

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018**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.*5. Lease Serial No.
COTTONWOOD 29-32 FED COM WCB 4H

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.

COTTONWOOD 29-32 FED COM WCB 4H

2. Name of Operator

CHISHOLM ENERGY OPERATING, LLC

Contact: JENNIFER ELROD

Email: jelrod@chisholmenergy.com

9. API Well No.

30-015-43705

3a. Address

801 CHERRY ST., SUITE 1200 UNIT-20
FORT WORTH, TX 76102

3b. Phone No. (include area code)

Ph: 817-953-3728

10. Field and Pool or Exploratory Area

PURPLE SAGE; WOLFCAMP (GAS)

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 29 T26S R26E Mer NMP NENE 100FNL 1240FEL
32.020228 N Lat, 104.310428 W Lon

11. County or Parish, State

EDDY COUNTY, NM

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	
	☐ 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.

09/14/2017- SUNDRY FILED TO MOVE LANDING POINT AND BOTTOM HOLE LOCATION

A) MOVE LANDING POINT

FROM: 330 FNL & 660 FEL
TO: 330 FNL & 440 FEL

B) MOVE BOTTOM HOLE LOCATION

FROM: 330 FSL & 660 FEL
TO: 330 FSL & 440 FEL

- All previous CoAs still apply.

BUREAU OF LAND MANAGEMENT
ARTESIA DISTRICT
MAR 05 2018

RECEIVED

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #388494 verified by the BLM Well Information System
For CHISHOLM ENERGY OPERATING, LLC, sent to the Carlsbad
Committed to AFMSS for processing by PRISCILLA PEREZ on 10/03/2017 ()

Name (Printed/Typed) JENNIFER ELROD

Title SR. REGULATORY TECH

Signature (Electronic Submission)

Date 09/14/2017

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <u>Mustafa Hagve</u>	Title <u>PETROLEUM ENGINEER</u>	Date <u>2-28-2018</u>
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 <u>CFO</u>	

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)

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

NSP
RNP. 3-9-18

DISTRICT I

1825 N. French Dr., Hobbs, NM 88240
Phone (505) 393-6161 Fax: (505) 393-0720

DISTRICT II

811 S. First St., Artesia, NM 88210
Phone (505) 748-1283 Fax: (505) 748-9720

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV

1226 S. St. Francis Dr., Santa Fe, NM 87506
Phone (505) 478-3480 Fax: (505) 478-3482

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

1226 South St. Francis Dr.
Santa Fe, New Mexico 87505

OIL CONSERVATION

ARTESIA DISTRICT

Form C-102

MAR 05 2018 Revised August 1, 2011

Submit one copy to appropriate
District Office

RECEIVED

WELL LOCATION AND ACREAGE DEDICATION PLAT

X AMENDED REPORT

API Number 30-015-43705	Pool Code 98220	Pool Name Purple Sage Wolfcamp
Property Code	Property Name COTTONWOOD 29-32 FED COM WCB	Well Number 4H
OGRID No. 372137	Operator Name CHISHOLM ENERGY OPERATING, LLC	Elevation 3421'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	FEET from the	North/SOUTH LINE	FEET from the	East/West Line	County
A	29	26 S	26 E		100	NORTH	1240	EAST	EDDY

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
LOT 1	32	26 S	26 E		330	SOUTH	440	EAST	EDDY
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						
223.08									

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

SURFACE LOCATION
Lat - N 32.02022817°
Long - W 104.31042797°
NMSPCE - N 371098.7
E 548436.3
(NAD-83)

LANDING POINT
330' FNL & 440' FEL
Lat - N 32.01959722°
Long - W 104.30784324°
NMSPCE - N 370869.3
E 549237.4
(NAD-83)

BOTTOM HOLE LOCATION
Lat - N 32.00100577°
Long - W 104.30773456°
NMSPCE - N 364106.3
E 549272.7
(NAD-83)

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.

Signature: *Jennifer Elrod* Date: 9/6/17
Printed Name: Jennifer Elrod
Email Address: jelrod@chisholmenergy.com

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.

