Well Name: LONESOME DOVE FED COM

Well Location: T26S / R35E / SEC 17 / TR I / 32.0423262 / -103.3846069

County or Parish/State: LEA / NM

Well Number: 424H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM110841

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002549526

Well Status: Drilling Well

Operator: TITUS OIL AND GAS PRODUCTION LLC

Notice of Intent

Sundry ID: 2646065

Type of Submission: Notice of Intent

Type of Action: Other

Date Sundry Submitted: 11/29/2021

Time Sundry Submitted: 03:12

Date proposed operation will begin: 11/29/2021

Procedure Description: Well Name Change from Lonesome Dove Fed Com 434H to Lonesome Dove Fed Come 424H; Depth Change from 12,696' TVD and 21,565' MD to 12,632' TVD and 20,748' MD; Change to Multibowl Wellhead; Adjustments to Casing and Cement to account for plan changes; Updated Choke Hose certs to match rig. Attachments: - Revised C-102 - Revised APD Drilling Plan - Revised Directional Plan - Revised Directional AC Report - Multibowl Wellhead Schematic

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

AFS___Multi_Bowl_Schematic_20211129151208.pdf

Choke_Hose_SN_74818_20211129151110.pdf

LONESOME_DOVE_FED_COM_424H__FKA_434H__C102_REV_1_SIGNED_20211129151109.pdf

Lonesome_Dove_Fed_COm_424H___APD_Drlg_Temp_20211129151109.pdf

Lonesome_Dove_Fed_Com_424H___Plan_3_11_18_21_AC_Report__1__20211129151109.pdf

Lonesome_Dove_Fed_Com_424H___Plan_3_11_18_21__1__20211129151109.pdf

Well Name: LONESOME DOVE FED COM

Well Location: T26S / R35E / SEC 17 / TR I / 32.0423262 / -103.3846069

County or Parish/State: LEA / NM

Well Number: 424H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM110841

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002549526

Well Status: Drilling Well

Operator: TITUS OIL AND GAS PRODUCTION LLC

Conditions of Approval

Additional Reviews

Lonesome_Dove_Fed_Com_424H__COA_20220118091028.pdf

Operator Certification

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: RYAN DELONG

Signed on: NOV 29, 2021 03:12 PM

Name: TITUS OIL AND GAS PRODUCTION LLC

Title: Regulatory Manager

Street Address: 420 Throckmorton Street, Suite 1150

City: Fort Worth **State:** TX

Phone: (817) 852-6370

Email address: rdelong@titusoil.com

Field Representative

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: cwalls@blm.gov

Disposition: Approved

Disposition Date: 01/18/2022

Signature: Chris Walls

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 Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-025-49526	96776	JABALINA; WOLFCAMP, SOUTHWEST

4 Property Code	5 Property Name	6 Well Number
329881	LONESOME DOVE FED COM	424H

7 OGRID No.	8 Operator Name	9 Elevation
373986	TITUS OIL & GAS PRODUCTION LLC	3203'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	17	26-S	35-E		2289'	SOUTH	1139'	EAST	LEA

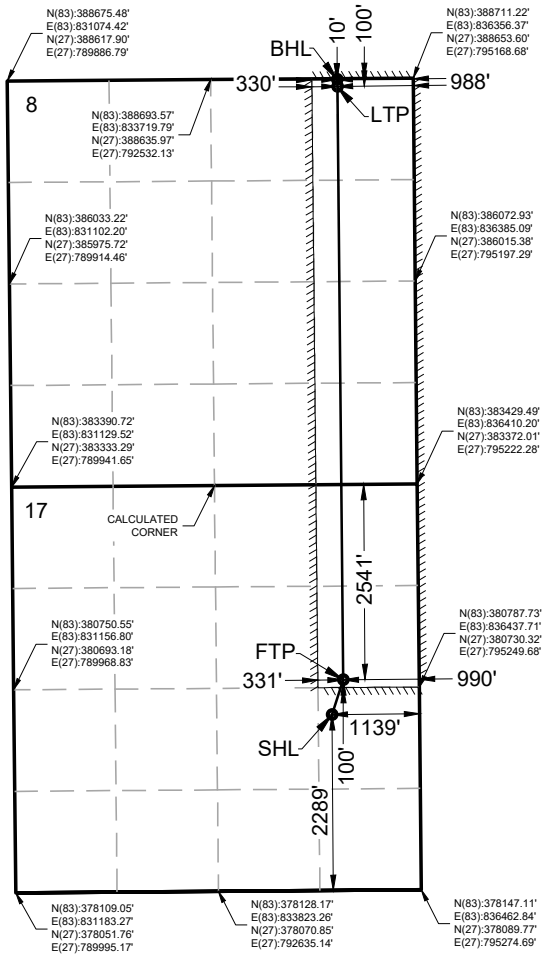
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	8	26-S	35-E		10'	NORTH	988'	EAST	LEA

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
240	Y		

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]



BOTTOM HOLE LOCATION (BHL)
NEW MEXICO EAST - NAD 83
X=835368.18 LAT.= 32.06504673° N
Y=388694.61 LONG.= 103.38415914° W
NEW MEXICO EAST - NAD 27
X=794180.50 LAT.= 32.06492035° N
Y=388636.99 LONG.= 103.38369710° W
10' FNL, 988' FEL - SECTION 8
10' FNL, 330' FWL - LEASE

LAST TAKE POINT (LTP)
NEW MEXICO EAST - NAD 83
X=835369.09 LAT.= 32.06479935° N
Y=388604.61 LONG.= 103.38415874° W
NEW MEXICO EAST - NAD 27
X=794181.41 LAT.= 32.06467297° N
Y=388547.00 LONG.= 103.38369671° W
100' FNL, 988' FEL - SECTION 8
100' FNL, 330' FWL - LEASE

FIRST TAKE POINT (FTP)
NEW MEXICO EAST - NAD 83
X=835446.69 LAT.= 32.04356766° N
Y=380880.75 LONG.= 103.38412750° W
NEW MEXICO EAST - NAD 27
X=794258.67 LAT.= 32.04344117° N
Y=380823.35 LONG.= 103.38366666° W
2541' FNL, 990' FEL - SECTION 17
100' FSL, 331' FWL - LEASE

SURFACE HOLE LOCATION (SHL)
NEW MEXICO EAST - NAD 83
X= 835302.08 LAT.= 32.04232625° N
Y= 380427.83 LONG.= 103.38460698° W
NEW MEXICO EAST - NAD 27
X= 794114.05 LAT.= 32.04219976° N
Y= 380370.44 LONG.= 103.38414619° W
2289' FSL, 1139' FEL - SECTION 17

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.

