

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

Form C-101
August 1, 2011
Permit 271458

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address CENTENNIAL RESOURCE PRODUCTION, LLC 1001 17th Street, Suite 1800 Denver, CO 80202		2. OGRID Number 372165
4. Property Code 325659		3. API Number 30-025-46331
5. Property Name CARNE ASADA STATE COM		6. Well No. 502H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
G	7	22S	35E	G	2585	N	2184	E	Lea

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
B	6	22S	35E	2	100	N	1650	E	Lea

9. Pool Information

OJO CHISO;BONE SPRING	96553
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3634
16. Multiple N	17. Proposed Depth 17982	18. Formation 2nd Bone Spring Sand	19. Contractor	20. Spud Date 9/24/2019
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	54.5	1800	1533	0
Int1	12.25	9.625	40	5500	1351	0
Prod	8.5	5.5	20	17982	1980	9503
Prod	8.75	5.5	20	10403	806	0

Casing/Cement Program: Additional Comments

Drilling 8.75 hole size for the curve and 8.5 hole size for the lateral for the 5.5 production casing string.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Pipe	10000	5000	Cameron

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable. Signature: Printed Name: Electronically filed by Sarah Ferreyros Title: Senior Regulatory Analyst Email Address: Sarah.Ferreyros@cdevinc.com Date: 8/22/2019	OIL CONSERVATION DIVISION Approved By: Paul F Kautz Title: Geologist Approved Date: 8/29/2019 Expiration Date: 8/29/2021 Conditions of Approval Attached
Phone: 720-499-1454	

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

☐ AMENDED REPORT

Certificate Number: _____

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

Form APD Comments

Permit 271458

PERMIT COMMENTS

Operator Name and Address: CENTENNIAL RESOURCE PRODUCTION, LLC [372165] 1001 17th Street, Suite 1800 Denver, CO 80202		API Number: 30-025-46331
		Well: CARNE ASADA STATE COM #502H

Created By	Comment	Comment Date
kcastillo	Spudder rig will preset surface casing. Please see attached C-102, I could not get the acreage section to work properly. I will email the Additional points required, GCP and payment info.	8/22/2019

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Form APD Conditions

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
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Permit 271458

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: CENTENNIAL RESOURCE PRODUCTION, LLC [372165] 1001 17th Street, Suite 1800 Denver, CO 80202	API Number: 30-025-46331
	Well: CARNE ASADA STATE COM #502H

OCD Reviewer	Condition
pkautz	Will require a directional survey with the C-104
pkautz	
pkautz	1) SURFACE & INTERMEDIATE CASING - Cement must circulate to surface -- 2) PRODUCTION CASING - Cement must tie back into intermediate casing --
pkautz	If cement does not circulate to surface, must run temperature survey or other log to determine top of cement
pkautz	Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water
pkautz	1)- The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud 2)- Drilling Sundries Form C-103 (Casing and Cement test are to be submitted within 10 days 3)- Completion Reports & Logs are to be submitted within 45 days 4)- Deviation / Directional Drill Survey are to be filed with or prior to C-104
pkautz	It is the operator's responsibility to monitor cancellation dates of approved APDs. APD's are good for 2 years and may be extended for one year. Only one 1 year extension will be granted if submitted by C-103 before expiration date. After expiration date or after a 1 year extension must submit new APD.
pkautz	Stage Tool 1) Must notify OCD Hobbs Office prior to running Stage Tool at 5753703186 2) If using Stage Tool on Surface casing, Stage Tool must be set greater than 350' from surface and a minimum of 200 feet above surface shoe. 3) When using a Stage Tool on Intermediate or Production Casing Stage must be a minimum of 50 feet below previous casing shoe.



NEW MEXICO

LEA

CARNE ASADA

CARNE ASADA STATE COM 502H

CARNE ASADA STATE COM 502H

Plan: PWP1

Standard Survey Report

29 August, 2019

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well CARNE ASADA STATE COM 502H
Project:	LEA	TVD Reference:	H&P650 @ 3662.3usft (H&P650 26.5+3635.8)
Site:	CARNE ASADA	MD Reference:	H&P650 @ 3662.3usft (H&P650 26.5+3635.8)
Well:	CARNE ASADA STATE COM 502H	North Reference:	True
Wellbore:	CARNE ASADA STATE COM 502H	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	Database:	Centennial EDM SQL Server

Project	LEA		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Zone 13N (108 W to 102 W)		

