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 <u>District IV</u>

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 Numbe 30-015-4945	2 Pool Code 98220)				
4 Property Code 332715		5 Property Name 6 Well CHICKEN NOODLE FED COM 4				
7 OGRID No. 373986	·	8 Operator Name TITUS OIL & GAS PRODUCTION LLC				

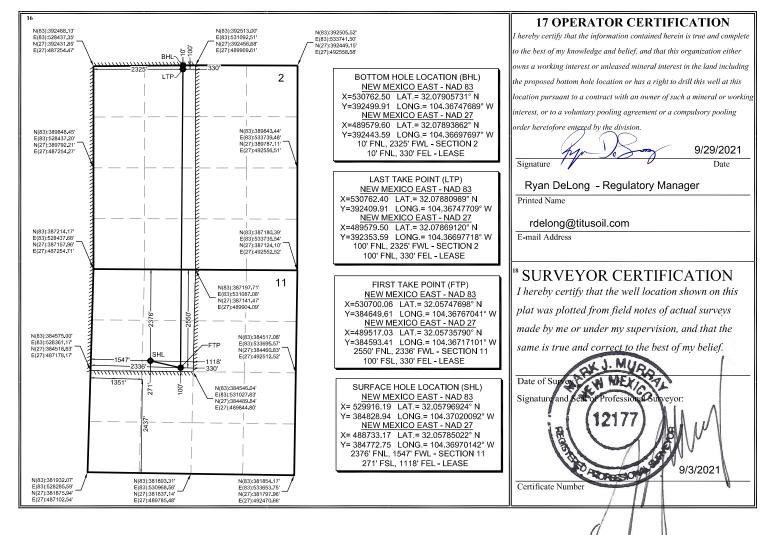
¹⁰ Surface Location

Γ	UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	F	11	26-S	25-E		2376'	NORTH	1547'	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

Γ	UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	С	2	26-S	25-Е		10'	NORTH	2325'	WEST	EDDY
Ī	12 Dedicated Acres	13 Joint o	or Infill 14	4 Consolidation	Code 15 O	rder No.				
	480	Y	Ţ.							

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.



Form 3160-3 FORM APPROVED OMB No. 1004-0137 (June 2015) Expires: January 31, 2018 **UNITED STATES** DEPARTMENT OF THE INTERIOR 5. Lease Serial No. NMNM113397 **BUREAU OF LAND MANAGEMENT** APPLICATION FOR PERMIT TO DRILL OR REENTER 6. If Indian, Allotee or Tribe Name 7. If Unit or CA Agreement, Name and No. **✓** DRILL REENTER 1a. Type of work: Oil Well 1b. Type of Well: Gas Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing ✓ Single Zone Multiple Zone CHICKEN NOODLE FED COM 2. Name of Operator 9. API Well No. TITUS OIL AND GAS PRODUCTION LLC 30-015-49451 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory (817) 852-6358 PURPLE SAGE/PURPLE SAGE WOLFC 420 Throckmorton St., Suite 1150, Fort Worth, TX 76102 4. Location of Well (Report location clearly and in accordance with any State requirements.*) 11. Sec., T. R. M. or Blk. and Survey or Area SEC 11/T26S/R25E/NMP At surface SENW / 2376 FNL / 1547 FWL / LAT 32.0579692 / LONG -104.3702009 At proposed prod. zone NENW / 10 FNL / 2325 FWL / LAT 32.0790573 / LONG -104.3674768 12. County or Parish 14. Distance in miles and direction from nearest town or post office* 13. State **EDDY** NM 15. Distance from proposed* 16. No of acres in lease 17. Spacing Unit dedicated to this well 271 feet location to nearest property or lease line, ft. 480.0 (Also to nearest drig. unit line, if any) 18. Distance from proposed location* 19. Proposed Depth 20. BLM/BIA Bond No. in file to nearest well, drilling, completed, 30 feet 8374 feet / 16397 feet FED: NMB001532 applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 3644 feet 10/29/2021 45 days 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable) 1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification. SUPO must be filed with the appropriate Forest Service Office). 6. Such other site specific information and/or plans as may be requested by the Name (Printed/Typed) Date 25. Signature WALTER JONES / Ph: (817) 852-6358 (Electronic Submission) 11/01/2020 Title þÿVice President Land Approved by (Signature) Date Name (Printed/Typed) (Electronic Submission) Cody Layton / Ph: (575) 234-5959 04/12/2022 Title Office Assistant Field Manager Lands & Minerals Carlsbad Field Office Application approval 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.