Signature 11/29/2021 Date

Ryan DeLong - Regulatory Manager
Printed Name

rdelong@titusoil.com
E-mail Address

[18] 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 of Survey

Signature and Seal of Professional Surveyor:

MARK J. MURRAY
NEW MEXICO
12177
REGISTERED PROFESSIONAL SURVEYOR

Certificate Number 10/12/2021

Titus Oil & Gas Production, LLC - Lonesome Dove Fed Com 424H

1. Geologic Formations

TVD of target	12,632' EOL	Pilot hole depth	NA
MD at TD:	20,748'	Deepest expected fresh water:	400'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	1091	Water	
Top of Salt	1587	Salt	
Base of Salt	5063	Salt	
Lamar	5390	Salt Water	
Delaware	5422	Salt Water	
Bone Spring Lime	9306	Oil/Gas	
1st Bone Spring	10526	Oil/Gas	
2nd Bone Spring	11045	Oil/Gas	
3rd Bone Spring	12179	Oil/Gas	
Wolfcamp	12546	Oil/Gas	
Wolfcamp X Sand	12560	Oil/Gas	
Wolfcamp Y Sand	12621	Oil/Gas	
Wolfcamp A	12661	Target Oil/Gas	
Wolfcamp B	12964	Not Penetrated	

2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Body
	From	To							
13.5"	0	1120	10.75"	45.5	J55	BTC	4.08	0.81	14.03
9.875"	0	12050	7.625"	29.7	HCL80	BTC	1.17	1.06	2.03
6.75"	0	11850	5.5"	20	P110	BTC	1.87	1.95	3.21
6.75"	11850	20,748	5"	18	P110	BTC	1.87	1.95	3.21
			BLM Minimum Safety Factor				1.125	1	1.6 Dry 1.8 Wet

Intermediate casing will be kept at least 1/3 full while running casing.to mitigate collapse.
Surface burst based on 0.7 frac gradient at the shoe with Gas Gradient 0.1 psi/ft to surface and
All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

The 5” casing will be run back 200’ into the intermediate casing to ensure the coupling OD clearance is greater than .422” for the cement bond tie in.

Titus Oil & Gas Production, LLC - Lonesome Dove Fed Com 424H

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary?	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

Titus Oil & Gas Production, LLC - Lonesome Dove Fed Com 424H

3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H_20 gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	250	13.5	1.75	9	12	Lead: Class C + 4% Gel + 1% CaCl2
	250	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl2
Int	900	10.3	3.6	22.95	16	TXI Lightwieght Blend
	250	15.0	1.27	5.72	8	Tail: Class H
Prod	350	11.9	2.5	19	72	Lead: 50:50:10 H Blend
	950	14.2	1.3	6.2	19	Tail: 50:50:2 Class H Blend

Contigency remediation cement plan for intermediate casing if cmt is not circulated to surface:

1st Stage - Bradenhead Stage Notes

Operator will pump 1000+ sx of Class C and allow cement to fall into place. Operator will not put any fluid on top of the cement after the fall. This will leave annuls filled with air to TOC. We will WOC +/- 2 hrs (or when surface samples are firm enough) to ensure cement is set up. TOC will be above the Lamar allowing for the fill up stage.

2nd Stage - Fill Up Stage Notes

After WOC to allow the Bradenhead Stage to set up, operator will proceed with the Fill Up Stage. Since there is only air in the annulus (no fluid will be placed in annulus after bradenhead stage), we will pump cement with opposite valve set to allow air to displace out. Fill up cement will be mixed and pumped until returns are taken to surface to complete the fill up. This will confirm a solid column of cement in the annulus all the way to surface completing the top out job. Operator will WOC after cement returns have been taken to surface.

Casing String	TOC	% Excess
Surface	0’	50%
1st Intermediate	0’	50%
Production	11,550'	35% OH in Lateral (KOP to EOL)

Titus Oil & Gas Production, LLC - Lonesome Dove Fed Com 424H

4. Pressure Control Equipment

N	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	x	Tested to:
9-7/8”	13-5/8”	3M	Annular	x	3000 psi
			Blind Ram		3M
			Pipe Ram		
			Double Ram		
			Other*		
6-3/4”	13-5/8”	10M	Annular	x	50% testing pressure
			Blind Ram	x	5M
			VBR Ram	x	
			VBR Ram	x	
			Other*		

See attached 5M Annular Variance Well Control plan for TItus Oil & Gas Production, LLC.

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold.

Y	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.
Y	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
	N Are anchors required by manufacturer?
Y	A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested.

Titus Oil & Gas Production, LLC - Lonesome Dove Fed Com 424H

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	Surf. Shoe	FW Gel	8.6 - 8.8	28-34	N/C
Surf csg	9-5/8" Int shoe	Nova N-Gauge	8.4 - 9	28-34	N/C
7-5/8" Int shoe	Lateral TD	OBM	10.8 - 11.8	35-45	<20

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring

6. Logging and Testing Procedures

Logging, Coring and Testing.	
Y	Will run GR/CNL from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
N	No Logs are planned based on well control or offset log information.
N	Drill stem test? If yes, explain.
N	Coring? If yes, explain.

Additional logs planned		Interval
N	Resistivity	Pilot Hole TD to ICP
N	Density	Pilot Hole TD to ICP
Y	CBL	Production casing (If cement not circulated to surface)
Y	Mud log	Intermediate shoe to TD
N	PEX	

Titus Oil & Gas Production, LLC - Lonesome Dove Fed Com 424H

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	7755 psi at 12632' TVD
Abnormal Temperature	NO 180 Deg. F.

No abnormal pressure or temperature conditions are anticipated. Sufficient mud materials to maintain mud properties and weight increase requirements will be kept on location at all times.

Sufficient supplies of Paper/LCM for periodic sweeps to control seepage and losses will be maintained on location.