Site	CARNE ASADA		
Site Position:		Northing:	0.00 usft
From:	Map	Easting:	0.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	0° 0' 0.000 N
		Longitude:	109° 29' 19.478 W
		Grid Convergence:	0.00 °

Well	CARNE ASADA STATE COM 502H		
Well Position	+N/-S	0.0 usft	Northing: 11,767,033.29 usft
	+E/-W	0.0 usft	Easting: 2,132,436.51 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 24' 22.935 N
		Longitude:	103° 24' 19.086 W
		Ground Level:	3,635.8 usft

Wellbore	CARNE ASADA STATE COM 502H				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	7.69	60.44	48,919.82131112

Design	PWP1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	3.85

Survey Tool Program	Date	8/21/2019		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	17,912.0	PWP1 (CARNE ASADA STATE COM 502H)	MWD+IFR1+MS	OWSG_Rev2_ MWD + IFR1 + Multi-Station Correction

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00

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Well:	CARNE ASADA STATE COM 502H	North Reference:	True
Wellbore:	CARNE ASADA STATE COM 502H	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	Database:	Centennial EDM SQL Server

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)
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	1.45	110.00	2,100.0	-0.4	1.2	-0.4	1.45	1.45	0.00
2,200.0	2.90	110.00	2,199.9	-1.7	4.8	-1.4	1.45	1.45	0.00
2,300.0	4.35	110.00	2,299.7	-3.9	10.7	-3.2	1.45	1.45	0.00
2,400.0	5.80	110.00	2,399.3	-6.9	19.0	-5.6	1.45	1.45	0.00
2,500.0	7.25	110.00	2,498.7	-10.8	29.7	-8.8	1.45	1.45	0.00
2,600.0	7.25	110.00	2,597.9	-15.1	41.5	-12.3	0.00	0.00	0.00
2,700.0	7.25	110.00	2,697.1	-19.4	53.4	-15.8	0.00	0.00	0.00
2,800.0	7.25	110.00	2,796.3	-23.8	65.3	-19.3	0.00	0.00	0.00
2,900.0	7.25	110.00	2,895.5	-28.1	77.1	-22.8	0.00	0.00	0.00
3,000.0	7.25	110.00	2,994.7	-32.4	89.0	-26.3	0.00	0.00	0.00
3,100.0	7.25	110.00	3,093.9	-36.7	100.8	-29.9	0.00	0.00	0.00
3,200.0	7.25	110.00	3,193.1	-41.0	112.7	-33.4	0.00	0.00	0.00
3,300.0	7.25	110.00	3,292.3	-45.3	124.6	-36.9	0.00	0.00	0.00
3,400.0	7.25	110.00	3,391.5	-49.7	136.4	-40.4	0.00	0.00	0.00
3,500.0	7.25	110.00	3,490.7	-54.0	148.3	-43.9	0.00	0.00	0.00
3,600.0	7.25	110.00	3,589.9	-58.3	160.1	-47.4	0.00	0.00	0.00
3,700.0	7.25	110.00	3,689.1	-62.6	172.0	-50.9	0.00	0.00	0.00
3,800.0	7.25	110.00	3,788.3	-66.9	183.9	-54.4	0.00	0.00	0.00
3,900.0	7.25	110.00	3,887.5	-71.2	195.7	-57.9	0.00	0.00	0.00
4,000.0	7.25	110.00	3,986.7	-75.5	207.6	-61.4	0.00	0.00	0.00
4,100.0	7.25	110.00	4,085.9	-79.9	219.4	-65.0	0.00	0.00	0.00
4,200.0	7.25	110.00	4,185.1	-84.2	231.3	-68.5	0.00	0.00	0.00
4,300.0	7.25	110.00	4,284.3	-88.5	243.1	-72.0	0.00	0.00	0.00
4,400.0	7.25	110.00	4,383.5	-92.8	255.0	-75.5	0.00	0.00	0.00
4,500.0	7.25	110.00	4,482.7	-97.1	266.9	-79.0	0.00	0.00	0.00
4,600.0	7.25	110.00	4,581.9	-101.4	278.7	-82.5	0.00	0.00	0.00
4,700.0	7.25	110.00	4,681.1	-105.8	290.6	-86.0	0.00	0.00	0.00
4,800.0	7.25	110.00	4,780.3	-110.1	302.4	-89.5	0.00	0.00	0.00
4,900.0	7.25	110.00	4,879.5	-114.4	314.3	-93.0	0.00	0.00	0.00
5,000.0	7.25	110.00	4,978.7	-118.7	326.2	-96.6	0.00	0.00	0.00
5,100.0	7.25	110.00	5,077.9	-123.0	338.0	-100.1	0.00	0.00	0.00
5,200.0	7.25	110.00	5,177.1	-127.3	349.9	-103.6	0.00	0.00	0.00
5,300.0	7.25	110.00	5,276.3	-131.7	361.7	-107.1	0.00	0.00	0.00