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.



Conditions of approval, if any, are attached.

State of New Mexico Energy, Minerals and Natural Resources Department

Submit Electronically Via E-permitting

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description Effective May 25, 2021

I. Operator: _Titus Oil	& Gas Produc	ction, LLC	OGRID: _3′	73986		_ Date:3	/15 /_2022
II. Type: ☒ Original ☐	Amendment	due to □ 19.15.27.	9.D(6)(a) NMA	C □ 19.15.27.9.D((6)(b) NN	MAC □ Other	
If Other, please describe	:						
III. Well(s): Provide the be recompleted from a s					wells pro	posed to be d	rilled or proposed to
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D		ipated ICF/D	Anticipated Produced Water BBL/D
Chicken Noodle Fed Com 402H	New Well	F, Sec 11, 26S-25E	2376' FNL &	770	19	90	3284
			1547' FWL				
V. Anticipated Schedul proposed to be recomple	e: Provide the	gle well pad or com	nected to a centi	ral delivery point.		t of wells prop	
Well Name	API	Spud Date	TD Reached Date	Completion Commencement		Initial Flow Back Date	First Production Date
Chicken Noodle Fed Com 402H	New Well	1/15/2023	3/1/2023	5/15/2023		4/21/2023	4/22/2023
VI. Separation Equipm VII. Operational Pract Subsection A through F VIII. Best Management during active and planne	tices: \(\times\) Attaction of 19.15.27.8	ch a complete descr NMAC. ☑ Attach a complet	iption of the ac	tions Operator wil	l take to	comply with	the requirements of

Section 2 Enhanced Plan

EFFECTIVE APRIL 1, 2022							
Beginning April 1, 2 reporting area must co			with its statewide natural g	as capture requirement for the applicable			
☐ Operator certifies capture requirement f	-	-	tion because Operator is in	compliance with its statewide natural gas			
IX. Anticipated Nati	ural Gas Producti	on:					
Wei	11	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF			
X. Natural Gas Gatl	hering System (NC	GGS):					
Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in			
production operations the segment or portion XII. Line Capacity. production volume from XIII. Line Pressure. natural gas gathering Attach Operator's XIV. Confidentiality Section 2 as provided	s to the existing or part of the natural gas gas. The natural gas gas om the well prior to the operator does by system(s) described plan to manage process. Operator ass in Paragraph (2) or	planned interconnect of the gathering system(s) to we thering system will to the date of first produce does not anticipate the dabove will continue to eduction in response to the date confidentiality purs	he natural gas gathering systewhich the well(s) will be considered will not have capacity to go tion. At its existing well(s) connect meet anticipated increases in the increased line pressure. Usuant to Section 71-2-8 NMS 27.9 NMAC, and attaches a fixed which is the increased of the increased line pressure.	atticipated pipeline route(s) connecting the em(s), and the maximum daily capacity of nected. Eather 100% of the anticipated natural gas seed to the same segment, or portion, of the a line pressure caused by the new well(s). EA 1978 for the information provided in full description of the specific information			

(h)

(i)

Section 3 - Certifications <u>Effective May 25, 2021</u>

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal: 🗵 Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system: or ☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. If Operator checks this box, Operator will select one of the following: Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or Venting and Flaring Plan.

Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including: power generation on lease; (a) **(b)** power generation for grid; compression on lease; (c) (d) liquids removal on lease; reinjection for underground storage; (e) **(f)** reinjection for temporary storage; **(g)** reinjection for enhanced oil recovery;

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

other alternative beneficial uses approved by the division.

fuel cell production; and

- (a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or
- (b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.
- 2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: A signature:
Printed Name: Ryan DeLong
Title: Regulatory Manager
E-mail Address: rdelong@titusoil.com
Date: 3/15/2023
Phone: 817-852-6370
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

VI. **Separation Equipment:** Attach a complete description of how Operator will size separation equipment to optimize gas capture:

Each surface facility design includes the following process equipment: 3-phase vertical separator (one per well), 3-phase heater treater (one per well), one or two sales gas scrubbers, two bulk free water knockouts, two bulk heater treaters, a vapor recover tower (VRT), a vapor recovery unit (VRU) compressor, multiple water and oil tanks, as well as flare liquid scrubbers (HP & LP), flares (HP & LP), and combustors. All process vessels will be sized to separate oil, water, and gas based upon historical & predicted well performance. Each process vessel will be fitted with the appropriately sized PSV as per ASME code requirements to mitigate vessel rupture and loss of containment. Additionally, the process vessels will be fitted with pressure transmitters tied to the facility control system with allow operations to monitor pressures and when necessary, shut-in the facility to avoid vessel over-pressure and potential flaring or venting of natural gas. Natural gas will be preferentially sent to pipeline, and only directed to the HP flare system in upset/emergency situations. Flash gas from the free water knockouts, bulk heater treaters, and VRT will be recompressed using a VRU compressor and will be preferentially redirected to gas sales pipeline. Oil tanks and water tanks will be fitted with 16 oz thief hatches as well as PRVs to protect the tank from rupture/collapse. The tank vapor outlets and tank vapor capture system will be sized to keep the tank pressures below 12 oz. the tank vapor capture system will include a scrubber and combustors. All tank vapors will be combusted to industry standards.

VII. **Operational Practices:** Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC:

- **During drilling operations** Gas meters will be installed at the shakers and Volume Totalizers will be installed on the pits. If elevated gas levels, or a pit gain are observed, returns will be diverted to a gas buster. Gas coming off the gas buster will be combusted at the flare stack. A 10' or taller flare will be located at least 100' from the SHL.
- During Completion Operations, including stimulation and frac plug drill out operations: hydrocarbon production to surface is minimized. If gas production does occur, gas will be combusted at a flare stack. A 10' or taller flare will be located at least 100' from SHL
- **During production operations:** All process vessels (separators, heater treaters, tanks) will recompress (where necessary) and route gas outlets into the natural gas gathering line. Gas will preferentially be routed to natural gas gathering pipeline and the flare system will only be used during emergency, malfunction, or if the gas does not meet pipeline specifications. In the event of flaring off-specification gas, operations will pull gas samples twice a week and will also route gas back to pipeline as soon as gas meets specifications. Exceptions to this will include only those qualified exceptions per the regulation 19.15.27.8 Subsection D.
- To comply with state performance standards, separation and storage equipment will be designed to handle the maximum anticipated throughput and pressure to minimize waste and reduce the likelihood of venting gas to atmosphere. Additionally, each storage atmospheric tank (oil & water) will be fitted with a level transmitter to facilitate gauging of the tank without opening the thief hatch. Any gas collected through the tank vent system is expected to be recompressed and routed to sales. However, in the event of an emergency, the tank vapor capture system will be designed to combust the gas using a combustor system with a continuous ignitor. The combustor will be properly anchored and will be

located a minimum of 100 feet from the well and storage tanks. Operators will conduct weekly AVO inspections. These AVO inspection records will be stored for the required 5-year period and will be made available upon Division request

VII. Best Management Practices: Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

• When performing routine or preventive maintenance on a vessel or tank, initially all inlet valves are close, and the vessel or tank is allowed to depressurize through the normal outlet connections to gas sales and/or liquid tanks. Once the vessel or tank is depressurized to lowest acceptable sales outlet pressure, usually around 20 psig, a temporary low-pressure flowline is connected from the vessel or tank to the VRU for further pressure reduction. Once depressurized to less than 1-2 psig, the remaining natural gas in the vessel or tank is vented to atmosphere through a controlled pressure relief valve. Once the vessel or tank is depressurized to atmospheric pressure, the vessel or tank can be safely opened, and maintenance performed.

