹ Spud Date 02/04/2020	²² Ready Date 12/17/2020	²³ TD 15,368' MD 5,173' TVD	²⁴ PBTD 15,351' MD 5,173' TVD	²⁵ Perforations 6,098'-15,297' MD 5,112'-5,161' TVD Frac Sleeve @ 15,326'	²⁶ DHC, MC
²⁷ Hole Size		²⁸ Casing & Tubing Size		²⁹ Depth Set	³⁰ Sacks Cement
12.25		9.625" 36# J55		370'	109
8.75		7" 26# J55		5,671'	Lead: 388 Tail: 251
6.125		4.5" 11.6# P110		TOL: 5,329' BOL: 15,365'	856

V. Well Test Data

³¹ Date New Oil	³² Gas Delivery Date	³³ Test Date	³⁴ Test Length	³⁵ Tbg. Pressure	³⁶ Csg. Pressure
³⁷ Choke Size	³⁸ Oil	³⁹ Water	⁴⁰ Gas		⁴¹ Test Method

⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Shaw-Marie Ford</i>		OIL CONSERVATION DIVISION	
Printed name: Shaw-Marie Ford		Approved by: <i>Amy Ferrusch</i>	
Title: Regulatory Specialist		Title: Data Compliance Manager	
E-mail Address: sford@djrlc.com		Approval Date: 12/17/20	
Date: 12/04/2020	Phone: 505-716-3297		

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) 476-3480 Fax: (505) 476-3482

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 1, 2011

Submit one copy to appropriate
District Office

OIL CONSERVATION DIVISION

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

☐ AMENDED REPORT
As Drilled

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-043-21335		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 529H
⁷ OGRID No. 371838	⁸ Operator Name DJR OPERATING, LLC			⁹ Elevation 6979'

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
J	31	23N	7W		2229'	SOUTH	2517'	EAST	SANDOVAL

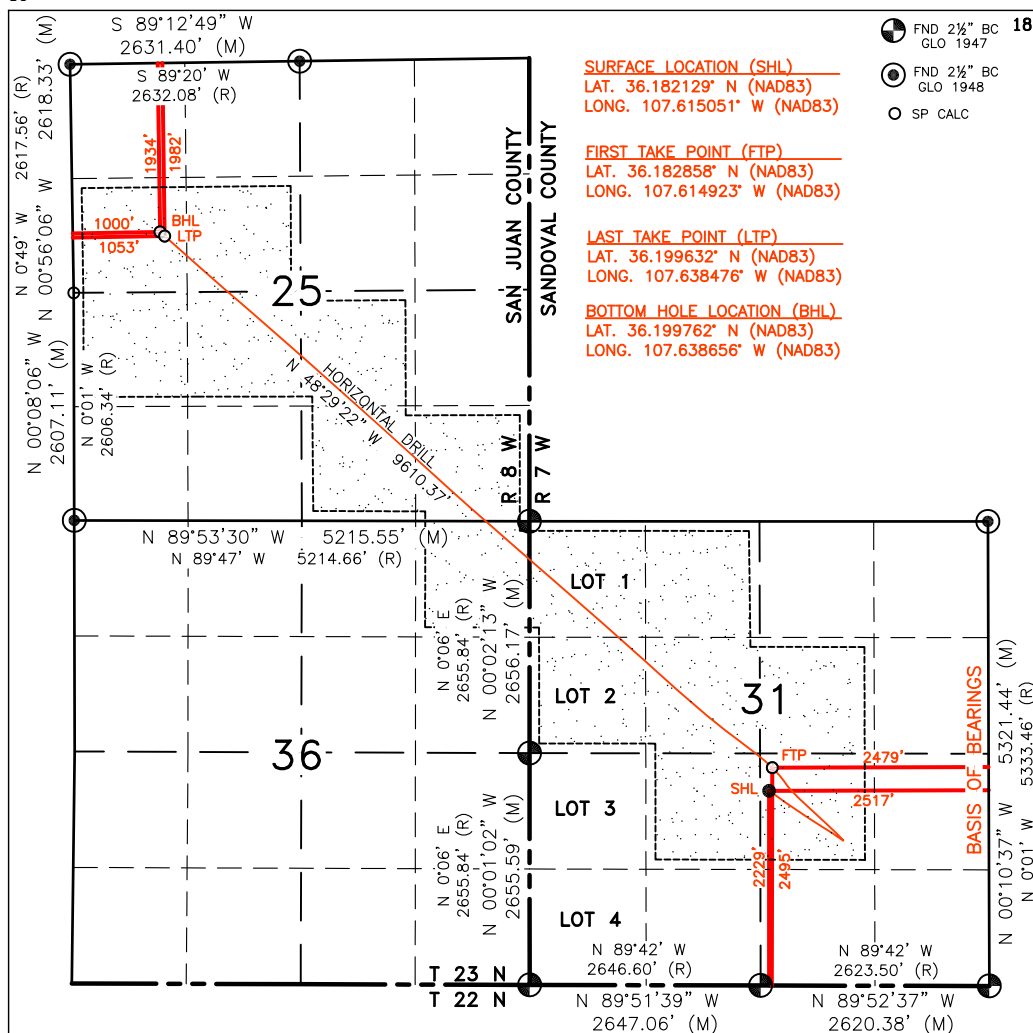
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	25	23N	8W		1934'	NORTH	1000'	WEST	SAN JUAN

¹² Dedicated Acres PENETRATED SPACING UNIT; SEC 31: NW/SE, SW/NE, NE/SW, NW/4 (281.24 AC.); SEC 36: NE/NE (40 AC.) SEC 25: SE/SE SW/SE, NW/SE, NE/SW, NW/SW, SE/NW, SW/NW (280 AC.) = 601.24 ACRES TOTAL	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. R-14081, R-14081A
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16



18	17	OPERATOR CERTIFICATION
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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 12/04/20
Signature Date

Shaw-Marie Ford

Printed Name
sford@dirllc.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.