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.	
N	H2S is present
Y	H2S Plan attached

8. Other Facets of Operation

Y	Is it a walking operation?
N	Is casing pre-set?

x	H2S Plan.
x	BOP & Choke Schematics.
x	Directional Plan
x	Multibowl Schematic

TITUS OIL GAS LLC

Project: Lea County, NM - (NAD83 NME)
Site: Lonesome Dove Fed Com
Well: 424H (FKA 434H)
Wellbore: OH
Design: Plan 3 11-18-21
Rig: Est. RKB

PHOENIX TECHNOLOGY SERVICES

T G M

Azimuths to Grid North
True North: -0.50°
Magnetic North: 5.80°

Magnetic Field
Strength: 47410.5nT
Dip Angle: 59.61°
Date: 11/30/2021
Model: MVHD

RKB @ 3229.50usft (Est. RKB)
Ground Level: 3203.00

WELL DETAILS

Ground Level: 3203.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	380427.83	835302.08	32° 2' 32.374500 N	103° 23' 4.585128 W

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
BHL v3 - Lonesome Dove Fed Com 424H	12632.50	8266.78	66.10	388694.61	835368.18	32° 3' 54.168279 N	103° 23' 2.972849 W
LTPv2 - Lonesome Dove Fed Com 424H	12634.45	8176.78	67.01	388604.61	835369.09	32° 3' 53.277654 N	103° 23' 2.971473 W
FTPv2 - Lonesome Dove Fed Com 424H	12660.50	452.92	144.60	380880.75	835446.69	32° 2' 36.843576 N	103° 23' 2.859000 W
2640'VS - Lonesome Dove Fed Com 424H	12675.50	2641.40	122.62	383069.24	835424.70	32° 2' 58.500484 N	103° 23' 2.890929 W
3823'VS - Lonesome Dove Fed Com 424H	12722.50	3824.35	110.73	384252.18	835412.81	32° 3' 10.206704 N	103° 23' 2.908174 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSect	Target	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2	1600.00	0.00	0.00	1600.00	0.00	0.00	0.00	0.00	0.00		KOP, Begin 1.50°/100' Build
3	1733.45	2.00	98.10	1733.43	-0.33	2.31	1.50	98.10	-0.35		Hold 2.00° Inc at 98.10° Azm
4	5919.16	2.00	98.10	5916.57	-20.92	147.06	0.00	0.00	-22.41		Begin 1.50°/100' Drop
5	6052.61	0.00	0.00	6050.00	-21.25	149.37	1.50	180.00	-22.76		Begin Vertical Hold
6	12185.66	0.00	0.00	12183.05	-21.25	149.37	0.00	0.00	-22.76		KOP2, Begin 12.00°/100' Build
7	12932.38	89.61	359.42	12660.50	452.92	144.60	12.00	359.42	451.43	FTPv2 - Lonesome Dove Fed Com 424H	LP, Hold 89.61° Inc at 359.42° Azm
8	15121.03	89.61	359.42	12675.50	2641.40	122.62	0.00	0.00	2640.03	2640'VS - Lonesome Dove Fed Com 424H	Begin 2.00°/100' Drop
9	15219.22	87.64	359.42	12677.86	2739.56	121.63	2.00	-180.00	2738.19		Hold 87.64° Inc
10	16304.98	87.64	359.42	12722.50	3824.35	110.73	0.00	0.00	3823.03	3823'VS - Lonesome Dove Fed Com 424H	Begin 2.00°/100' Build
11	16484.46	91.23	359.42	12724.26	4003.78	108.93	2.00	0.00	4002.47		Hold 91.23° Inc
12	20748.66	91.23	359.42	12632.50	8266.78	66.10	0.00	0.00	8265.69	BHL v3 - Lonesome Dove Fed Com 424H	TD at 20748.66

Map System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone Name: New Mexico Eastern Zone

Local Origin: Well 424H (FKA 434H), Grid North

Latitude: 32° 2' 32.374500 N
Longitude: 103° 23' 4.585128 W

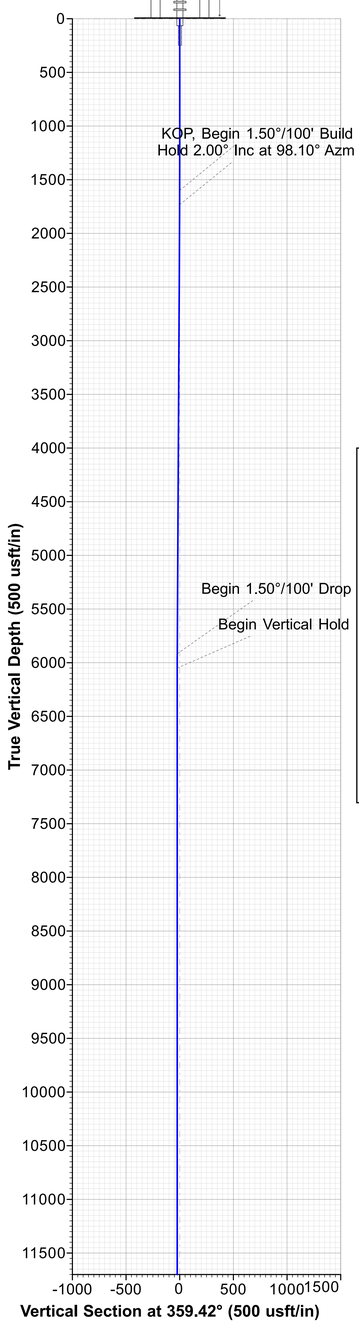
Grid East: 835302.08
Grid North: 380427.83
Scale Factor: 1.000

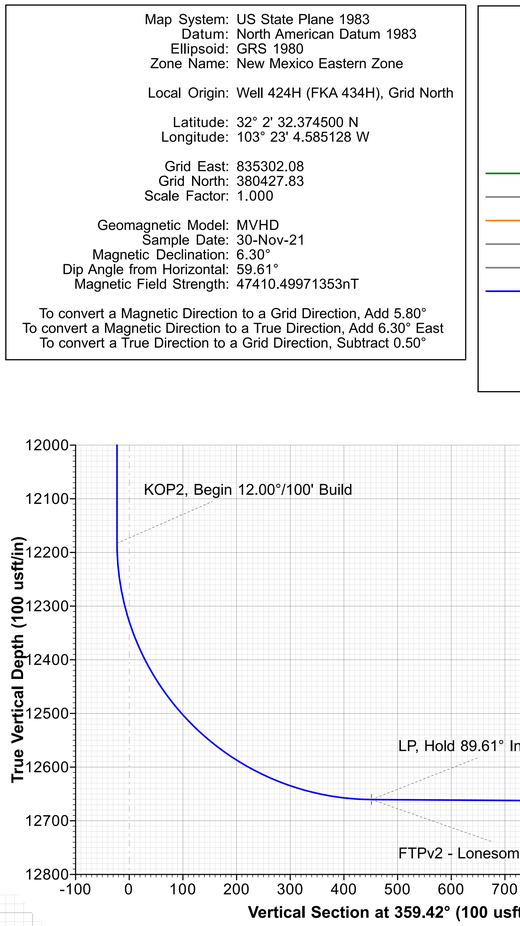
Geomagnetic Model: MVHD
Sample Date: 30-Nov-21
Magnetic Declination: 6.30°
Dip Angle from Horizontal: 59.61°
Magnetic Field Strength: 47410.49971353nT