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well CARNE ASADA STATE COM 502H
Project:	LEA	TVD Reference:	H&P650 @ 3662.3usft (H&P650 26.5+3635.8)
Site:	CARNE ASADA	MD Reference:	H&P650 @ 3662.3usft (H&P650 26.5+3635.8)
Well:	CARNE ASADA STATE COM 502H	North Reference:	True
Wellbore:	CARNE ASADA STATE COM 502H	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	Database:	Centennial EDM SQL Server

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)
5,400.0	7.25	110.00	5,375.5	-136.0	373.6	-110.6	0.00	0.00	0.00
5,500.0	7.25	110.00	5,474.7	-140.3	385.5	-114.1	0.00	0.00	0.00
5,600.0	7.25	110.00	5,573.9	-144.6	397.3	-117.6	0.00	0.00	0.00
5,700.0	7.25	110.00	5,673.1	-148.9	409.2	-121.1	0.00	0.00	0.00
5,800.0	7.25	110.00	5,772.3	-153.2	421.0	-124.6	0.00	0.00	0.00
5,900.0	7.25	110.00	5,871.5	-157.6	432.9	-128.1	0.00	0.00	0.00
6,000.0	7.25	110.00	5,970.7	-161.9	444.7	-131.7	0.00	0.00	0.00
6,100.0	7.25	110.00	6,069.9	-166.2	456.6	-135.2	0.00	0.00	0.00
6,200.0	7.25	110.00	6,169.1	-170.5	468.5	-138.7	0.00	0.00	0.00
6,300.0	7.25	110.00	6,268.3	-174.8	480.3	-142.2	0.00	0.00	0.00
6,400.0	7.25	110.00	6,367.5	-179.1	492.2	-145.7	0.00	0.00	0.00
6,500.0	7.25	110.00	6,466.7	-183.5	504.0	-149.2	0.00	0.00	0.00
6,600.0	5.80	110.00	6,566.0	-187.3	514.7	-152.4	1.45	-1.45	0.00
6,700.0	4.35	110.00	6,665.6	-190.4	523.0	-154.8	1.45	-1.45	0.00
6,800.0	2.90	110.00	6,765.4	-192.5	529.0	-156.6	1.45	-1.45	0.00
6,900.0	1.45	110.00	6,865.4	-193.8	532.5	-157.6	1.45	-1.45	0.00
7,000.0	0.00	0.00	6,965.4	-194.3	533.7	-158.0	1.45	-1.45	0.00
7,100.0	0.00	0.00	7,065.4	-194.3	533.7	-158.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,165.4	-194.3	533.7	-158.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,265.4	-194.3	533.7	-158.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,365.4	-194.3	533.7	-158.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,465.4	-194.3	533.7	-158.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,565.4	-194.3	533.7	-158.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,665.4	-194.3	533.7	-158.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,765.4	-194.3	533.7	-158.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,865.4	-194.3	533.7	-158.0	0.00	0.00	0.00
8,000.0	0.00	0.00	7,965.4	-194.3	533.7	-158.0	0.00	0.00	0.00
8,100.0	0.00	0.00	8,065.4	-194.3	533.7	-158.0	0.00	0.00	0.00
8,200.0	0.00	0.00	8,165.4	-194.3	533.7	-158.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,265.4	-194.3	533.7	-158.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,365.4	-194.3	533.7	-158.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,465.4	-194.3	533.7	-158.0	0.00	0.00	0.00
8,600.0	0.00	0.00	8,565.4	-194.3	533.7	-158.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,665.4	-194.3	533.7	-158.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,765.4	-194.3	533.7	-158.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,865.4	-194.3	533.7	-158.0	0.00	0.00	0.00
9,000.0	0.00	0.00	8,965.4	-194.3	533.7	-158.0	0.00	0.00	0.00
9,100.0	0.00	0.00	9,065.4	-194.3	533.7	-158.0	0.00	0.00	0.00
9,200.0	0.00	0.00	9,165.4	-194.3	533.7	-158.0	0.00	0.00	0.00
9,300.0	0.00	0.00	9,265.4	-194.3	533.7	-158.0	0.00	0.00	0.00
9,400.0	0.00	0.00	9,365.4	-194.3	533.7	-158.0	0.00	0.00	0.00
9,500.0	0.00	0.00	9,465.4	-194.3	533.7	-158.0	0.00	0.00	0.00
9,540.7	0.00	0.00	9,506.1	-194.3	533.7	-158.0	0.00	0.00	0.00