DECEMBER 3, 2020

Date of Survey

Signature and Seal of Professional Surveyor:



Certificate Number

11393

**Directional Survey Certification**

2948 I-70 Business Loop
Grand Junction, CO 81504
(970)-245-9447 Fax (970)-245-9454

Operator	DJR Operating
Well Name & No.	North Alamito J31 2307 529H
County & State	San Juan, NM
SDI Job No.	OP.023859
Rig	Aztec 920

I, Janie Collins, having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 440 feet to a measured depth of 15,368 feet is true and correct as determined from all available records.

A handwritten signature in blue ink, appearing to read 'Janie Collins', written over a horizontal line.

Signature

9-Mar-20

Date

Janie Collins

Colorado District Well Planner
Scientific Drilling International



Scientific Drilling, Intl Survey Report

Company:	DJR Operating	Local Co-ordinate Reference:	Well NAU 529H - Slot 2
Project:	North Alamito Unit	TVD Reference:	GL 6979' & RKB 14' @ 6993.00usft (Aztec 920)
Site:	J31 2307	MD Reference:	GL 6979' & RKB 14' @ 6993.00usft (Aztec 920)
Well:	NAU 529H	North Reference:	True
Wellbore:	Original drilling	Survey Calculation Method:	Minimum Curvature
Design:	Original drilling	Database:	Grand Junction

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		J31 2307			
Site Position:		Northing:		1,885,649.91 usft	
From:		Easting:		2,787,494.55 usft	
Position Uncertainty:		Slot Radius:		Grid Convergence:	
Lat/Long		0.00 usft		36.1820890	
		13.20 in		-107.6150970	
				0.13 °	

Well		NAU 529H - Slot 2				
Well Position	+N/-S	0.00 usft	Northing:	1,885,664.50 usft	Latitude:	36.1821290
	+E/-W	0.00 usft	Easting:	2,787,508.09 usft	Longitude:	-107.6150510
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	6,979.00 usft

Wellbore	Original drilling				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	1/23/2020	8.72	62.75	49,309.70000000

Design	Original drilling				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	312.504	

Survey Program	Date	3/9/2020			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
440.00	4,536.00	Survey #1 - Surface MWD Survey (Original)	MWD+HDGM	OWSG MWD + HDGM	
4,599.00	5,628.00	Survey #2 - Curve MWD Survey (Original)	MWD+HDGM	OWSG MWD + HDGM	
5,754.00	15,368.00	Survey #3 - Lateral MWD Survey (Original)	MWD+HDGM	OWSG MWD + HDGM	

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	
440.00	0.91	37.190	439.98	2.78	2.11	0.32	0.21	0.21	0.00	
501.00	1.06	33.340	500.97	3.64	2.71	0.46	0.27	0.25	-6.31	
563.00	1.39	97.820	562.96	4.02	3.78	-0.07	2.16	0.53	104.00	
624.00	3.03	110.470	623.91	3.35	6.02	-2.17	2.79	2.69	20.74	
684.00	5.08	117.630	683.76	1.57	9.86	-6.21	3.51	3.42	11.93	
745.00	6.79	121.480	744.43	-1.57	15.33	-12.36	2.88	2.80	6.31	
806.00	8.16	124.260	804.91	-5.89	21.98	-20.18	2.32	2.25	4.56	
866.00	8.95	127.500	864.24	-11.13	29.20	-29.05	1.54	1.32	5.40	



Scientific Drilling, Intl Survey Report

Company:	DJR Operating	Local Co-ordinate Reference:	Well NAU 529H - Slot 2
Project:	North Alamito Unit	TVD Reference:	GL 6979' & RKB 14' @ 6993.00usft (Aztec 920)
Site:	J31 2307	MD Reference:	GL 6979' & RKB 14' @ 6993.00usft (Aztec 920)
Well:	NAU 529H	North Reference:	True
Wellbore:	Original drilling	Survey Calculation Method:	Minimum Curvature
Design:	Original drilling	Database:	Grand Junction