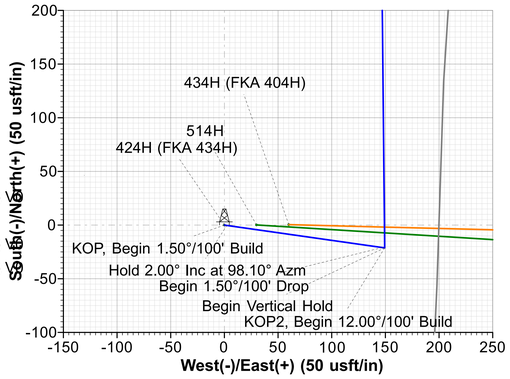
To convert a Magnetic Direction to a Grid Direction, Add 5.80°
To convert a Magnetic Direction to a True Direction, Add 6.30° East
To convert a True Direction to a Grid Direction, Subtract 0.50°

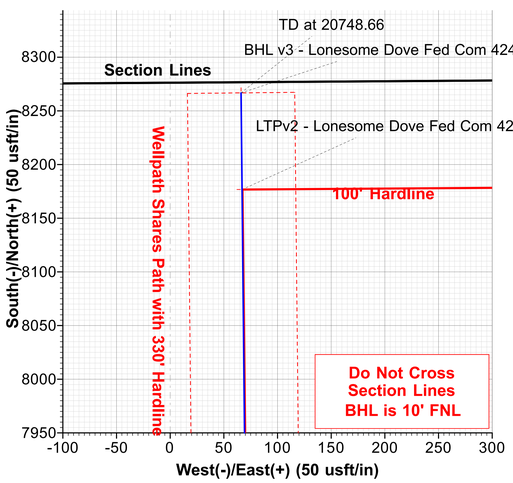
LEGEND

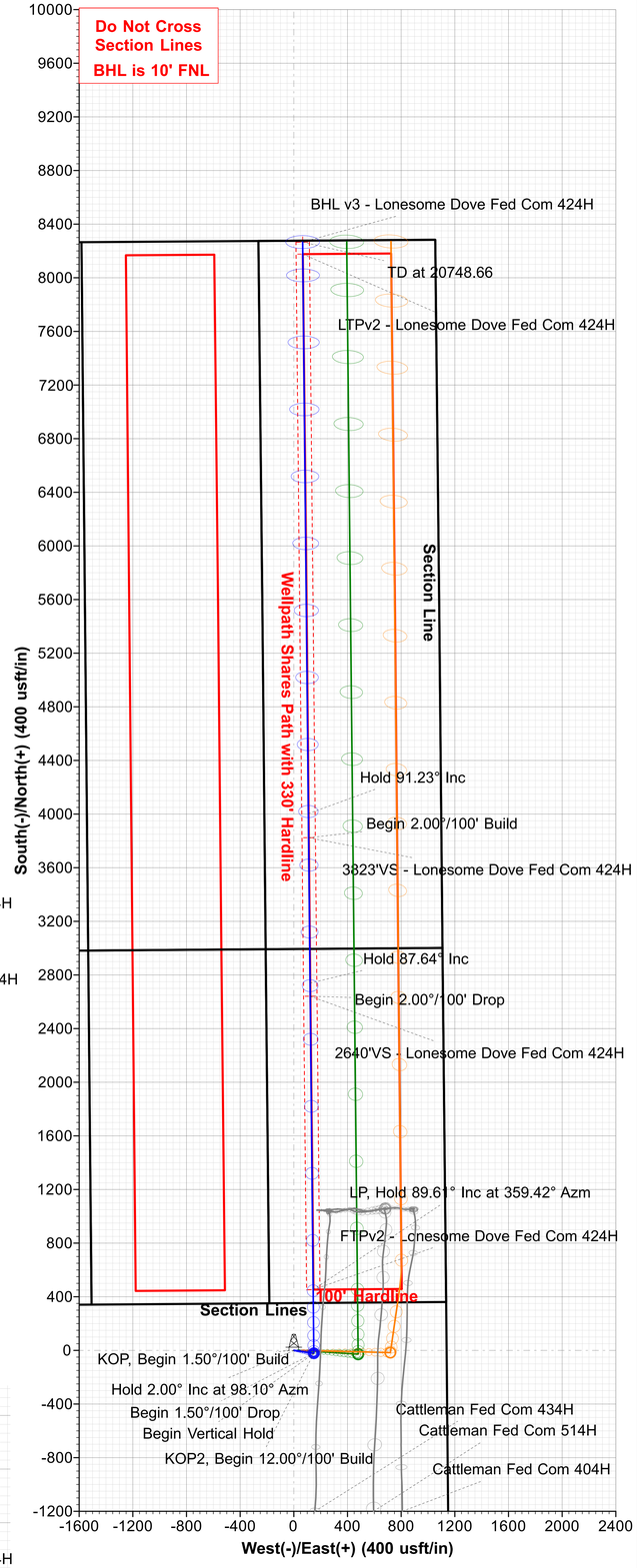
- 514H, OH, Plan 3 11-18-21 V0
- Cattleman Fed Com 404H, OH / 67732, Surveys (H&P 474) V0
- 434H (FKA 404H), OH, Plan 3 11-18-21 V0
- Cattleman Fed Com 434H, OH / 67733, Surveys (H&P 474) V0
- Cattleman Fed Com 514H, OH / 67734, Surveys (H&P 474) V0
- Plan 3 11-18-21

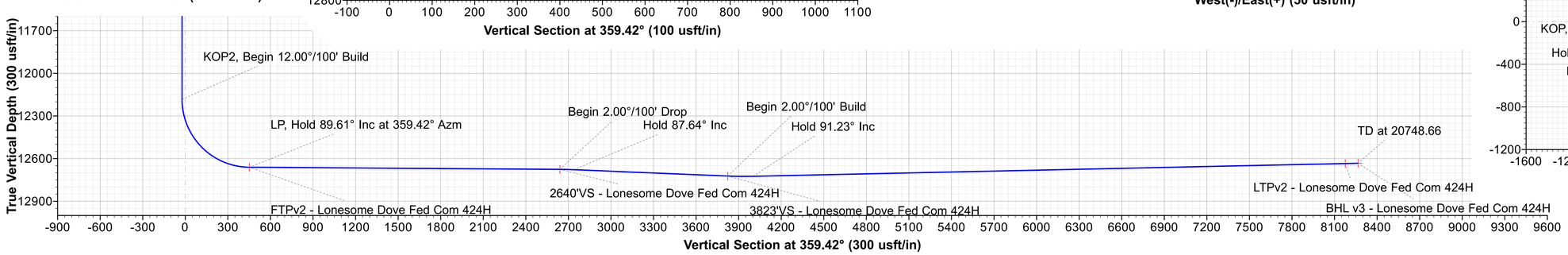












Date: 13:51, November 18 2021

PHOENIX
TECHNOLOGY SERVICES

Titus Oil & Gas Production, LLC

Lea County, NM - (NAD83 NME)
Lonesome Dove Fed Com
424H (FKA 434H)