Date Surveyed: 9/6/17
Signature of Professional Surveyor: *[Signature]*
Certificate No.: 7977
Scale: 1" = 2000'
WO Num.: 33259



CHISHOLM
ENERGY

Chisholm Energy Holdings, LLC
Project: Eddy County, NM (NAD83)
Site: Sec 29-T26S-R26E
Well: Cottonwood 29-32 Fed Com WCB 4H
Wellbore: Wellbore #1
Plan: Plan #3 (Cottonwood 29-32 Fed Com WCB 4H/Wellbore #1)
Nabors M55

INTEGRITY
Directional Services

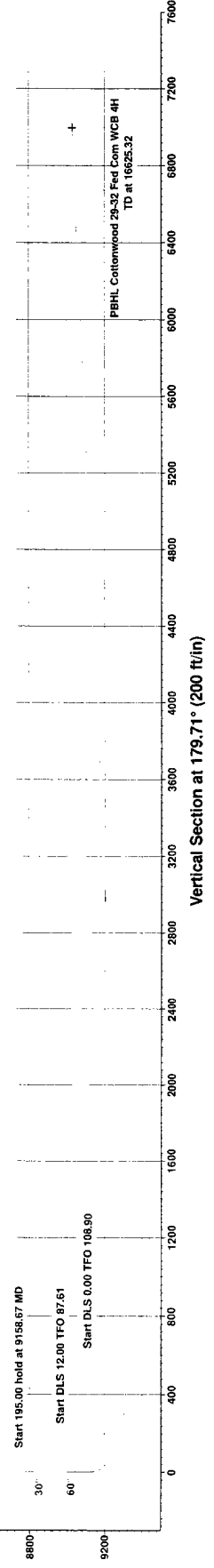
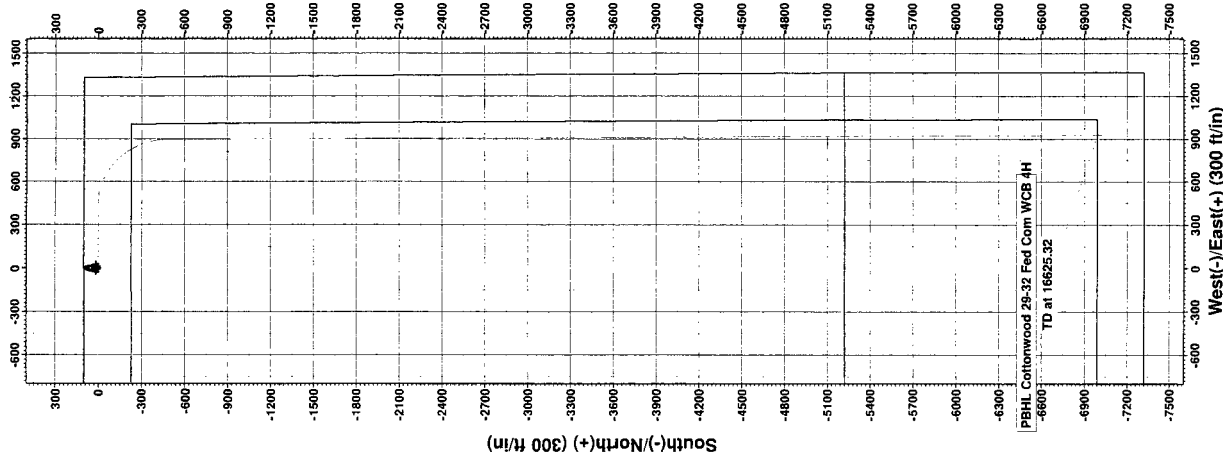
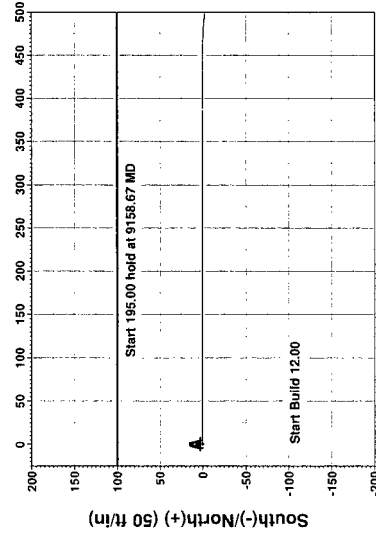
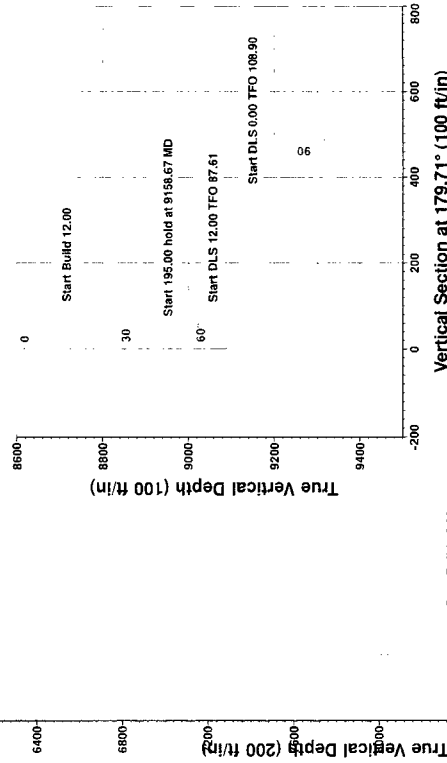
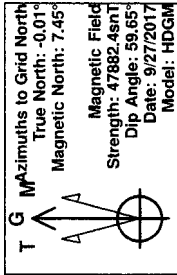
WELL DETAILS: Cottonwood 29-32 Fed Com WCB 4H
Ground Elevation:: 3421.00
RKB Elevation: KB-22 @ 3443.00ft (Nabors M55)
Rig Name: Nabors M55