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)	
926.00	8.84	132.060	923.52	-17.06	36.33	-38.31	1.19	-0.18	7.60	
987.00	9.20	132.810	983.77	-23.51	43.39	-47.87	0.62	0.59	1.23	
1,047.00	9.34	133.250	1,042.99	-30.11	50.45	-57.54	0.26	0.23	0.73	
1,107.00	10.62	133.320	1,102.08	-37.24	58.02	-67.93	2.13	2.13	0.12	
1,169.00	11.18	129.550	1,162.96	-44.98	66.81	-79.65	1.46	0.90	-6.08	
1,229.00	10.88	124.180	1,221.85	-51.87	75.98	-91.06	1.78	-0.50	-8.95	
1,290.00	12.19	125.740	1,281.62	-58.87	85.97	-103.15	2.21	2.15	2.56	
1,350.00	13.21	128.350	1,340.15	-66.82	96.49	-116.28	1.95	1.70	4.35	
1,412.00	14.12	127.570	1,400.39	-75.83	108.04	-130.88	1.50	1.47	-1.26	
1,473.00	14.98	126.940	1,459.44	-85.10	120.24	-146.14	1.43	1.41	-1.03	
1,533.00	17.05	126.510	1,517.11	-95.00	133.51	-162.61	3.46	3.45	-0.72	
1,594.00	18.38	126.370	1,575.21	-106.02	148.44	-181.07	2.18	2.18	-0.23	
1,655.00	18.48	125.120	1,633.08	-117.28	164.09	-200.22	0.67	0.16	-2.05	
1,716.00	17.97	123.840	1,691.02	-128.09	179.82	-219.11	1.06	-0.84	-2.10	
1,776.00	17.26	124.220	1,748.21	-138.25	194.86	-237.06	1.20	-1.18	0.63	
1,838.00	16.72	124.560	1,807.50	-148.48	209.81	-255.00	0.89	-0.87	0.55	
1,899.00	16.44	125.090	1,865.97	-158.42	224.10	-272.25	0.52	-0.46	0.87	
1,962.00	16.53	125.940	1,926.38	-168.80	238.65	-289.99	0.41	0.14	1.35	
2,025.00	16.20	125.650	1,986.83	-179.19	253.05	-307.62	0.54	-0.52	-0.46	
2,088.00	16.52	124.170	2,047.27	-189.34	267.60	-325.21	0.83	0.51	-2.35	
2,151.00	16.55	123.080	2,107.67	-199.27	282.53	-342.92	0.49	0.05	-1.73	
2,214.00	17.03	123.980	2,167.98	-209.32	297.70	-360.90	0.87	0.76	1.43	
2,278.00	16.81	124.530	2,229.21	-219.80	313.10	-379.33	0.43	-0.34	0.86	
2,341.00	17.63	124.600	2,289.39	-230.39	328.46	-397.81	1.30	1.30	0.11	
2,404.00	17.67	124.030	2,349.42	-241.15	344.23	-416.71	0.28	0.06	-0.90	
2,467.00	18.02	123.210	2,409.39	-251.84	360.31	-435.79	0.68	0.56	-1.30	
2,530.00	18.52	122.200	2,469.22	-262.51	376.93	-455.25	0.94	0.79	-1.60	
2,594.00	18.29	121.680	2,529.94	-273.20	394.08	-475.11	0.44	-0.36	-0.81	
2,657.00	18.98	121.230	2,589.64	-283.70	411.25	-494.87	1.12	1.10	-0.71	
2,720.00	19.59	120.440	2,649.10	-294.37	429.12	-515.24	1.05	0.97	-1.25	
2,783.00	19.52	121.950	2,708.47	-305.29	447.15	-535.92	0.81	-0.11	2.40	
2,846.00	19.12	123.750	2,767.92	-316.59	464.66	-556.46	1.14	-0.63	2.86	
2,909.00	19.25	123.780	2,827.42	-328.10	481.87	-576.93	0.21	0.21	0.05	
2,973.00	17.48	125.800	2,888.16	-339.59	498.44	-596.90	2.94	-2.77	3.16	
3,036.00	16.99	125.560	2,948.33	-350.47	513.60	-615.44	0.79	-0.78	-0.38	
3,099.00	17.19	123.880	3,008.55	-361.02	528.82	-633.78	0.85	0.32	-2.67	
3,162.00	17.51	123.360	3,068.69	-371.42	544.46	-652.34	0.56	0.51	-0.83	
3,225.00	17.22	123.560	3,128.82	-381.79	560.15	-670.91	0.47	-0.46	0.32	
3,288.00	17.22	122.430	3,188.99	-391.94	575.79	-689.30	0.53	0.00	-1.79	
3,351.00	17.17	120.740	3,249.18	-401.70	591.66	-707.59	0.80	-0.08	-2.68	
3,415.00	17.19	120.740	3,310.32	-411.36	607.90	-726.09	0.03	0.03	0.00	
3,478.00	17.58	120.610	3,370.44	-420.96	624.09	-744.52	0.62	0.62	-0.21	
3,541.00	17.69	119.890	3,430.48	-430.58	640.58	-763.17	0.39	0.17	-1.14	



Scientific Drilling, Intl Survey Report

Company:	DJR Operating	Local Co-ordinate Reference:	Well NAU 529H - Slot 2
Project:	North Alamito Unit	TVD Reference:	GL 6979' & RKB 14' @ 6993.00usft (Aztec 920)
Site:	J31 2307	MD Reference:	GL 6979' & RKB 14' @ 6993.00usft (Aztec 920)
Well:	NAU 529H	North Reference:	True
Wellbore:	Original drilling	Survey Calculation Method:	Minimum Curvature
Design:	Original drilling	Database:	Grand Junction