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Design:	PWP1	Database:	Centennial EDM SQL Server

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)
9,600.0	5.93	359.96	9,565.2	-191.2	533.7	-154.9	10.00	10.00	0.00
9,700.0	15.93	359.96	9,663.3	-172.3	533.7	-136.0	10.00	10.00	0.00
9,800.0	25.93	359.96	9,756.6	-136.6	533.7	-100.4	10.00	10.00	0.00
9,900.0	35.93	359.96	9,842.3	-85.2	533.7	-49.2	10.00	10.00	0.00
10,000.0	45.93	359.96	9,917.7	-19.8	533.6	16.0	10.00	10.00	0.00
10,100.0	55.93	359.96	9,980.7	57.7	533.6	93.4	10.00	10.00	0.00
10,200.0	65.93	359.96	10,029.2	145.0	533.5	180.5	10.00	10.00	0.00
10,300.0	75.93	359.96	10,061.8	239.4	533.4	274.7	10.00	10.00	0.00
10,400.0	85.93	359.96	10,077.6	338.0	533.4	373.1	10.00	10.00	0.00
10,440.7	90.00	359.96	10,079.0	378.7	533.3	413.6	10.00	10.00	0.00
10,500.0	90.00	359.96	10,079.0	438.0	533.3	472.8	0.00	0.00	0.00
10,600.0	90.00	359.96	10,079.0	538.0	533.2	572.6	0.00	0.00	0.00
10,700.0	90.00	359.96	10,079.0	638.0	533.1	672.3	0.00	0.00	0.00
10,800.0	90.00	359.96	10,079.0	738.0	533.1	772.1	0.00	0.00	0.00
10,900.0	90.00	359.96	10,079.0	838.0	533.0	871.9	0.00	0.00	0.00
11,000.0	90.00	359.96	10,079.0	938.0	532.9	971.7	0.00	0.00	0.00
11,100.0	90.00	359.96	10,079.0	1,038.0	532.9	1,071.4	0.00	0.00	0.00
11,200.0	90.00	359.96	10,079.0	1,138.0	532.8	1,171.2	0.00	0.00	0.00
11,300.0	90.00	359.96	10,079.0	1,238.0	532.7	1,271.0	0.00	0.00	0.00
11,400.0	90.00	359.96	10,079.0	1,338.0	532.7	1,370.7	0.00	0.00	0.00
11,500.0	90.00	359.96	10,079.0	1,438.0	532.6	1,470.5	0.00	0.00	0.00
11,600.0	90.00	359.96	10,079.0	1,538.0	532.5	1,570.3	0.00	0.00	0.00
11,700.0	90.00	359.96	10,079.0	1,638.0	532.4	1,670.0	0.00	0.00	0.00
11,800.0	90.00	359.96	10,079.0	1,738.0	532.4	1,769.8	0.00	0.00	0.00
11,900.0	90.00	359.96	10,079.0	1,838.0	532.3	1,869.6	0.00	0.00	0.00
12,000.0	90.00	359.96	10,079.0	1,938.0	532.2	1,969.4	0.00	0.00	0.00
12,100.0	90.00	359.96	10,079.0	2,038.0	532.2	2,069.1	0.00	0.00	0.00
12,200.0	90.00	359.96	10,079.0	2,138.0	532.1	2,168.9	0.00	0.00	0.00
12,300.0	90.00	359.96	10,079.0	2,238.0	532.0	2,268.7	0.00	0.00	0.00
12,400.0	90.00	359.96	10,079.0	2,338.0	532.0	2,368.4	0.00	0.00	0.00
12,500.0	90.00	359.96	10,079.0	2,438.0	531.9	2,468.2	0.00	0.00	0.00
12,600.0	90.00	359.96	10,079.0	2,538.0	531.8	2,568.0	0.00	0.00	0.00
12,700.0	90.00	359.96	10,079.0	2,638.0	531.7	2,667.7	0.00	0.00	0.00
12,800.0	90.00	359.96	10,079.0	2,738.0	531.7	2,767.5	0.00	0.00	0.00
12,900.0	90.00	359.96	10,079.0	2,838.0	531.6	2,867.3	0.00	0.00	0.00
13,000.0	90.00	359.96	10,079.0	2,938.0	531.5	2,967.0	0.00	0.00	0.00
13,100.0	90.00	359.96	10,079.0	3,038.0	531.5	3,066.8	0.00	0.00	0.00
13,200.0	90.00	359.96	10,079.0	3,138.0	531.4	3,166.6	0.00	0.00	0.00
13,300.0	90.00	359.96	10,079.0	3,238.0	531.3	3,266.4	0.00	0.00	0.00
13,400.0	90.00	359.96	10,079.0	3,338.0	531.3	3,366.1	0.00	0.00	0.00
13,500.0	90.00	359.96	10,079.0	3,438.0	531.2	3,465.9	0.00	0.00	0.00
13,600.0	90.00	359.96	10,079.0	3,538.0	531.1	3,565.7	0.00	0.00	0.00
13,700.0	90.00	359.96	10,079.0	3,638.0	531.1	3,665.4	0.00	0.00	0.00