Northing 371098.7000 Easting 548346.3000 Latitude 32.020228 Longitude -104.310718

PROJECT DETAILS: Eddy County, NM (NAD83)
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level
Local North: Grid

Planned Section Details

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VFace	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	8617.00	0.00	0.00	8617.00	0.00	0.00	0.00	0.00	0.00	Start Build 12.00
3	9158.67	65.00	90.00	9049.73	0.00	275.68	12.00	90.00	1.40	Start 195.00 hold at 9158.67 MD
4	9353.67	65.00	90.00	9132.14	0.00	452.41	0.00	0.00	2.29	Start DLS 12.00 TFO 87.61
5	10110.28	92.50	179.71	9315.62	-483.66	893.63	12.00	87.61	488.18	Start DLS 0.00 TFO 108.90
6	16625.32	92.50	179.71	9031.50	-6992.41	926.40	0.00	108.90	6997.01	TD at 16625.32



WILSON CONSERVATION

APTESIA DISTRICT

MAR 05 2018

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Chisholm Energy Holdings, LLC

Eddy County, NM (NAD83)

Sec 29-T26S-R26E

Cottonwood 29-32 Fed Com WCB 4H

Wellbore #1

Plan: Plan #3

Standard Planning Report

20 November, 2017

Planning Report

Database:	EDM 5000.1	Local Co-ordinate Reference:	Well Cottonwood 29-32 Fed Com WCB 4H
Company:	Chisholm Energy Holdings, LLC	TVD Reference:	KB=22 @ 3443.00ft (Nabors M55)
Project:	Eddy County, NM (NAD83)	MD Reference:	KB=22 @ 3443.00ft (Nabors M55)
Site:	Sec 29-T26S-R26E	North Reference:	Grid
Well:	Cottonwood 29-32 Fed Com WCB 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

Project	Eddy County, NM (NAD83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site Sec 29-T26S-R26E

Site Position:		Northing:	370,998.9779 usft	Latitude:	32.019956
From:	Map	Easting:	545,508.9000 usft	Longitude:	-104.319874
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.01 °