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)	
3,605.00	17.99	120.120	3,491.40	-440.38	657.56	-782.31	0.48	0.47	0.36	
3,668.00	17.82	121.820	3,551.35	-450.35	674.17	-801.29	0.87	-0.27	2.70	
3,731.00	17.32	122.270	3,611.41	-460.43	690.29	-819.99	0.82	-0.79	0.71	
3,794.00	16.69	123.420	3,671.66	-470.42	705.77	-838.15	1.13	-1.00	1.83	
3,857.00	16.71	124.170	3,732.00	-480.49	720.81	-856.05	0.34	0.03	1.19	
3,920.00	16.44	124.440	3,792.38	-490.62	735.66	-873.83	0.45	-0.43	0.43	
3,983.00	16.32	124.580	3,852.83	-500.69	750.30	-891.43	0.20	-0.19	0.22	
4,047.00	17.04	125.230	3,914.13	-511.20	765.36	-909.64	1.16	1.13	1.02	
4,110.00	17.14	124.650	3,974.35	-521.80	780.54	-927.99	0.31	0.16	-0.92	
4,173.00	16.21	125.060	4,034.70	-532.13	795.37	-945.90	1.49	-1.48	0.65	
4,235.00	15.29	125.110	4,094.37	-541.81	809.14	-962.59	1.48	-1.48	0.08	
4,298.00	14.34	125.970	4,155.28	-551.17	822.25	-978.58	1.55	-1.51	1.37	
4,361.00	12.59	124.750	4,216.55	-559.66	834.21	-993.14	2.81	-2.78	-1.94	
4,410.00	10.78	124.790	4,264.53	-565.32	842.36	-1,002.97	3.69	-3.69	0.08	
4,473.00	3.77	112.400	4,326.98	-569.48	849.12	-1,010.76	11.34	-11.13	-19.67	
4,536.00	2.17	348.490	4,389.94	-569.10	850.80	-1,011.74	8.41	-2.54	-196.68	
4,599.00	10.89	318.350	4,452.48	-563.47	846.60	-1,004.84	14.41	13.84	-47.84	
4,662.00	18.25	321.010	4,513.41	-551.34	836.42	-989.15	11.73	11.68	4.22	
4,725.00	25.81	318.830	4,571.77	-533.32	821.17	-965.72	12.07	12.00	-3.46	
4,789.00	33.84	313.820	4,627.26	-510.46	799.10	-934.01	13.13	12.55	-7.83	
4,852.00	40.95	311.540	4,677.28	-484.59	770.95	-895.78	11.50	11.29	-3.62	
4,915.00	41.09	313.380	4,724.81	-456.67	740.45	-854.43	1.93	0.22	2.92	
4,978.00	41.39	314.430	4,772.19	-427.87	710.53	-812.91	1.20	0.48	1.67	
5,041.00	43.55	314.840	4,818.66	-397.99	680.26	-770.41	3.46	3.43	0.65	
5,104.00	48.25	313.810	4,862.49	-366.40	647.90	-725.20	7.55	7.46	-1.63	
5,167.00	52.64	312.420	4,902.60	-333.22	612.44	-676.65	7.17	6.97	-2.21	
5,230.00	54.00	311.810	4,940.23	-299.34	574.96	-626.12	2.29	2.16	-0.97	
5,294.00	57.89	312.650	4,976.06	-263.70	535.71	-573.11	6.17	6.08	1.31	
5,357.00	61.69	312.890	5,007.76	-226.74	495.75	-518.68	6.04	6.03	0.38	
5,420.00	67.82	312.210	5,034.61	-188.23	453.79	-461.72	9.78	9.73	-1.08	
5,483.00	71.05	311.640	5,056.74	-148.83	409.91	-402.75	5.20	5.13	-0.90	
5,546.00	76.27	313.000	5,074.46	-108.13	365.23	-342.32	8.54	8.29	2.16	
5,610.00	78.93	313.610	5,088.20	-65.26	319.75	-279.82	4.26	4.16	0.95	
5,628.00	80.76	314.680	5,091.37	-52.92	307.03	-262.11	11.73	10.17	5.94	
5,754.00	84.86	313.800	5,107.14	34.27	217.49	-137.19	3.33	3.25	-0.70	
5,818.00	85.90	312.370	5,112.30	77.84	170.90	-73.40	2.76	1.63	-2.23	
5,880.00	87.75	311.450	5,115.73	119.19	124.83	-11.50	3.33	2.98	-1.48	
5,943.00	88.76	311.700	5,117.65	160.98	77.73	51.46	1.65	1.60	0.40	
6,006.00	89.43	311.670	5,118.64	202.87	30.68	114.44	1.06	1.06	-0.05	
6,069.00	90.47	313.210	5,118.70	245.38	-15.81	177.44	2.95	1.65	2.44	
6,131.00	91.11	313.500	5,117.84	287.94	-60.88	239.43	1.13	1.03	0.47	
6,194.00	91.78	313.280	5,116.25	331.20	-106.65	302.40	1.12	1.06	-0.35	
6,256.00	90.97	312.570	5,114.77	373.42	-152.03	364.38	1.74	-1.31	-1.15	



Scientific Drilling, Intl Survey Report

Company:	DJR Operating	Local Co-ordinate Reference:	Well NAU 529H - Slot 2
Project:	North Alamito Unit	TVD Reference:	GL 6979' & RKB 14' @ 6993.00usft (Aztec 920)
Site:	J31 2307	MD Reference:	GL 6979' & RKB 14' @ 6993.00usft (Aztec 920)
Well:	NAU 529H	North Reference:	True
Wellbore:	Original drilling	Survey Calculation Method:	Minimum Curvature
Design:	Original drilling	Database:	Grand Junction