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well CARNE ASADA STATE COM 502H
Project:	LEA	TVD Reference:	H&P650 @ 3662.3usft (H&P650 26.5+3635.8)
Site:	CARNE ASADA	MD Reference:	H&P650 @ 3662.3usft (H&P650 26.5+3635.8)
Well:	CARNE ASADA STATE COM 502H	North Reference:	True
Wellbore:	CARNE ASADA STATE COM 502H	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	Database:	Centennial EDM SQL Server

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)
13,800.0	90.00	359.96	10,079.0	3,738.0	531.0	3,765.2	0.00	0.00	0.00
13,900.0	90.00	359.96	10,079.0	3,838.0	530.9	3,865.0	0.00	0.00	0.00
14,000.0	90.00	359.96	10,079.0	3,938.0	530.8	3,964.7	0.00	0.00	0.00
14,100.0	90.00	359.96	10,079.0	4,038.0	530.8	4,064.5	0.00	0.00	0.00
14,200.0	90.00	359.96	10,079.0	4,138.0	530.7	4,164.3	0.00	0.00	0.00
14,300.0	90.00	359.96	10,079.0	4,238.0	530.6	4,264.1	0.00	0.00	0.00
14,400.0	90.00	359.96	10,079.0	4,338.0	530.6	4,363.8	0.00	0.00	0.00
14,500.0	90.00	359.96	10,079.0	4,438.0	530.5	4,463.6	0.00	0.00	0.00
14,600.0	90.00	359.96	10,079.0	4,538.0	530.4	4,563.4	0.00	0.00	0.00
14,700.0	90.00	359.96	10,079.0	4,638.0	530.4	4,663.1	0.00	0.00	0.00
14,800.0	90.00	359.96	10,079.0	4,738.0	530.3	4,762.9	0.00	0.00	0.00
14,900.0	90.00	359.96	10,079.0	4,838.0	530.2	4,862.7	0.00	0.00	0.00
15,000.0	90.00	359.96	10,079.0	4,938.0	530.1	4,962.4	0.00	0.00	0.00
15,100.0	90.00	359.96	10,079.0	5,038.0	530.1	5,062.2	0.00	0.00	0.00
15,200.0	90.00	359.96	10,079.0	5,138.0	530.0	5,162.0	0.00	0.00	0.00
15,300.0	90.00	359.96	10,079.0	5,238.0	529.9	5,261.8	0.00	0.00	0.00
15,400.0	90.00	359.96	10,079.0	5,338.0	529.9	5,361.5	0.00	0.00	0.00
15,500.0	90.00	359.96	10,079.0	5,438.0	529.8	5,461.3	0.00	0.00	0.00
15,600.0	90.00	359.96	10,079.0	5,538.0	529.7	5,561.1	0.00	0.00	0.00
15,700.0	90.00	359.96	10,079.0	5,638.0	529.7	5,660.8	0.00	0.00	0.00
15,800.0	90.00	359.96	10,079.0	5,738.0	529.6	5,760.6	0.00	0.00	0.00
15,900.0	90.00	359.96	10,079.0	5,838.0	529.5	5,860.4	0.00	0.00	0.00
16,000.0	90.00	359.96	10,079.0	5,938.0	529.4	5,960.1	0.00	0.00	0.00
16,100.0	90.00	359.96	10,079.0	6,038.0	529.4	6,059.9	0.00	0.00	0.00
16,200.0	90.00	359.96	10,079.0	6,138.0	529.3	6,159.7	0.00	0.00	0.00
16,300.0	90.00	359.96	10,079.0	6,238.0	529.2	6,259.5	0.00	0.00	0.00
16,400.0	90.00	359.96	10,079.0	6,338.0	529.2	6,359.2	0.00	0.00	0.00
16,500.0	90.00	359.96	10,079.0	6,438.0	529.1	6,459.0	0.00	0.00	0.00
16,600.0	90.00	359.96	10,079.0	6,538.0	529.0	6,558.8	0.00	0.00	0.00
16,700.0	90.00	359.96	10,079.0	6,638.0	529.0	6,658.5	0.00	0.00	0.00
16,800.0	90.00	359.96	10,079.0	6,738.0	528.9	6,758.3	0.00	0.00	0.00
16,900.0	90.00	359.96	10,079.0	6,838.0	528.8	6,858.1	0.00	0.00	0.00
17,000.0	90.00	359.96	10,079.0	6,938.0	528.7	6,957.8	0.00	0.00	0.00
17,100.0	90.00	359.96	10,079.0	7,038.0	528.7	7,057.6	0.00	0.00	0.00
17,200.0	90.00	359.96	10,079.0	7,138.0	528.6	7,157.4	0.00	0.00	0.00
17,300.0	90.00	359.96	10,079.0	7,238.0	528.5	7,257.1	0.00	0.00	0.00
17,400.0	90.00	359.96	10,079.0	7,338.0	528.5	7,356.9	0.00	0.00	0.00
17,500.0	90.00	359.96	10,079.0	7,438.0	528.4	7,456.7	0.00	0.00	0.00
17,600.0	90.00	359.96	10,079.0	7,538.0	528.3	7,556.5	0.00	0.00	0.00
17,700.0	90.00	359.96	10,079.0	7,638.0	528.3	7,656.2	0.00	0.00	0.00
17,800.0	90.00	359.96	10,079.0	7,738.0	528.2	7,756.0	0.00	0.00	0.00
17,900.0	90.00	359.96	10,079.0	7,838.0	528.1	7,855.8	0.00	0.00	0.00
17,911.7	90.00	359.96	10,079.0	7,849.7	528.1	7,867.4	0.00	0.00	0.00