Well Cottonwood 29-32 Fed Com WCB 4H

Well Position	+N/-S	99.72 ft	Northing:	371,098.7000 usft	Latitude:	32.020228
	+E/-W	2,837.41 ft	Easting:	548,346.3000 usft	Longitude:	-104.310719
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	3,421.00 ft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	HDGM	9/27/2017	7.47	59.65	47,882

Design Plan #3

Audit Notes:

Version:	Phase:	PLAN	Tie On Depth:	0.00
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Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	179.71

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8,617.00	0.00	0.00	8,617.00	0.00	0.00	0.00	0.00	0.00	0.00	
9,158.67	65.00	90.00	9,049.73	0.00	275.68	12.00	12.00	0.00	90.00	
9,353.67	65.00	90.00	9,132.14	0.00	452.41	0.00	0.00	0.00	0.00	
10,110.28	92.50	179.71	9,315.62	-483.66	893.63	12.00	3.63	11.86	87.61	
16,625.32	92.50	179.71	9,031.50	-6,992.41	926.40	0.00	0.00	0.00	108.90	PBHL Cottonwood 29

Planning Report

Database: EDM 5000.1
Company: Chisholm Energy Holdings, LLC
Project: Eddy County, NM (NAD83)
Site: Sec 29-T26S-R26E
Well: Cottonwood 29-32 Fed Com WCB 4H
Wellbore: Wellbore #1
Design: Plan #3

Local Co-ordinate Reference: Well Cottonwood 29-32 Fed Com WCB 4H
TVD Reference: KB=22 @ 3443.00ft (Nabors M55)
MD Reference: KB=22 @ 3443.00ft (Nabors M55)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00

Planning Report

Database: EDM 5000.1
Company: Chisholm Energy Holdings, LLC
Project: Eddy County, NM (NAD83)
Site: Sec 29-T26S-R26E
Well: Cottonwood 29-32 Fed Com WCB 4H
Wellbore: Wellbore #1
Design: Plan #3

Local Co-ordinate Reference: Well Cottonwood 29-32 Fed Com WCB 4H
TVD Reference: KB=22 @ 3443.00ft (Nabors M55)
MD Reference: KB=22 @ 3443.00ft (Nabors M55)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Bulld Rate (°/100usft)	Turn Rate (°/100usft)
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00
8,000.00	0.00	0.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00
8,100.00	0.00	0.00	8,100.00	0.00	0.00	0.00	0.00	0.00	0.00
8,200.00	0.00	0.00	8,200.00	0.00	0.00	0.00	0.00	0.00	0.00
8,300.00	0.00	0.00	8,300.00	0.00	0.00	0.00	0.00	0.00	0.00
8,400.00	0.00	0.00	8,400.00	0.00	0.00	0.00	0.00	0.00	0.00
8,500.00	0.00	0.00	8,500.00	0.00	0.00	0.00	0.00	0.00	0.00
8,600.00	0.00	0.00	8,600.00	0.00	0.00	0.00	0.00	0.00	0.00
8,617.00	0.00	0.00	8,617.00	0.00	0.00	0.00	0.00	0.00	0.00
8,625.00	0.96	90.00	8,625.00	0.00	0.07	0.00	12.00	12.00	0.00
8,650.00	3.96	90.00	8,649.97	0.00	1.14	0.01	12.00	12.00	0.00
8,675.00	6.96	90.00	8,674.86	0.00	3.52	0.02	12.00	12.00	0.00
8,700.00	9.96	90.00	8,699.58	0.00	7.20	0.04	12.00	12.00	0.00
8,725.00	12.96	90.00	8,724.08	0.00	12.16	0.06	12.00	12.00	0.00
8,750.00	15.96	90.00	8,748.29	0.00	18.40	0.09	12.00	12.00	0.00
8,775.00	18.96	90.00	8,772.13	0.00	25.90	0.13	12.00	12.00	0.00
8,800.00	21.96	90.00	8,795.55	0.00	34.64	0.18	12.00	12.00	0.00
8,825.00	24.96	90.00	8,818.48	0.00	44.59	0.23	12.00	12.00	0.00
8,850.00	27.96	90.00	8,840.86	0.00	55.73	0.28	12.00	12.00	0.00
8,875.00	30.96	90.00	8,862.63	0.00	68.03	0.34	12.00	12.00	0.00
8,900.00	33.96	90.00	8,883.72	0.00	81.44	0.41	12.00	12.00	0.00
8,925.00	36.96	90.00	8,904.08	0.00	95.94	0.49	12.00	12.00	0.00
8,950.00	39.96	90.00	8,923.65	0.00	111.49	0.56	12.00	12.00	0.00
8,975.00	42.96	90.00	8,942.39	0.00	128.04	0.65	12.00	12.00	0.00
9,000.00	45.96	90.00	8,960.23	0.00	145.55	0.74	12.00	12.00	0.00
9,025.00	48.96	90.00	8,977.13	0.00	163.97	0.83	12.00	12.00	0.00
9,050.00	51.96	90.00	8,993.04	0.00	183.25	0.93	12.00	12.00	0.00
9,075.00	54.96	90.00	9,007.93	0.00	203.33	1.03	12.00	12.00	0.00
9,100.00	57.96	90.00	9,021.74	0.00	224.16	1.13	12.00	12.00	0.00