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)	
6,319.00	91.17	312.160	5,113.59	415.86	-198.58	427.37	0.72	0.32	-0.65	
6,382.00	90.30	311.710	5,112.78	457.96	-245.44	490.36	1.55	-1.38	-0.71	
6,445.00	90.60	311.150	5,112.29	499.65	-292.67	553.35	1.01	0.48	-0.89	
6,508.00	90.00	309.330	5,111.96	540.34	-340.76	616.29	3.04	-0.95	-2.89	
6,569.00	89.60	308.060	5,112.17	578.48	-388.37	677.16	2.18	-0.66	-2.08	
6,631.00	89.16	307.290	5,112.84	616.37	-437.44	738.93	1.43	-0.71	-1.24	
6,694.00	89.56	308.790	5,113.55	655.18	-487.05	801.74	2.46	0.63	2.38	
6,757.00	89.90	310.670	5,113.84	695.45	-535.50	864.66	3.03	0.54	2.98	
6,820.00	90.07	309.920	5,113.86	736.19	-583.55	927.61	1.22	0.27	-1.19	
6,883.00	89.63	311.510	5,114.02	777.29	-631.30	990.58	2.62	-0.70	2.52	
6,945.00	90.07	312.220	5,114.19	818.66	-677.47	1,052.57	1.35	0.71	1.15	
7,008.00	90.00	310.930	5,114.15	860.47	-724.60	1,115.56	2.05	-0.11	-2.05	
7,070.00	89.56	312.630	5,114.39	901.78	-770.83	1,177.56	2.83	-0.71	2.74	
7,133.00	89.77	313.170	5,114.75	944.66	-816.98	1,240.55	0.92	0.33	0.86	
7,196.00	90.44	313.120	5,114.64	987.74	-862.95	1,303.55	1.07	1.06	-0.08	
7,259.00	89.56	312.930	5,114.64	1,030.73	-909.00	1,366.55	1.43	-1.40	-0.30	
7,321.00	90.40	313.110	5,114.66	1,073.03	-954.33	1,428.54	1.39	1.35	0.29	
7,384.00	88.93	312.030	5,115.03	1,115.64	-1,000.72	1,491.54	2.90	-2.33	-1.71	
7,446.00	89.16	311.410	5,116.06	1,156.90	-1,046.99	1,553.52	1.07	0.37	-1.00	
7,509.00	89.60	310.770	5,116.74	1,198.30	-1,094.47	1,616.50	1.23	0.70	-1.02	
7,571.00	90.23	310.260	5,116.84	1,238.58	-1,141.61	1,678.46	1.31	1.02	-0.82	
7,634.00	89.40	311.210	5,117.04	1,279.69	-1,189.34	1,741.43	2.00	-1.32	1.51	
7,697.00	90.47	312.380	5,117.11	1,321.68	-1,236.31	1,804.42	2.52	1.70	1.86	
7,760.00	89.50	312.470	5,117.13	1,364.18	-1,282.81	1,867.42	1.55	-1.54	0.14	
7,823.00	90.20	312.730	5,117.29	1,406.82	-1,329.19	1,930.42	1.19	1.11	0.41	
7,886.00	90.50	312.070	5,116.91	1,449.30	-1,375.71	1,993.42	1.15	0.48	-1.05	
7,948.00	88.62	311.720	5,117.38	1,490.70	-1,421.86	2,055.41	3.08	-3.03	-0.56	
8,011.00	89.06	311.720	5,118.66	1,532.61	-1,468.87	2,118.39	0.70	0.70	0.00	
8,074.00	89.60	312.810	5,119.40	1,574.98	-1,515.49	2,181.39	1.93	0.86	1.73	
8,137.00	88.69	313.020	5,120.34	1,617.87	-1,561.62	2,244.38	1.48	-1.44	0.33	
8,200.00	86.98	312.030	5,122.72	1,660.42	-1,608.02	2,307.33	3.14	-2.71	-1.57	
8,263.00	88.69	312.140	5,125.10	1,702.62	-1,654.74	2,370.28	2.72	2.71	0.17	
8,325.00	89.33	311.990	5,126.17	1,744.15	-1,700.76	2,432.27	1.06	1.03	-0.24	
8,387.00	89.67	311.660	5,126.71	1,785.49	-1,746.96	2,494.26	0.76	0.55	-0.53	
8,451.00	90.10	311.100	5,126.84	1,827.80	-1,794.98	2,558.25	1.10	0.67	-0.88	
8,513.00	89.56	311.270	5,127.02	1,868.63	-1,841.64	2,620.23	0.91	-0.87	0.27	
8,576.00	89.70	310.900	5,127.43	1,910.03	-1,889.12	2,683.21	0.63	0.22	-0.59	
8,639.00	89.83	310.550	5,127.69	1,951.13	-1,936.87	2,746.18	0.59	0.21	-0.56	
8,702.00	89.87	310.170	5,127.85	1,991.93	-1,984.87	2,809.14	0.61	0.06	-0.60	
8,766.00	90.10	309.230	5,127.87	2,032.81	-2,034.11	2,873.06	1.51	0.36	-1.47	
8,828.00	89.50	310.550	5,128.08	2,072.57	-2,081.68	2,934.99	2.34	-0.97	2.13	
8,891.00	89.60	311.090	5,128.58	2,113.75	-2,129.36	2,997.96	0.87	0.16	0.86	
8,953.00	90.44	311.300	5,128.56	2,154.58	-2,176.01	3,059.95	1.40	1.35	0.34	
9,016.00	88.63	310.400	5,129.07	2,195.79	-2,223.66	3,122.92	3.21	-2.87	-1.43	



Scientific Drilling, Intl Survey Report

Company:	DJR Operating	Local Co-ordinate Reference:	Well NAU 529H - Slot 2
Project:	North Alamito Unit	TVD Reference:	GL 6979' & RKB 14' @ 6993.00usft (Aztec 920)
Site:	J31 2307	MD Reference:	GL 6979' & RKB 14' @ 6993.00usft (Aztec 920)
Well:	NAU 529H	North Reference:	True
Wellbore:	Original drilling	Survey Calculation Method:	Minimum Curvature
Design:	Original drilling	Database:	Grand Junction