1. Geologic Formations

TVD of target	8,374' EOL	Pilot hole depth	NA
MD at TD:	16,485'	Deepest expected fresh water:	100'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	330	Water	
Top of Salt	450	Salt	
Base of Salt	1505	Salt	
Lamar	1707	Salt Water	
Delaware	1753	Salt Water	
Bone Spring Lime	5211	Oil/Gas	
1st Bone Spring	6109	Oil/Gas	
2nd Bone Spring	6987	Oil/Gas	
3rd Bone spring	7834	Oil/Gas	
Wolfcamp	8131	Oil/Gas	
Wolfcamp X Sand	8139	Oil/Gas	
Wolfcamp Y Sand	8202	Target Oil/Gas	
Х	Х	Not Penetrated	
Х	Х	Not Penetrated	

2. Casing Program

	Casing	Interval		Weight			SF	05 D 1	SF
Hole Size	From	То	Csg. Size	(lbs)	Grade	Conn.	Collapse	SF Burst	Body
13.5"	0	355	10.75"	45.5	J55	BTC	12.87	1.26	44.27
9.875"	0	7700	7.625"	29.7	HCL80	BTC	1.84	1.60	3.17
6.75"	0	7500	5.5"	20	P110	BTC	2.83	2.94	4.84
6.75"	7500	16,485	5"	18	P110	BTC	2.83	2.94	4.84
				BLM Mi	nimum Sa	fety 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.

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Υ
Does casing meet API specifications? If no, attach casing specification sheet.	Υ
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).	Υ
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Υ
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 3 rd 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?	- 17
Is 2 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	Y
If yes, are there two strings cemented to surface?	Υ
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	Y
If yes, are there three strings cemented to surface?	Y

3. Cementing Program

Casing	# Sks	Wt. lb/	Yld ft3/	H ₂ 0 gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	350	13.5	1.75	9	12	Lead: Class C + 4% Gel + 1% CaCl2
Suri.	250	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl2
Int Sta 1	450	10.3	3.6	22.95	16	TXI Lightwieght Blend
Int Stg 1	300	15.0	1.27	5.72	8	Tail: Class H
Int Sta 2	250	12.7	2.0	11.16	16	TXI Lightwieght Blend
Int Stg 2	100	14.8	1.33	6.33	8	Tail: Class H
Prod	400	11.9	2.5	19	72	Lead: 50:50:10 H Blend
FIUU	1000	14.2	1.3	6.2	19	Tail: 50:50:2 Class H Blend

Operator will utilize a DVT/ECP on the 7.625" Interemediate casing to pump a 2-stage cement job.

The DVT/ECP will be place +/- 1,725' near the Lamar in gauge competent formation.

Volumes Subject to Observed Hole Conditions and/or Fluid Caliper Results Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

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

4. Pressure Control Equipment

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	Ту	pe	x	Tested to:
			Ann	ıular	Χ	3000 psi
9-7/8"			Blind	Ram		
	13-5/8"	3M	Pipe Ram			3M
			Double	e Ram		SIVI
			Other*			
			Ann	ıular	х	50% testing pressure
6-3/4"	13-5/8"	5M	Blind	Ram	Χ	
			VBR	Ram	Χ	5M
			VBR	Ram	Χ	JIVI
			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.

	Formation integrity test will be performed per Onshore Order #2.
Y	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.

5. Mud Program

	Depth		Weight	Viscosity	Water Loss	
From	То	Туре	(ppg)	Viscosity	Water Loss	
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.	
Υ	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.

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

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	5140 psi at 8374' TVD
Abnormal Temperature	NO 145 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?

Х	H2S Plan.
х	BOP & Choke Schematics.
х	Directional Plan
Х	Multibowl Schematic

£7200

97600

9000

₩8400

KOP2, Begin 11.00°/100' Build

LP, Hold 88.98° Inc at 0.46° Azm

FTPv2 - Chicken Noodle Fed Com 402H

2400

Vertical Section at 0.46° (400 usft/in)