Planning Report

Database: EDM 5000.1
Company: Chisholm Energy Holdings, LLC
Project: Eddy County, NM (NAD83)
Site: Sec 29-T26S-R26E
Well: Cottonwood 29-32 Fed Com WCB 4H
Wellbore: Wellbore #1
Design: Plan #3

Local Co-ordinate Reference: Well Cottonwood 29-32 Fed Com WCB 4H
TVD Reference: KB=22 @ 3443.00ft (Nabors M55)
MD Reference: KB=22 @ 3443.00ft (Nabors M55)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,125.00	60.96	90.00	9,034.44	0.00	245.69	1.24	12.00	12.00	0.00
9,150.00	63.96	90.00	9,046.00	0.00	267.86	1.36	12.00	12.00	0.00
9,158.67	65.00	90.00	9,049.73	0.00	275.68	1.40	12.00	12.00	0.00
9,200.00	65.00	90.00	9,067.20	0.00	313.14	1.58	0.00	0.00	0.00
9,300.00	65.00	90.00	9,109.46	0.00	403.77	2.04	0.00	0.00	0.00
9,353.67	65.00	90.00	9,132.14	0.00	452.41	2.29	0.00	0.00	0.00
9,375.00	65.13	92.82	9,141.14	-0.48	471.75	2.86	12.00	0.62	13.22
9,400.00	65.36	96.11	9,151.61	-2.24	494.38	4.75	12.00	0.89	13.18
9,425.00	65.65	99.39	9,161.98	-5.31	516.91	7.93	12.00	1.18	13.12
9,450.00	66.02	102.66	9,172.21	-9.68	539.30	12.41	12.00	1.46	13.06
9,475.00	66.45	105.90	9,182.29	-15.32	561.46	18.16	12.00	1.73	12.97
9,500.00	66.95	109.12	9,192.18	-22.23	583.36	25.18	12.00	2.00	12.88
9,525.00	67.52	112.32	9,201.86	-30.39	604.91	33.45	12.00	2.26	12.78
9,550.00	68.14	115.49	9,211.29	-39.77	626.08	42.93	12.00	2.51	12.67
9,575.00	68.83	118.62	9,220.46	-50.34	646.79	53.62	12.00	2.75	12.56
9,600.00	69.58	121.73	9,229.34	-62.09	666.98	65.47	12.00	2.98	12.43
9,625.00	70.37	124.81	9,237.90	-74.98	686.62	78.45	12.00	3.20	12.31
9,650.00	71.23	127.86	9,246.13	-88.97	705.63	92.54	12.00	3.40	12.18
9,675.00	72.13	130.87	9,253.99	-104.02	723.98	107.68	12.00	3.60	12.06
9,700.00	73.07	133.86	9,261.47	-120.09	741.60	123.84	12.00	3.78	11.93
9,725.00	74.06	136.81	9,268.54	-137.14	758.45	140.98	12.00	3.95	11.81
9,750.00	75.09	139.73	9,275.19	-155.13	774.49	159.05	12.00	4.11	11.69
9,775.00	76.15	142.63	9,281.40	-173.99	789.67	177.99	12.00	4.26	11.58
9,800.00	77.25	145.50	9,287.15	-193.69	803.95	197.76	12.00	4.40	11.47
9,825.00	78.38	148.34	9,292.43	-214.16	817.28	218.30	12.00	4.52	11.37