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)
9,079.00	88.46	310.250	5,130.67	2,236.54	-2,271.68	3,185.85	0.36	-0.27	-0.24
9,142.00	89.40	310.720	5,131.84	2,277.44	-2,319.58	3,248.80	1.67	1.49	0.75
9,205.00	90.40	311.110	5,131.95	2,318.70	-2,367.19	3,311.77	1.70	1.59	0.62
9,267.00	90.84	311.200	5,131.28	2,359.50	-2,413.87	3,373.75	0.72	0.71	0.15
9,330.00	91.07	310.620	5,130.23	2,400.75	-2,461.47	3,436.72	0.99	0.37	-0.92
9,393.00	90.97	311.250	5,129.11	2,442.02	-2,509.06	3,499.68	1.01	-0.16	1.00
9,455.00	91.17	311.180	5,127.95	2,482.86	-2,555.69	3,561.66	0.34	0.32	-0.11
9,518.00	90.50	311.410	5,127.04	2,524.43	-2,603.02	3,624.64	1.12	-1.06	0.37
9,580.00	88.96	312.070	5,127.33	2,565.71	-2,649.28	3,686.63	2.70	-2.48	1.06
9,643.00	89.30	312.690	5,128.28	2,608.17	-2,695.81	3,749.62	1.12	0.54	0.98
9,706.00	89.60	312.450	5,128.89	2,650.79	-2,742.21	3,812.62	0.61	0.48	-0.38
9,768.00	90.03	311.920	5,129.09	2,692.42	-2,788.15	3,874.62	1.10	0.69	-0.85
9,830.00	90.00	311.660	5,129.07	2,733.74	-2,834.37	3,936.61	0.42	-0.05	-0.42
9,892.00	90.20	311.370	5,128.96	2,774.83	-2,880.80	3,998.60	0.57	0.32	-0.47
9,955.00	90.30	311.000	5,128.69	2,816.32	-2,928.21	4,061.58	0.61	0.16	-0.59
10,018.00	89.60	309.650	5,128.74	2,857.08	-2,976.24	4,124.54	2.41	-1.11	-2.14
10,081.00	89.13	308.240	5,129.44	2,896.68	-3,025.23	4,187.41	2.36	-0.75	-2.24
10,144.00	88.89	309.700	5,130.53	2,936.29	-3,074.20	4,250.28	2.35	-0.38	2.32
10,204.00	87.95	310.610	5,132.19	2,974.97	-3,120.04	4,310.20	2.18	-1.57	1.52
10,270.00	86.71	311.100	5,135.26	3,018.10	-3,169.91	4,376.10	2.02	-1.88	0.74
10,332.00	88.09	312.360	5,138.07	3,059.32	-3,216.13	4,438.03	3.01	2.23	2.03
10,395.00	89.10	312.200	5,139.62	3,101.69	-3,262.73	4,501.01	1.62	1.60	-0.25
10,456.00	89.50	311.660	5,140.36	3,142.45	-3,308.10	4,562.00	1.10	0.66	-0.89
10,517.00	89.56	310.380	5,140.86	3,182.48	-3,354.12	4,622.98	2.10	0.10	-2.10
10,577.00	89.97	311.070	5,141.11	3,221.63	-3,399.59	4,682.95	1.34	0.68	1.15
10,639.00	90.13	312.130	5,141.06	3,262.79	-3,445.96	4,744.94	1.73	0.26	1.71
10,700.00	89.70	314.060	5,141.15	3,304.46	-3,490.50	4,805.94	3.24	-0.70	3.16
10,761.00	90.34	313.190	5,141.12	3,346.55	-3,534.65	4,866.92	1.77	1.05	-1.43
10,822.00	90.54	312.390	5,140.66	3,387.99	-3,579.42	4,927.92	1.35	0.33	-1.31
10,882.00	90.84	311.860	5,139.93	3,428.23	-3,623.92	4,987.91	1.01	0.50	-0.88
10,942.00	91.51	311.330	5,138.70	3,468.05	-3,668.78	5,047.89	1.42	1.12	-0.88
11,002.00	91.01	311.670	5,137.38	3,507.80	-3,713.70	5,107.87	1.01	-0.83	0.57
11,063.00	90.17	311.700	5,136.76	3,548.36	-3,759.26	5,168.86	1.38	-1.38	0.05
11,123.00	90.17	311.250	5,136.58	3,588.10	-3,804.21	5,228.85	0.75	0.00	-0.75
11,184.00	89.50	311.470	5,136.75	3,628.41	-3,849.99	5,289.84	1.16	-1.10	0.36
11,245.00	88.83	312.230	5,137.64	3,669.10	-3,895.43	5,350.82	1.66	-1.10	1.25
11,306.00	89.03	311.890	5,138.78	3,709.96	-3,940.71	5,411.81	0.65	0.33	-0.56
11,366.00	89.56	312.130	5,139.52	3,750.11	-3,985.29	5,471.80	0.97	0.88	0.40
11,427.00	88.96	312.270	5,140.31	3,791.08	-4,030.47	5,532.80	1.01	-0.98	0.23
11,488.00	89.19	313.410	5,141.29	3,832.55	-4,075.19	5,593.79	1.91	0.38	1.87
11,549.00	88.16	313.040	5,142.70	3,874.32	-4,119.63	5,654.77	1.79	-1.69	-0.61
11,609.00	88.56	312.870	5,144.42	3,915.19	-4,163.53	5,714.74	0.72	0.67	-0.28
11,670.00	89.70	313.230	5,145.35	3,956.82	-4,208.10	5,775.73	1.96	1.87	0.59