WELL DETAILS

3643.69

-50-

ഗ-100-

5200

LTPv2 - Chicken Noodle Fed Com 402H

6400 6800

BHLv2 - Chicken Noodle Fed Com 402H

7200 7600 8000 8400 8800

Latitude

Azimuths to Grid North True North: 0.02° West(-)/East(+) (300 usft/in) Magnetic North: 7.14° Magnetic Field BHLv2 - Chicken Noodle Fed Com 402h Strength: 47506.4nT 301H Dip Angle: 59.56° LTPv2 - Chicken Noodle Fed Com 402H Date: 9/24/2021 7800 Model: MVHD Section Lines **Do Not Cross** 100' Hardline **Section Line** Map System: US State Plane 1983 Datum: North American Datum 1983 BHL is 10' FNL Ellipsoid: GRS 1980 Longitude 7200-Zone Name: New Mexico Eastern Zone 32° 3' 28.689296 N 104° 22' 12.723242 W Local Origin: Well 402H, Grid North 6900 Latitude: 32° 3' 28.689296 N Longitude: 104° 22' 12.723242 W 6600 Grid East: 529916.19 Grid North: 384828.94 Scale Factor: 1.000 6300· Geomagnetic Model: MVHD Sample Date: 24-Sep-21 6000 Magnetic Declination: 7.12° **Annotation** Dip Angle from Horizontal: 59.56° Magnetic Field Strength: 47506.44222630nT KOP, Begin 1.50°/100' Build 5700-Hold 13.00° Inc at 131.54° Azm To convert a Magnetic Direction to a Grid Direction, Add 7.14° Begin 1.50°/100' Drop To convert a Magnetic Direction to a True Direction, Add 7.12° East Begin Vertical Hold KOP2, Begin 11.00°/100' Build To convert a True Direction to a Grid Direction, Add 0.02° 5400-0.46 -173.03 FTPv2 - Chicken Noodle Fed Com 402LP, Hold 88.98° Inc at 0.46° Azm 0.00 7677.52 BHLv2 - Chicken Noodle Fed Com 402 FD at 16485.16 5100-4800 4500 4200 **≨** 3900-**Do Not Cross** 3600-**Section Lines** BHL is 10' FNL **1** 3300-BHLv2 - Chicken Noodle Fed Com 402H 7700-Section Lines 3000-LTPv2 - Chicken Noodle Fed Com 402H 2700 **5**7600-100' Hardline 2400 27550 301H 2100-7500-401H 402H 1800 **%**7450-1500 KOP, Begin 1.50°/100' Build 7400 1200 Hold 13.00° Inc at 131.54° Azn 7350 900 West(-)/East(+) (50 usft/in) 700 750 800 850 650 600 West(-)/East(+) (50 usft/in) 300 LP Hold 88.98° Inc at 0.46° Azm FTPV2 - Chicken Noodle Fed Com 402H -300 Section Lines KOP, Begin/1.50°/100' Build Hold 13.00° Inc at 131.54° Azm -900-Begin 1.50°/100' Drop Begin Vertical Hold

-1200-

KOP2, Begin 11.00°/100' Build

300 600 900

West(-)/East(+) (300 usft/in)

1200 1500 1800 2100

Date: 14:04, September 28 20 1



Titus Oil & Gas Production, LLC

Eddy County, NM (NAD83 NME) Chicken Noodle Fed Com 402H

OH

Plan: Plan 2 09-24-21

Standard Planning Report

24 September, 2021







USA Compass Database:

Company: Titus Oil & Gas Production, LLC Project: Eddy County, NM (NAD83 NME)

Chicken Noodle Fed Com Site:

Well: 402H Wellbore: OH

Design: Plan 2 09-24-21 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well 402H

RKB @ 3670.19usft (H&P 474) RKB @ 3670.19usft (H&P 474)

0.46

Minimum Curvature

Project Eddy County, NM (NAD83 NME)

US State Plane 1983 Map System: North American Datum 1983 Geo Datum: New Mexico Eastern Zone Map Zone:

System Datum:

Mean Sea Level

Chicken Noodle Fed Com Site

Northing: 384,355.64 usft 32° 3' 24.001920 N Site Position: Latitude: From: Мар Easting: 528,929.19 usft Longitude: 104° 22' 24.190824 W **Position Uncertainty:** 0.00 usft Slot Radius: 13-3/16 " Grid Convergence: -0.02 °

Well 402H

473.30 usft 384.828.94 usft 32° 3' 28.689296 N **Well Position** +N/-S Northing: Latitude: 529,916.19 usft 104° 22' 12.723243 W +E/-W 987.00 usft Easting: Longitude:

Position Uncertainty 1.00 usft Wellhead Elevation: Ground Level: 3,643.69 usft

ОН Wellbore

Declination Magnetics **Model Name** Sample Date **Dip Angle** Field Strength (°) (°) (nT) MVHD 59.56 47,506.44222629 9/24/2021 7.12

Design Plan 2 09-24-21 Audit Notes: Version: Phase: **PROTOTYPE** Tie On Depth: 0.00 Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°)

0.00

0.00

Date 9/24/2021 Plan Survey Tool Program

Depth From Depth To

(usft) (usft)

Survey (Wellbore) **Tool Name** Remarks

0.00

0.00 MWD+HRGM 16,484.70 Plan 2 09-24-21 (OH)

OWSG MWD + HRGM

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	
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,666.92	13.00	131.54	2,659.50	-64.96	73.32	1.50	1.50	0.00	131.54	
6,426.34	13.00	131.54	6,322.50	-625.94	706.48	0.00	0.00	0.00	0.00	
7,293.26	0.00	360.00	7,182.00	-690.90	779.80	1.50	-1.50	0.00	180.00	
7,824.47	0.00	360.00	7,713.21	-690.90	779.80	0.00	0.00	0.00	0.00	
8,633.36	88.98	0.46	8,234.00	-179.33	783.87	11.00	11.00	0.00	0.46	FTPv2 - Chicken Noc
16,485.16	88.98	0.46	8,374.00	7,670.97	846.31	0.00	0.00	0.00	0.00	BHLv2 - Chicken Noc





Database: USA Compass

Company: Titus Oil & Gas Production, LLC
Project: Eddy County, NM (NAD83 NME)

Site: Chicken Noodle Fed Com

Well: 402H Wellbore: OH

Design: Plan 2 09-24-21

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well 402H

RKB @ 3670.19usft (H&P 474) RKB @ 3670.19usft (H&P 474)