9,850.00	79.54	151.16	9,297.22	-235.36	829.64	239.55	12.00	4.63	11.28
9,875.00	80.72	153.96	9,301.50	-257.21	840.99	261.47	12.00	4.73	11.20
9,900.00	81.92	156.74	9,305.27	-279.67	851.30	283.98	12.00	4.81	11.12
9,925.00	83.15	159.50	9,308.52	-302.67	860.53	307.03	12.00	4.89	11.05
9,950.00	84.38	162.25	9,311.24	-326.15	868.67	330.54	12.00	4.95	11.00
9,975.00	85.64	164.99	9,313.41	-350.04	875.69	354.47	12.00	5.00	10.95
10,000.00	86.90	167.72	9,315.04	-374.28	881.58	378.74	12.00	5.04	10.91
10,025.00	88.16	170.44	9,316.12	-398.81	886.31	403.29	12.00	5.07	10.89
10,050.00	89.43	173.16	9,316.64	-423.54	889.88	428.04	12.00	5.09	10.87
10,075.00	90.71	175.87	9,316.61	-448.42	892.27	452.93	12.00	5.09	10.87
10,100.00	91.98	178.59	9,316.03	-473.38	893.47	477.90	12.00	5.08	10.87
10,110.28	92.50	179.71	9,315.62	-483.66	893.63	488.18	12.00	5.07	10.88
10,200.00	92.50	179.71	9,311.71	-573.29	894.08	577.81	0.00	0.00	0.00
10,300.00	92.50	179.71	9,307.35	-673.19	894.58	677.71	0.00	0.00	0.00
10,400.00	92.50	179.71	9,302.99	-773.10	895.09	777.62	0.00	0.00	0.00
10,500.00	92.50	179.71	9,298.63	-873.00	895.60	877.52	0.00	0.00	0.00
10,600.00	92.50	179.71	9,294.26	-972.90	896.10	977.43	0.00	0.00	0.00
10,700.00	92.50	179.71	9,289.90	-1,072.81	896.61	1,077.33	0.00	0.00	0.00
10,800.00	92.50	179.71	9,285.54	-1,172.71	897.11	1,177.24	0.00	0.00	0.00
10,900.00	92.50	179.71	9,281.18	-1,272.61	897.62	1,277.14	0.00	0.00	0.00
11,000.00	92.50	179.71	9,276.82	-1,372.52	898.12	1,377.05	0.00	0.00	0.00
11,100.00	92.50	179.71	9,272.46	-1,472.42	898.63	1,476.95	0.00	0.00	0.00
11,200.00	92.50	179.71	9,268.09	-1,572.32	899.13	1,576.86	0.00	0.00	0.00
11,300.00	92.50	179.71	9,263.73	-1,672.23	899.64	1,676.76	0.00	0.00	0.00
11,400.00	92.50	179.71	9,259.37	-1,772.13	900.14	1,776.67	0.00	0.00	0.00
11,500.00	92.50	179.71	9,255.01	-1,872.04	900.64	1,876.57	0.00	0.00	0.00
11,600.00	92.50	179.71	9,250.65	-1,971.94	901.15	1,976.47	0.00	0.00	0.00
11,700.00	92.50	179.71	9,246.29	-2,071.84	901.65	2,076.38	0.00 *	0.00	0.00
11,800.00	92.50	179.71	9,241.92	-2,171.75	902.16	2,176.28	0.00	0.00	0.00