Scientific Drilling, Intl Survey Report

Company:	DJR Operating	Local Co-ordinate Reference:	Well NAU 529H - Slot 2
Project:	North Alamito Unit	TVD Reference:	GL 6979' & RKB 14' @ 6993.00usft (Aztec 920)
Site:	J31 2307	MD Reference:	GL 6979' & RKB 14' @ 6993.00usft (Aztec 920)
Well:	NAU 529H	North Reference:	True
Wellbore:	Original drilling	Survey Calculation Method:	Minimum Curvature
Design:	Original drilling	Database:	Grand Junction

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)
11,730.00	90.17	312.780	5,145.41	3,997.75	-4,251.97	5,835.73	1.08	0.78	-0.75
11,790.00	89.33	312.080	5,145.68	4,038.23	-4,296.26	5,895.72	1.82	-1.40	-1.17
11,849.00	88.72	311.440	5,146.68	4,077.51	-4,340.26	5,954.71	1.50	-1.03	-1.08
11,909.00	89.46	311.940	5,147.63	4,117.42	-4,385.06	6,014.70	1.49	1.23	0.83
11,970.00	90.60	312.220	5,147.60	4,158.29	-4,430.33	6,075.69	1.92	1.87	0.46
12,030.00	89.63	312.210	5,147.48	4,198.61	-4,474.77	6,135.69	1.62	-1.62	-0.02
12,091.00	88.42	311.460	5,148.52	4,239.29	-4,520.21	6,196.68	2.33	-1.98	-1.23
12,151.00	88.93	311.250	5,149.91	4,278.92	-4,565.24	6,256.65	0.92	0.85	-0.35
12,212.00	90.60	312.240	5,150.16	4,319.53	-4,610.75	6,317.64	3.18	2.74	1.62
12,273.00	89.16	311.300	5,150.28	4,360.17	-4,656.24	6,378.63	2.82	-2.36	-1.54
12,333.00	88.32	310.330	5,151.60	4,399.37	-4,701.64	6,438.59	2.14	-1.40	-1.62
12,396.00	89.43	310.490	5,152.84	4,440.21	-4,749.60	6,501.54	1.78	1.76	0.25
12,457.00	90.30	311.020	5,152.98	4,480.03	-4,795.81	6,562.51	1.67	1.43	0.87
12,518.00	89.56	310.620	5,153.06	4,519.90	-4,841.97	6,623.48	1.38	-1.21	-0.66
12,579.00	88.39	309.850	5,154.15	4,559.30	-4,888.53	6,684.42	2.30	-1.92	-1.26
12,639.00	88.39	309.140	5,155.84	4,597.44	-4,934.81	6,744.31	1.18	0.00	-1.18
12,700.00	88.83	311.160	5,157.32	4,636.76	-4,981.42	6,805.24	3.39	0.72	3.31
12,761.00	90.07	312.560	5,157.90	4,677.46	-5,026.85	6,866.23	3.07	2.03	2.30
12,823.00	90.80	313.720	5,157.43	4,719.85	-5,072.09	6,928.22	2.21	1.18	1.87
12,883.00	90.47	313.520	5,156.77	4,761.24	-5,115.52	6,988.21	0.64	-0.55	-0.33
12,944.00	89.56	313.280	5,156.75	4,803.16	-5,159.84	7,049.20	1.54	-1.49	-0.39
13,005.00	89.90	313.200	5,157.04	4,844.94	-5,204.28	7,110.20	0.57	0.56	-0.13
13,066.00	89.13	312.930	5,157.55	4,886.59	-5,248.84	7,171.19	1.34	-1.26	-0.44
13,127.00	89.13	311.640	5,158.48	4,927.63	-5,293.96	7,232.18	2.11	0.00	-2.11
13,188.00	90.33	312.270	5,158.77	4,968.41	-5,339.32	7,293.18	2.22	1.97	1.03
13,248.00	90.87	311.740	5,158.14	5,008.56	-5,383.91	7,353.17	1.26	0.90	-0.88
13,310.00	91.14	311.340	5,157.05	5,049.67	-5,430.31	7,415.15	0.78	0.44	-0.65
13,370.00	88.53	308.270	5,157.22	5,088.07	-5,476.39	7,475.07	6.72	-4.35	-5.12
13,430.00	88.39	307.730	5,158.84	5,125.00	-5,523.65	7,534.87	0.93	-0.23	-0.90
13,491.00	89.00	308.500	5,160.23	5,162.64	-5,571.63	7,595.67	1.61	1.00	1.26
13,553.00	87.92	310.120	5,161.89	5,201.90	-5,619.59	7,657.55	3.14	-1.74	2.61
13,614.00	90.87	311.670	5,162.54	5,241.83	-5,665.69	7,718.51	5.46	4.84	2.54
13,674.00	91.44	311.310	5,161.33	5,281.57	-5,710.62	7,778.49	1.12	0.95	-0.60
13,734.00	91.95	311.350	5,159.55	5,321.18	-5,755.66	7,838.45	0.85	0.85	0.07
13,795.00	91.24	310.610	5,157.85	5,361.16	-5,801.69	7,899.41	1.68	-1.16	-1.21
13,855.00	91.48	311.810	5,156.43	5,400.68	-5,846.81	7,959.37	2.04	0.40	2.00
13,917.00	91.67	312.480	5,154.73	5,442.27	-5,892.77	8,021.35	1.12	0.31	1.08
13,978.00	90.50	312.450	5,153.57	5,483.44	-5,937.76	8,082.34	1.92	-1.92	-0.05
14,039.00	89.26	311.880	5,153.70	5,524.39	-5,982.97	8,143.33	2.24	-2.03	-0.93
14,100.00	89.16	311.120	5,154.54	5,564.80	-6,028.65	8,204.32	1.26	-0.16	-1.25
14,162.00	89.90	310.840	5,155.05	5,605.46	-6,075.46	8,266.29	1.28	1.19	-0.45
14,221.00	90.03	310.650	5,155.08	5,643.97	-6,120.16	8,325.26	0.39	0.22	-0.32
14,283.00	89.06	311.030	5,155.58	5,684.51	-6,167.06	8,387.24	1.68	-1.56	0.61