Grid

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
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.50°/100' Build	101.51	4 000 00	0.07	0.00	0.00	4.50	4.50	0.00
1,900.00	1.50	131.54	1,899.99	-0.87	0.98	-0.86	1.50	1.50	0.00
2,000.00	3.00	131.54	1,999.91	-3.47	3.92	-3.44	1.50	1.50	0.00
2,100.00	4.50	131.54	2,099.69	-7.81	8.81	-7.74	1.50	1.50	0.00
2,200.00	6.00	131.54	2,199.27	-13.88	15.66	-13.75	1.50	1.50	0.00
2,300.00	7.50	131.54	2,298.57	-21.67	24.46	-21.47	1.50	1.50	0.00
2,400.00	9.00	131.54	2,397.54	-31.19	35.20	-30.90	1.50	1.50	0.00
2,500.00	10.50	131.54	2,496.09	-42.42	47.87	-42.03	1.50	1.50	0.00
2,600.00	12.00	131.54	2,594.16	-55.35	62.48	-54.85	1.50	1.50	0.00
2,666.92	13.00	131.54	2,659.50	-64.96	73.32	-64.37	1.50	1.50	0.00
	Inc at 131.54° Az								
2,700.00	13.00	131.54	2,691.73	-69.90	78.89	-69.26	0.00	0.00	0.00
2,800.00	13.00	131.54	2,789.16	-84.82	95.73	-84.05	0.00	0.00	0.00
2,900.00	13.00	131.54	2,886.60	-99.74	112.57	-98.83	0.00	0.00	0.00
3,000.00	13.00	131.54	2,984.03	-114.66	129.42	-113.62	0.00	0.00	0.00
3,100.00	13.00	131.54	3,081.47	-129.58	146.26	-128.41	0.00	0.00	0.00
3,200.00	13.00	131.54	3,178.91	-144.51	163.10	-143.19	0.00	0.00	0.00
3,300.00	13.00	131.54	3,276.34	-159.43	179.94	-157.98	0.00	0.00	0.00
3,400.00	13.00	131.54	3,373.78	-174.35	196.78	-172.76	0.00	0.00	0.00
3,500.00	13.00	131.54	3,471.21	-189.27	213.63	-187.55	0.00	0.00	0.00
3,600.00	13.00	131.54	3,568.65	-204.19	230.47	-202.34	0.00	0.00	0.00
3,700.00	13.00	131.54	3,666.08	-219.12	247.31	-217.12	0.00	0.00	0.00
3,800.00	13.00	131.54	3,763.52	-234.04	264.15	-231.91	0.00	0.00	0.00
3,900.00	13.00	131.54	3,860.95	-248.96	280.99	-246.70	0.00	0.00	0.00
4,000.00	13.00	131.54	3,958.39	-263.88	297.84	-261.48	0.00	0.00	0.00
4,100.00	13.00	131.54	4,055.83	-278.80	314.68	-276.27	0.00	0.00	0.00
4,200.00	13.00	131.54	4,153.26	-293.72	331.52	-291.05	0.00	0.00	0.00
4,300.00	13.00	131.54	4,250.70	-308.65	348.36	-305.84	0.00	0.00	0.00
4,400.00	13.00	131.54	4,348.13	-323.57	365.21	-320.63	0.00	0.00	0.00
4,500.00	13.00	131.54	4,445.57	-338.49	382.05	-335.41	0.00	0.00	0.00
4,600.00	13.00	131.54	4.543.00	-353.41	398.89	-350.20	0.00	0.00	0.00
4,700.00	13.00	131.54	4,543.00 4,640.44	-353.41 -368.33	398.89 415.73	-350.20 -364.99	0.00	0.00	0.00
4,700.00	13.00	131.54	4,640.44 4,737.87	-368.33 -383.26	415.73	-364.99 -379.77	0.00	0.00	0.00
4,800.00	13.00	131.54	4,737.07	-398.18	432.57	-379.77	0.00	0.00	0.00
5,000.00	13.00	131.54	4,033.31	-396.16 -413.10	466.26	-394.56 -409.34	0.00	0.00	0.00
5,100.00	13.00	131.54	5,030.18	-428.02	483.10	-424.13	0.00	0.00	0.00
5,200.00	13.00	131.54	5,127.62	-442.94	499.94	-438.92	0.00	0.00	0.00
5,300.00	13.00	131.54	5,225.05	-457.87	516.78	-453.70	0.00	0.00	0.00
5,400.00	13.00	131.54	5,322.49	-472.79	533.63	-468.49	0.00	0.00	0.00
5,500.00	13.00	131.54	5,419.92	-487.71	550.47	-483.28	0.00	0.00	0.00
5,600.00	13.00	131.54	5,517.36	-502.63	567.31	-498.06	0.00	0.00	0.00
5,700.00	13.00	131.54	5,614.79	-517.55	584.15	-512.85	0.00	0.00	0.00
5,800.00	13.00	131.54	5,712.23	-532.48	600.99	-527.63	0.00	0.00	0.00
5,900.00	13.00	131.54	5,809.66	-547.40	617.84	-542.42	0.00	0.00	0.00
6,000.00	13.00	131.54	5,907.10	-562.32	634.68	-557.21	0.00	0.00	0.00
6,100.00	13.00	131.54	6,004.54	-577.24	651.52	-571.99	0.00	0.00	0.00
6,200.00	13.00	131.54	6,101.97	-592.16	668.36	-586.78	0.00	0.00	0.00
6,300.00	13.00	131.54	6,199.41	-607.09	685.20	-601.56	0.00	0.00	0.00
6,400.00	13.00	131.54	6,296.84	-622.01	702.05	-616.35	0.00	0.00	0.00
6,426.34	13.00	131.54	6,322.50	-625.94	706.48	-620.25	0.00	0.00	0.00





Database: USA Compass

Company: Titus Oil & Gas Production, LLC
Project: Eddy County, NM (NAD83 NME)

Site: Chicken Noodle Fed Com

Well: 402H Wellbore: OH

Design: Plan 2 09-24-21

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well 402H

RKB @ 3670.19usft (H&P 474)

RKB @ 3670.19usft (H&P 474)