OH

Plan: Plan 3 11-18-21

Standard Planning Report

18 November, 2021

TITUS OIL GAS LLC

PHOENIX TECHNOLOGY SERVICES

Planning Report

TITUS OIL GAS LLC

Database:	USA Compass	**Local Co-ordinate Reference:**	Well 424H (FKA 434H)
Company:	Titus Oil & Gas Production, LLC	**TVD Reference:**	RKB @ 3229.50usft (Est. RKB)
Project:	Lea County, NM - (NAD83 NME)	**MD Reference:**	RKB @ 3229.50usft (Est. RKB)
Site:	Lonesome Dove Fed Com	**North Reference:**	Grid
Well:	424H (FKA 434H)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 3 11-18-21		

Project Lea County, NM - (NAD83 NME)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site Lonesome Dove Fed Com

Site Position:		**Northing:**	379,941.34 usft	**Latitude:**	32° 2' 27.746664 N
From:	Map	**Easting:**	833,154.89 usft	**Longitude:**	103° 23' 29.578524 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.50 °

Well 424H (FKA 434H)

Well Position	**+N/-S**	486.49 usft	**Northing:**	380,427.83 usft	**Latitude:**	32° 2' 32.374500 N
	+E/-W	2,147.19 usft	**Easting:**	835,302.08 usft	**Longitude:**	103° 23' 4.585128 W
Position Uncertainty		1.00 usft	**Wellhead Elevation:**		**Ground Level:**	3,203.00 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	MVHD	11/30/2021	6.30	59.61	47,410.49971353

Design Plan 3 11-18-21

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	359.42

Plan Survey Tool Program **Date** 11/18/2021

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	20,748.63	Plan 3 11-18-21 (OH)	MWD+HDGM	
				OWSG Rev.2 MWD + HDGM	

PHOENIX TECHNOLOGY SERVICES

Planning Report

TITUS OIL GAS LLC

Database:	USA Compass	**Local Co-ordinate Reference:**	Well 424H (FKA 434H)
Company:	Titus Oil & Gas Production, LLC	**TVD Reference:**	RKB @ 3229.50usft (Est. RKB)
Project:	Lea County, NM - (NAD83 NME)	**MD Reference:**	RKB @ 3229.50usft (Est. RKB)
Site:	Lonesome Dove Fed Com	**North Reference:**	Grid
Well:	424H (FKA 434H)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 3 11-18-21		

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	0.00	0.00	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	
1,733.45	2.00	98.10	1,733.43	-0.33	2.31	1.50	1.50	0.00	98.10	
5,919.16	2.00	98.10	5,916.57	-20.92	147.06	0.00	0.00	0.00	0.00	
6,052.61	0.00	0.00	6,050.00	-21.25	149.37	1.50	-1.50	0.00	180.00	
12,185.66	0.00	0.00	12,183.05	-21.25	149.37	0.00	0.00	0.00	0.00	
12,932.38	89.61	359.42	12,660.50	452.92	144.60	12.00	12.00	0.00	359.42	FTPv2 - Lonesome D
15,121.03	89.61	359.42	12,675.50	2,641.40	122.62	0.00	0.00	0.00	0.00	2640'VS - Lonesome
15,219.22	87.64	359.42	12,677.86	2,739.56	121.63	2.00	-2.00	0.00	-180.00	
16,304.98	87.64	359.42	12,722.50	3,824.35	110.73	0.00	0.00	0.00	0.00	3823'VS - Lonesome
16,484.46	91.23	359.42	12,724.26	4,003.78	108.93	2.00	2.00	0.00	0.00	
20,748.66	91.23	359.42	12,632.50	8,266.78	66.10	0.00	0.00	0.00	0.00	BHL v3 - Lonesome D

PHOENIX TECHNOLOGY SERVICES

Planning Report

TITUS OIL GAS LLC

Database:	USA Compass	**Local Co-ordinate Reference:**	Well 424H (FKA 434H)
Company:	Titus Oil & Gas Production, LLC	**TVD Reference:**	RKB @ 3229.50usft (Est. RKB)
Project:	Lea County, NM - (NAD83 NME)	**MD Reference:**	RKB @ 3229.50usft (Est. RKB)
Site:	Lonesome Dove Fed Com	**North Reference:**	Grid
Well:	424H (FKA 434H)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 3 11-18-21		