Scientific Drilling, Intl Survey Report

Company:	DJR Operating	Local Co-ordinate Reference:	Well NAU 529H - Slot 2
Project:	North Alamito Unit	TVD Reference:	GL 6979' & RKB 14' @ 6993.00usft (Aztec 920)
Site:	J31 2307	MD Reference:	GL 6979' & RKB 14' @ 6993.00usft (Aztec 920)
Well:	NAU 529H	North Reference:	True
Wellbore:	Original drilling	Survey Calculation Method:	Minimum Curvature
Design:	Original drilling	Database:	Grand Junction

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)	
14,344.00	89.97	311.220	5,156.09	5,724.63	-6,213.01	8,448.22	1.52	1.49	0.31	
14,404.00	89.00	311.390	5,156.63	5,764.23	-6,258.08	8,508.20	1.64	-1.62	0.28	
14,466.00	88.70	311.210	5,157.88	5,805.15	-6,304.64	8,570.17	0.56	-0.48	-0.29	
14,527.00	89.40	311.140	5,158.89	5,845.30	-6,350.55	8,631.15	1.15	1.15	-0.11	
14,588.00	90.07	310.850	5,159.17	5,885.31	-6,396.59	8,692.13	1.20	1.10	-0.48	
14,648.00	89.43	311.160	5,159.43	5,924.68	-6,441.87	8,752.10	1.19	-1.07	0.52	
14,709.00	89.23	311.580	5,160.14	5,964.99	-6,487.65	8,813.09	0.76	-0.33	0.69	
14,770.00	89.60	310.800	5,160.77	6,005.16	-6,533.55	8,874.07	1.42	0.61	-1.28	
14,831.00	89.43	312.010	5,161.28	6,045.51	-6,579.30	8,935.05	2.00	-0.28	1.98	
14,891.00	90.00	311.980	5,161.58	6,085.65	-6,623.89	8,995.05	0.95	0.95	-0.05	
14,952.00	90.74	311.540	5,161.19	6,126.27	-6,669.39	9,056.04	1.41	1.21	-0.72	
15,014.00	89.36	312.320	5,161.13	6,167.70	-6,715.52	9,118.04	2.56	-2.23	1.26	
15,076.00	88.93	312.050	5,162.06	6,209.33	-6,761.45	9,180.03	0.82	-0.69	-0.44	
15,137.00	88.90	311.550	5,163.21	6,249.98	-6,806.92	9,241.01	0.82	-0.05	-0.82	
15,198.00	88.59	311.340	5,164.55	6,290.35	-6,852.63	9,301.99	0.61	-0.51	-0.34	
15,259.00	86.85	312.600	5,166.98	6,331.11	-6,897.95	9,362.93	3.52	-2.85	2.07	
15,316.00	86.58	311.490	5,170.24	6,369.22	-6,940.20	9,419.84	2.00	-0.47	-1.95	
15,368.00	86.58	311.490	5,173.35	6,403.61	-6,979.09	9,471.74	0.00	0.00	0.00	

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
440.00	439.98	2.78	2.11	First SDI Surface MWD Survey	
4,536.00	4,389.94	-569.10	850.80	Last SDI Surface MWD Survey	
4,599.00	4,452.48	-563.47	846.60	First SDI Curve MWD Survey	
5,628.00	5,091.37	-52.92	307.03	Last SDI Curve MWD Survey	
5,754.00	5,107.14	34.27	217.49	First SDI Lateral MWD Survey	
15,316.00	5,170.24	6,369.22	-6,940.20	Last SDI Lateral MWD Survey	
15,368.00	5,173.35	6,403.61	-6,979.09	Projection to TD	

Checked By: _____ Approved By: _____ Date: _____

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 12333

COMMENTS

Operator:			OGRID:	Action Number:	Action Type:
DJR OPERATING, LLC 1 Road 3263 Aztec, NM87410			371838	12333	C-104C
Created By	Comment				Comment Date
kpickford	KP GEO Review 12/17/2020				12/17/2020
ahvermersch	12-16-20 Operator submitted email to request a ready date change to 12-16-20. OK by AV verbal approval given 12-16-20				12/17/2020
ahvermersch	None				12/16/2020

Operator:	DJR OPERATING, LLC	1 Road 3263	Aztec, NM87410	OGRID:	371838	Action Number:	12333	Action Type:	C-104C
OCD Reviewer				Condition					
ahvermersch				None					