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well CARNE ASADA STATE COM 502H
Project:	LEA	TVD Reference:	H&P650 @ 3662.3usft (H&P650 26.5+3635.8)
Site:	CARNE ASADA	MD Reference:	H&P650 @ 3662.3usft (H&P650 26.5+3635.8)
Well:	CARNE ASADA STATE COM 502H	North Reference:	True
Wellbore:	CARNE ASADA STATE COM 502H	Survey Calculation Method:	Minimum Curvature
Design:	PWP1	Database:	Centennial EDM SQL Server

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
LTP/BHL - CARNE ASAI - hit/miss target - Shape	0.00	0.00	10,052.3	7,849.7	528.3	11,774,889.99	2,132,847.65	32° 25' 40.616 N	103° 24' 12.921 W
- plan misses target center by 26.7usft at 17911.7usft MD (10079.0 TVD, 7849.7 N, 528.1 E)									
- Point									
90° - CARNE ASADA S1 - hit/miss target - Shape	0.00	0.00	10,052.3	270.3	519.4	11,767,311.36	2,132,951.79	32° 24' 25.610 N	103° 24' 13.027 W
- plan misses target center by 21.3usft at 10329.1usft MD (10068.2 TVD, 267.8 N, 533.4 E)									
- Point									
FTP - CARNE ASADA 5i - hit/miss target - Shape	0.00	0.00	10,052.3	44.5	533.3	11,767,085.72	2,132,969.08	32° 24' 23.375 N	103° 24' 12.865 W
- plan misses target center by 67.5usft at 10123.3usft MD (9993.3 TVD, 77.2 N, 533.5 E)									
- Circle (radius 50.0)									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,800.0	1,800.0	13 3/8"	13-3/8	17-1/2	
5,525.5	5,500.0	9 5/8"	9-5/8	12-1/4	
17,912.0		5 1/2"	5-1/2	8-1/2	

Checked By: _____ Approved By: _____ Date: _____