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	0.00	0.00	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
KOP, Begin 1.50°/100' Build									
1,700.00	1.50	98.10	1,699.99	-0.18	1.30	-0.20	1.50	1.50	0.00
1,733.45	2.00	98.10	1,733.43	-0.33	2.31	-0.35	1.50	1.50	0.00
Hold 2.00° Inc at 98.10° Azm									
1,800.00	2.00	98.10	1,799.93	-0.66	4.61	-0.70	0.00	0.00	0.00
1,900.00	2.00	98.10	1,899.87	-1.15	8.07	-1.23	0.00	0.00	0.00
2,000.00	2.00	98.10	1,999.81	-1.64	11.53	-1.76	0.00	0.00	0.00
2,100.00	2.00	98.10	2,099.75	-2.13	14.98	-2.28	0.00	0.00	0.00
2,200.00	2.00	98.10	2,199.69	-2.62	18.44	-2.81	0.00	0.00	0.00
2,300.00	2.00	98.10	2,299.63	-3.12	21.90	-3.34	0.00	0.00	0.00
2,400.00	2.00	98.10	2,399.57	-3.61	25.36	-3.86	0.00	0.00	0.00
2,500.00	2.00	98.10	2,499.51	-4.10	28.82	-4.39	0.00	0.00	0.00
2,600.00	2.00	98.10	2,599.44	-4.59	32.28	-4.92	0.00	0.00	0.00
2,700.00	2.00	98.10	2,699.38	-5.08	35.73	-5.44	0.00	0.00	0.00
2,800.00	2.00	98.10	2,799.32	-5.57	39.19	-5.97	0.00	0.00	0.00
2,900.00	2.00	98.10	2,899.26	-6.07	42.65	-6.50	0.00	0.00	0.00
3,000.00	2.00	98.10	2,999.20	-6.56	46.11	-7.03	0.00	0.00	0.00
3,100.00	2.00	98.10	3,099.14	-7.05	49.57	-7.55	0.00	0.00	0.00
3,200.00	2.00	98.10	3,199.08	-7.54	53.02	-8.08	0.00	0.00	0.00
3,300.00	2.00	98.10	3,299.02	-8.03	56.48	-8.61	0.00	0.00	0.00
3,400.00	2.00	98.10	3,398.96	-8.53	59.94	-9.13	0.00	0.00	0.00
3,500.00	2.00	98.10	3,498.89	-9.02	63.40	-9.66	0.00	0.00	0.00
3,600.00	2.00	98.10	3,598.83	-9.51	66.86	-10.19	0.00	0.00	0.00
3,700.00	2.00	98.10	3,698.77	-10.00	70.32	-10.71	0.00	0.00	0.00
3,800.00	2.00	98.10	3,798.71	-10.49	73.77	-11.24	0.00	0.00	0.00
3,900.00	2.00	98.10	3,898.65	-10.99	77.23	-11.77	0.00	0.00	0.00
4,000.00	2.00	98.10	3,998.59	-11.48	80.69	-12.29	0.00	0.00	0.00
4,100.00	2.00	98.10	4,098.53	-11.97	84.15	-12.82	0.00	0.00	0.00
4,200.00	2.00	98.10	4,198.47	-12.46	87.61	-13.35	0.00	0.00	0.00
4,300.00	2.00	98.10	4,298.41	-12.95	91.07	-13.88	0.00	0.00	0.00
4,400.00	2.00	98.10	4,398.35	-13.45	94.52	-14.40	0.00	0.00	0.00
4,500.00	2.00	98.10	4,498.28	-13.94	97.98	-14.93	0.00	0.00	0.00
4,600.00	2.00	98.10	4,598.22	-14.43	101.44	-15.46	0.00	0.00	0.00
4,700.00	2.00	98.10	4,698.16	-14.92	104.90	-15.98	0.00	0.00	0.00
4,800.00	2.00	98.10	4,798.10	-15.41	108.36	-16.51	0.00	0.00	0.00
4,900.00	2.00	98.10	4,898.04	-15.91	111.82	-17.04	0.00	0.00	0.00
5,000.00	2.00	98.10	4,997.98	-16.40	115.27	-17.56	0.00	0.00	0.00
5,100.00	2.00	98.10	5,097.92	-16.89	118.73	-18.09	0.00	0.00	0.00
5,200.00	2.00	98.10	5,197.86	-17.38	122.19	-18.62	0.00	0.00	0.00
5,300.00	2.00	98.10	5,297.80	-17.87	125.65	-19.14	0.00	0.00	0.00
5,400.00	2.00	98.10	5,397.74	-18.37	129.11	-19.67	0.00	0.00	0.00
5,500.00	2.00	98.10	5,497.67	-18.86	132.56	-20.20	0.00	0.00	0.00
5,600.00	2.00	98.10	5,597.61	-19.35	136.02	-20.72	0.00	0.00	0.00
5,700.00	2.00	98.10	5,697.55	-19.84	139.48	-21.25	0.00	0.00	0.00
5,800.00	2.00	98.10	5,797.49	-20.33	142.94	-21.78	0.00	0.00	0.00
5,900.00	2.00	98.10	5,897.43	-20.82	146.40	-22.31	0.00	0.00	0.00
5,919.16	2.00	98.10	5,916.57	-20.92	147.06	-22.41	0.00	0.00	0.00
Begin 1.50°/100' Drop									
6,000.00	0.79	98.10	5,997.39	-21.20	149.01	-22.70	1.50	-1.50	0.00
6,052.61	0.00	0.00	6,050.00	-21.25	149.37	-22.76	1.50	-1.50	0.00
Begin Vertical Hold									
12,185.66	0.00	0.00	12,183.05	-21.25	149.37	-22.76	0.00	0.00	0.00

PHOENIX TECHNOLOGY SERVICES

Planning Report

TITUS OIL GAS LLC

Database:	USA Compass	**Local Co-ordinate Reference:**	Well 424H (FKA 434H)
Company:	Titus Oil & Gas Production, LLC	**TVD Reference:**	RKB @ 3229.50usft (Est. RKB)
Project:	Lea County, NM - (NAD83 NME)	**MD Reference:**	RKB @ 3229.50usft (Est. RKB)
Site:	Lonesome Dove Fed Com	**North Reference:**	Grid
Well:	424H (FKA 434H)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 3 11-18-21		