Planning Report

Database: EDM 5000.1
Company: Chisholm Energy Holdings, LLC
Project: Eddy County, NM (NAD83)
Site: Sec 29-T26S-R26E
Well: Cottonwood 29-32 Fed Com WCB 4H
Wellbore: Wellbore #1
Design: Plan #3

Local Co-ordinate Reference: Well Cottonwood 29-32 Fed Com WCB 4H
TVD Reference: KB=22 @ 3443.00ft (Nabors M55)
MD Reference: KB=22 @ 3443.00ft (Nabors M55)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,900.00	92.50	179.71	9,237.56	-2,271.65	902.66	2,276.19	0.00	0.00	0.00
12,000.00	92.50	179.71	9,233.20	-2,371.55	903.17	2,376.09	0.00	0.00	0.00
12,100.00	92.50	179.71	9,228.84	-2,471.46	903.67	2,476.00	0.00	0.00	0.00
12,200.00	92.50	179.71	9,224.48	-2,571.36	904.17	2,575.90	0.00	0.00	0.00
12,300.00	92.50	179.71	9,220.12	-2,671.26	904.68	2,675.81	0.00	0.00	0.00
12,400.00	92.50	179.71	9,215.76	-2,771.17	905.18	2,775.71	0.00	0.00	0.00
12,500.00	92.50	179.71	9,211.39	-2,871.07	905.69	2,875.62	0.00	0.00	0.00
12,600.00	92.50	179.71	9,207.03	-2,970.97	906.19	2,975.52	0.00	0.00	0.00
12,700.00	92.50	179.71	9,202.67	-3,070.88	906.69	3,075.43	0.00	0.00	0.00
12,800.00	92.50	179.71	9,198.31	-3,170.78	907.20	3,175.33	0.00	0.00	0.00
12,900.00	92.50	179.71	9,193.95	-3,270.69	907.70	3,275.24	0.00	0.00	0.00
13,000.00	92.50	179.71	9,189.59	-3,370.59	908.20	3,375.14	0.00	0.00	0.00
13,100.00	92.50	179.71	9,185.23	-3,470.49	908.71	3,475.05	0.00	0.00	0.00
13,200.00	92.50	179.71	9,180.87	-3,570.40	909.21	3,574.95	0.00	0.00	0.00
13,300.00	92.50	179.71	9,176.51	-3,670.30	909.71	3,674.86	0.00	0.00	0.00
13,400.00	92.50	179.71	9,172.14	-3,770.20	910.22	3,774.76	0.00	0.00	0.00
13,500.00	92.50	179.71	9,167.78	-3,870.11	910.72	3,874.67	0.00	0.00	0.00
13,600.00	92.50	179.71	9,163.42	-3,970.01	911.22	3,974.57	0.00	0.00	0.00
13,700.00	92.50	179.71	9,159.06	-4,069.91	911.73	4,074.48	0.00	0.00	0.00
13,800.00	92.50	179.71	9,154.70	-4,169.82	912.23	4,174.38	0.00	0.00	0.00
13,900.00	92.50	179.71	9,150.34	-4,269.72	912.73	4,274.29	0.00	0.00	0.00
14,000.00	92.50	179.71	9,145.98	-4,369.63	913.23	4,374.19	0.00	0.00	0.00
14,100.00	92.50	179.71	9,141.62	-4,469.53	913.74	4,474.10	0.00	0.00	0.00
14,200.00	92.50	179.71	9,137.26	-4,569.43	914.24	4,574.00	0.00	0.00	0.00
14,300.00	92.50	179.71	9,132.90	-4,669.34	914.74	4,673.91	0.00	0.00	0.00
14,400.00	92.50	179.71	9,128.53	-4,769.24	915.24	4,773.81	0.00	0.00	0.00
14,500.00	92.50	179.71	9,124.17	-4,869.14	915.75	4,873.72	0.00	0.00	0.00
14,600.00	92.50	179.71	9,119.81	-4,969.05	916.25	4,973.62	0.00	0.00	0.00
14,700.00	92.50	179.71	9,115.45	-5,068.95	916.75	5,073.53	0.00	0.00	0.00
14,800.00	92.50	179.71	9,111.09	-5,168.85	917.25	5,173.43	0.00	0.00	0.00
14,900.00	92.50	179.71	9,106.73	-5,268.76	917.75	5,273.34	0.00	0.00	0.00
15,000.00	92.50	179.71	9,102.37	-5,368.66	918.26	5,373.24	0.00	0.00	0.00
15,100.00	92.50	179.71	9,098.01	-5,468.56	918.76	5,473.15	0.00	0.00	0.00
15,200.00	92.50	179.71	9,093.65	-5,568.47	919.26	5,573.05	0.00	0.00	0.00
15,300.00	92.50	179.71	9,089.29	-5,668.37	919.76	5,672.95	0.00	0.00	0.00
15,400.00	92.50	179.71	9,084.93	-5,768.28	920.26	5,772.86	0.00	0.00	0.00
15,500.00	92.50	179.71	9,080.57	-5,868.18	920.76	5,872.76	0.00	0.00	0.00
15,600.00	92.50	179.71	9,076.21	-5,968.08	921.27	5,972.67	0.00	0.00	0.00
15,700.00	92.50	179.71	9,071.85	-6,067.99	921.77	6,072.57	0.00	0.00	0.00
15,800.00	92.50	179.71	9,067.49	-6,167.89	922.27	6,172.48	0.00	0.00	0.00
15,900.00	92.50	179.71	9,063.13	-6,267.79	922.77	6,272.38	0.00	0.00	0.00
16,000.00	92.50	179.71	9,058.77	-6,367.70	923.27	6,372.29	0.00	0.00	0.00
16,100.00	92.50	179.71	9,054.41	-6,467.60	923.77	6,472.19	0.00	0.00	0.00
16,200.00	92.50	179.71	9,050.05	-6,567.50	924.27	6,572.10	0.00	0.00	0.00
16,300.00	92.50	179.71	9,045.68	-6,667.41	924.77	6,672.00	0.00	0.00	0.00
16,400.00	92.50	179.71	9,041.32	-6,767.31	925.27	6,771.91	0.00	0.00	0.00
16,500.00	92.50	179.71	9,036.96	-6,867.22	925.77	6,871.81	0.00	0.00	0.00
16,600.00	92.50	179.71	9,032.60	-6,967.12	926.28	6,971.72	0.00	0.00	0.00
16,625.32	92.50	179.71	9,031.50	-6,992.41	926.40	6,997.01	0.00	0.00	0.00