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)
KOP2, Begin 12.00°/100' Build									
12,200.00	1.72	359.42	12,197.39	-21.03	149.37	-22.54	12.00	12.00	0.00
12,300.00	13.72	359.42	12,296.30	-7.62	149.23	-9.13	12.00	12.00	0.00
12,400.00	25.72	359.42	12,390.26	26.06	148.89	24.55	12.00	12.00	0.00
12,500.00	37.72	359.42	12,475.17	78.54	148.37	77.03	12.00	12.00	0.00
12,600.00	49.72	359.42	12,547.31	147.53	147.67	146.02	12.00	12.00	0.00
12,700.00	61.72	359.42	12,603.53	230.00	146.84	228.50	12.00	12.00	0.00
12,800.00	73.72	359.42	12,641.37	322.36	145.92	320.87	12.00	12.00	0.00
12,900.00	85.72	359.42	12,659.18	420.57	144.93	419.08	12.00	12.00	0.00
12,932.38	89.61	359.42	12,660.50	452.92	144.60	451.43	12.00	12.00	0.00
LP, Hold 89.61° Inc at 359.42° Azm									
13,000.00	89.61	359.42	12,660.96	520.53	143.92	519.05	0.00	0.00	0.00
13,100.00	89.61	359.42	12,661.65	620.53	142.92	619.05	0.00	0.00	0.00
13,200.00	89.61	359.42	12,662.33	720.52	141.92	719.05	0.00	0.00	0.00
13,300.00	89.61	359.42	12,663.02	820.51	140.91	819.04	0.00	0.00	0.00
13,400.00	89.61	359.42	12,663.71	920.50	139.91	919.04	0.00	0.00	0.00
13,500.00	89.61	359.42	12,664.39	1,020.50	138.90	1,019.04	0.00	0.00	0.00
13,600.00	89.61	359.42	12,665.08	1,120.49	137.90	1,119.04	0.00	0.00	0.00
13,700.00	89.61	359.42	12,665.76	1,220.48	136.89	1,219.03	0.00	0.00	0.00
13,800.00	89.61	359.42	12,666.45	1,320.47	135.89	1,319.03	0.00	0.00	0.00
13,900.00	89.61	359.42	12,667.13	1,420.47	134.88	1,419.03	0.00	0.00	0.00
14,000.00	89.61	359.42	12,667.82	1,520.46	133.88	1,519.03	0.00	0.00	0.00
14,100.00	89.61	359.42	12,668.50	1,620.45	132.87	1,619.02	0.00	0.00	0.00
14,200.00	89.61	359.42	12,669.19	1,720.44	131.87	1,719.02	0.00	0.00	0.00
14,300.00	89.61	359.42	12,669.87	1,820.44	130.86	1,819.02	0.00	0.00	0.00
14,400.00	89.61	359.42	12,670.56	1,920.43	129.86	1,919.02	0.00	0.00	0.00
14,500.00	89.61	359.42	12,671.24	2,020.42	128.86	2,019.01	0.00	0.00	0.00
14,600.00	89.61	359.42	12,671.93	2,120.42	127.85	2,119.01	0.00	0.00	0.00
14,700.00	89.61	359.42	12,672.61	2,220.41	126.85	2,219.01	0.00	0.00	0.00
14,800.00	89.61	359.42	12,673.30	2,320.40	125.84	2,319.01	0.00	0.00	0.00
14,900.00	89.61	359.42	12,673.99	2,420.39	124.84	2,419.01	0.00	0.00	0.00
15,000.00	89.61	359.42	12,674.67	2,520.39	123.83	2,519.00	0.00	0.00	0.00
15,100.00	89.61	359.42	12,675.36	2,620.38	122.83	2,619.00	0.00	0.00	0.00
15,121.03	89.61	359.42	12,675.50	2,641.40	122.62	2,640.03	0.00	0.00	0.00
Begin 2.00°/100' Drop									
15,200.00	88.03	359.42	12,677.13	2,720.35	121.82	2,718.98	2.00	-2.00	0.00
15,219.22	87.64	359.42	12,677.86	2,739.56	121.63	2,738.19	2.00	-2.00	0.00
Hold 87.64° Inc									
15,300.00	87.64	359.42	12,681.18	2,820.27	120.82	2,818.90	0.00	0.00	0.00
15,400.00	87.64	359.42	12,685.29	2,920.18	119.82	2,918.81	0.00	0.00	0.00
15,500.00	87.64	359.42	12,689.40	3,020.09	118.81	3,018.73	0.00	0.00	0.00
15,600.00	87.64	359.42	12,693.51	3,120.00	117.81	3,118.65	0.00	0.00	0.00
15,700.00	87.64	359.42	12,697.62	3,219.91	116.80	3,218.56	0.00	0.00	0.00
15,800.00	87.64	359.42	12,701.74	3,319.82	115.80	3,318.48	0.00	0.00	0.00
15,900.00	87.64	359.42	12,705.85	3,419.73	114.80	3,418.39	0.00	0.00	0.00
16,000.00	87.64	359.42	12,709.96	3,519.64	113.79	3,518.31	0.00	0.00	0.00
16,100.00	87.64	359.42	12,714.07	3,619.55	112.79	3,618.22	0.00	0.00	0.00
16,200.00	87.64	359.42	12,718.18	3,719.46	111.78	3,718.14	0.00	0.00	0.00
16,300.00	87.64	359.42	12,722.30	3,819.37	110.78	3,818.05	0.00	0.00	0.00
16,304.98	87.64	359.42	12,722.50	3,824.35	110.73	3,823.03	0.00	0.00	0.00
Begin 2.00°/100' Build									
16,400.00	89.54	359.42	12,724.83	3,919.33	109.78	3,918.02	2.00	2.00	0.00
16,484.46	91.23	359.42	12,724.26	4,003.78	108.93	4,002.47	2.00	2.00	0.00

PHOENIX TECHNOLOGY SERVICES

Planning Report

TITUS OIL GAS LLC

Database:	USA Compass	**Local Co-ordinate Reference:**	Well 424H (FKA 434H)
Company:	Titus Oil & Gas Production, LLC	**TVD Reference:**	RKB @ 3229.50usft (Est. RKB)
Project:	Lea County, NM - (NAD83 NME)	**MD Reference:**	RKB @ 3229.50usft (Est. RKB)
Site:	Lonesome Dove Fed Com	**North Reference:**	Grid
Well:	424H (FKA 434H)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 3 11-18-21		

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)
Hold 91.23° Inc									
16,500.00	91.23	359.42	12,723.93	4,019.31	108.77	4,018.01	0.00	0.00	0.00
16,600.00	91.23	359.42	12,721.77	4,119.29	107.77	4,117.98	0.00	0.00	0.00
16,700.00	91.23	359.42	12,719.62	4,219.26	106.76	4,217.96	0.00	0.00	0.00
16,800.00	91.23	359.42	12,717.47	4,319.23	105.76	4,317.94	0.00	0.00	0.00
16,900.00	91.23	359.42	12,715.32	4,419.20	104.75	4,417.91	0.00	0.00	0.00
17,000.00	91.23	359.42	12,713.17	4,519.17	103.75	4,517.89	0.00	0.00	0.00
17,100.00	91.23	359.42	12,711.01	4,619.15	102.75	4,617.87	0.00	0.00	0.00
17,200.00	91.23	359.42	12,708.86	4,719.12	101.74	4,717.85	0.00	0.00	0.00
17,300.00	91.23	359.42	12,706.71	4,819.09	100.74	4,817.82	0.00	0.00	0.00
17,400.00	91.23	359.42	12,704.56	4,919.06	99.73	4,917.80	0.00	0.00	0.00
17,500.00	91.23	359.42	12,702.41	5,019.03	98.73	5,017.78	0.00	0.00	0.00
17,600.00	91.23	359.42	12,700.25	5,119.00	97.72	5,117.75	0.00	0.00	0.00
17,700.00	91.23	359.42	12,698.10	5,218.98	96.72	5,217.73	0.00	0.00	0.00
17,800.00	91.23	359.42	12,695.95	5,318.95	95.71	5,317.71	0.00	0.00	0.00
17,900.00	91.23	359.42	12,693.80	5,418.92	94.71	5,417.68	0.00	0.00	0.00
18,000.00	91.23	359.42	12,691.65	5,518.89	93.71	5,517.66	0.00	0.00	0.00
18,100.00	91.23	359.42	12,689.50	5,618.86	92.70	5,617.64	0.00	0.00	0.00
18,200.00	91.23	359.42	12,687.34	5,718.84	91.70	5,717.61	0.00	0.00	0.00
18,300.00	91.23	359.42	12,685.19	5,818.81	90.69	5,817.59	0.00	0.00	0.00
18,400.00	91.23	359.42	12,683.04	5,918.78	89.69	5,917.57	0.00	0.00	0.00
18,500.00	91.23	359.42	12,680.89	6,018.75	88.68	6,017.54	0.00	0.00	0.00
18,600.00	91.23	359.42	12,678.74	6,118.72	87.68	6,117.52	0.00	0.00	0.00
18,700.00	91.23	359.42	12,676.58	6,218.69	86.67	6,217.50	0.00	0.00	0.00
18,800.00	91.23	359.42	12,674.43	6,318.67	85.67	6,317.47	0.00	0.00	0.00
18,900.00	91.23	359.42	12,672.28	6,418.64	84.67	6,417.45	0.00	0.00	0.00
19,000.00	91.23	359.42	12,670.13	6,518.61	83.66	6,517.43	0.00	0.00	0.00
19,100.00	91.23	359.42	12,667.98	6,618.58	82.66	6,617.41	0.00	0.00	0.00
19,200.00	91.23	359.42	12,665.83	6,718.55	81.65	6,717.38	0.00	0.00	0.00
19,300.00	91.23	359.42	12,663.67	6,818.52	80.65	6,817.36	0.00	0.00	0.00
19,400.00	91.23	359.42	12,661.52	6,918.50	79.64	6,917.34	0.00	0.00	0.00
19,500.00	91.23	359.42	12,659.37	7,018.47	78.64	7,017.31	0.00	0.00	0.00
19,600.00	91.23	359.42	12,657.22	7,118.44	77.64	7,117.29	0.00	0.00	0.00
19,700.00	91.23	359.42	12,655.07	7,218.41	76.63	7,217.27	0.00	0.00	0.00
19,800.00	91.23	359.42	12,652.91	7,318.38	75.63	7,317.24	0.00	0.00	0.00
19,900.00	91.23	359.42	12,650.76	7,418.36	74.62	7,417.22	0.00	0.00	0.00
20,000.00	91.23	359.42	12,648.61	7,518.33	73.62	7,517.20	0.00	0.00	0.00
20,100.00	91.23	359.42	12,646.46	7,618.30	72.61	7,617.17	0.00	0.00	0.00
20,200.00	91.23	359.42	12,644.31	7,718.27	71.61	7,717.15	0.00	0.00	0.00
20,300.00	91.23	359.42	12,642.15	7,818.24	70.60	7,817.13	0.00	0.00	0.00
20,400.00	91.23	359.42	12,640.00	7,918.21	69.60	7,917.10	0.00	0.00	0.00
20,500.00	91.23	359.42	12,637.85	8,018.19	68.60	8,017.08	0.00	0.00	0.00
20,600.00	91.23	359.42	12,635.70	8,118.16	67.59	8,117.06	0.00	0.00	0.00
20,700.00	91.23	359.42	12,633.55	8,218.13	66.59	8,217.04	0.00	0.00	0.00
20,748.66	91.23	359.42	12,632.50	8,266.78	66.10	8,265.69	0.00	0.00	0.00
TD at 20748.66									

PHOENIX TECHNOLOGY SERVICES

Planning Report

TITUS OIL GAS LLC

Database:	USA Compass	**Local Co-ordinate Reference:**	Well 424H (FKA 434H)
Company:	Titus Oil & Gas Production, LLC	**TVD Reference:**	RKB @ 3229.50usft (Est. RKB)
Project:	Lea County, NM - (NAD83 NME)	**MD Reference:**	RKB @ 3229.50usft (Est. RKB)
Site:	Lonesome Dove Fed Com	**North Reference:**	Grid
Well:	424H (FKA 434H)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 3 11-18-21		

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
BHL v3 - Lonesome Dov - plan hits target center - Point	0.00	0.00	12,632.50	8,266.78	66.10	388,694.61	835,368.18	32° 3' 54.168279 N	103° 23' 2.972849 W
LTPv2 - Lonesome Dove - plan misses target center by 0.01usft at 20658.64usft MD (12634.44 TVD, 8176.78 N, 67.00 E) - Point	0.00	0.00	12,634.45	8,176.78	67.01	388,604.61	835,369.09	32° 3' 53.277654 N	103° 23' 2.971473 W
FTPv2 - Lonesome Dove - plan hits target center - Point	0.00	0.00	12,660.50	452.92	144.60	380,880.75	835,446.68	32° 2' 36.843576 N	103° 23' 2.859000 W
2640'VS - Lonesome Do - plan hits target center - Point	0.00	0.00	12,675.50	2,641.40	122.62	383,069.23	835,424.70	32° 2' 58.500485 N	103° 23' 2.890929 W
3823'VS - Lonesome Do - plan hits target center - Point	0.00	0.00	12,722.50	3,824.35	110.73	384,252.18	835,412.81	32° 3' 10.206704 N	103° 23' 2.908174 W

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
20,751.70		20" Casing	20	24

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
1,600.00	1,600.00	0.00	0.00	KOP, Begin 1.50°/100' Build
1,733.45	1,733.43	-0.33	2.31	Hold 2.00° Inc at 98.10° Azm
5,919.16	5,916.57	-20.92	147.06	Begin 1.50°/100' Drop
6,052.61	6,050.00	-21.25	149.37	Begin Vertical Hold
12,185.66	12,183.05	-21.25	149.37	KOP2, Begin 12.00°/100' Build
12,932.38	12,660.50	452.92	144.60	LP, Hold 89.61° Inc at 359.42° Azm
15,121.03	12,675.50	2,641.40	122.62	Begin 2.00°/100' Drop
15,219.22	12,677.86	2,739.56	121.63	Hold 87.64° Inc
16,304.98	12,722.50	3,824.35	110.73	Begin 2.00°/100' Build
16,484.46	12,724.26	4,003.78	108.93	Hold 91.23° Inc
20,748.66	12,632.50	8,266.78	66.10	TD at 20748.66

District I
1625 N. French Dr., Hobbs, NM 88240
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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

CONDITIONS

Action 73643

CONDITIONS

Operator: Titus Oil & Gas Production, LLC 420 Throckmorton St, Ste 1150 Fort Worth, TX 76012	OGRID: 373986
	Action Number: 73643
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	1/21/2022