PBHL Cottonwood 29-32 Fed Com WCB 4H

Planning Report

Database:	EDM 5000.1	Local Co-ordinate Reference:	Well Cottonwood 29-32 Fed Com WCB 4H
Company:	Chisholm Energy Holdings, LLC	TVD Reference:	KB=22 @ 3443.00ft (Nabors M55)
Project:	Eddy County, NM (NAD83)	MD Reference:	KB=22 @ 3443.00ft (Nabors M55)
Site:	Sec 29-T26S-R26E	North Reference:	Grid
Well:	Cottonwood 29-32 Fed Com WCB 4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3		

Design Targets

Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL Cottonwood 29-32 - plan hits target center - Point	0.00	0.00	9,031.50	-6,992.41	926.40	364,106.3000	549,272.7000	32.001006	-104.307735

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		
		+N/-S (ft)	+E/-W (ft)	Comment
8,617.00	8,617.00	0.00	0.00	Start Build 12.00
9,158.67	9,049.73	0.00	275.68	Start 195.00 hold at 9158.67 MD
9,353.67	9,132.14	0.00	452.41	Start DLS 12.00 TFO 87.61
10,110.28	9,315.62	-483.66	893.63	Start DLS 0.00 TFO 108.90
16,625.32	9,031.50	-6,992.41	926.40	TD at 16625.32