Grid

sign:	Plan 2 09-24-2	• •							
anned 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)
6,500.00	11.90	131.54	6,394.43	-636.47	718.37	-630.68	1.50	-1.50	0.00
6,600.00	10.40	131.54	6,492.54	-649.29	732.84	-643.39	1.50	-1.50	0.00
6,700.00	8.90	131.54	6,591.13	-660.41	745.39	-654.40	1.50	-1.50	0.00
6,800.00	7.40	131.54	6,690.11	-669.81	756.00	-663.72	1.50	-1.50	0.00
6,900.00	5.90	131.54	6,789.44	-677.48	764.66	-671.32	1.50	-1.50	0.00
7,000.00	4.40	131.54	6,889.03	-683.44	771.38	-677.22	1.50	-1.50	0.00
7,100.00	2.90	131.54	6,988.83	-687.66	776.14	-681.40	1.50	-1.50	0.00
7,200.00	1.40	131.54	7,088.75	-690.14	778.95	-683.87	1.50	-1.50	0.00
7,293.26	0.00	360.00	7,182.00	-690.90	779.80	-684.61	1.50	-1.50	0.00
Begin Vertica	l Hold								
7,824.47	0.00	0.00	7,713.21	-690.90	779.80	-684.61	0.00	0.00	0.00
KOP2, Begin	11.00°/100' Buil	d							
7,900.00	8.31	0.46	7,788.48	-685.43	779.84	-679.15	11.00	11.00	0.00
8,000.00	19.31	0.46	7,885.44	-661.60	780.03	-655.32	11.00	11.00	0.00
8,100.00	30.31	0.46	7,976.07	-619.71	780.37	-613.42	11.00	11.00	0.00
8,200.00	41.31	0.46	8,057.05	-561.29	780.83	-555.00	11.00	11.00	0.00
8,200.00	52.31	0.46	8,057.05 8,125.38	-561.29 -488.50	780.83 781.41	-555.00 -482.21	11.00	11.00	0.00
8,400.00	63.31	0.46	8,178.58	-404.00	782.08	-397.71	11.00	11.00	0.00
8,500.00	74.31	0.46	8,214.67	-310.91	782.82	-304.62	11.00	11.00	0.00
8,600.00	85.31	0.46	8,232.34	-212.64	783.61	-206.35	11.00	11.00	0.00
8,633.36	88.98	0.46	8,234.00	-179.33	783.87	-173.03	11.00	11.00	0.00
LP, Hold 88.9	8° Inc at 0.46° A	\zm							
8,700.00	88.98	0.46	8,235.19	-112.71	784.40	-106.40	0.00	0.00	0.00
8,800.00	88.98	0.46	8,236.97	-12.72	785.20	-6.42	0.00	0.00	0.00
8,900.00	88.98	0.46	8,238.75	87.26	785.99	93.56	0.00	0.00	0.00
9,000.00	88.98	0.46	8,240.54	187.24	786.79	193.55	0.00	0.00	0.00
9,100.00	88.98	0.46	8,242.32	287.22	787.58	293.53	0.00	0.00	0.00
9,200.00	88.98	0.46	8,244.10	387.20	788.38	393.52	0.00	0.00	0.00
9,300.00	88.98	0.46	8,245.89	487.18	789.17	493.50	0.00	0.00	0.00
9,400.00	88.98	0.46	8,247.67	587.16	789.97	593.48	0.00	0.00	0.00
9,500.00	88.98	0.46	8,249.45	687.14	790.76	693.47	0.00	0.00	0.00
9,600.00	88.98	0.46	8,251.24	787.12	791.56	793.45	0.00	0.00	0.00
9,700.00	88.98	0.46	8,253.02	887.10	791.30	893.44	0.00	0.00	0.00
9,800.00	88.98	0.46	8,254.80	987.09	793.15	993.42	0.00	0.00	0.00
9,900.00	88.98	0.46	8,256.58	1,087.07	793.94	1,093.41	0.00	0.00	0.00
10,000.00	88.98	0.46	8,258.37	1,187.05	794.74	1,193.39	0.00	0.00	0.00
10,100.00	88.98	0.46	8,260.15	1,287.03	795.53	1,293.37	0.00	0.00	0.00
10,200.00	88.98	0.46	8,261.93	1,387.01	796.33	1,393.36	0.00	0.00	0.00
10,300.00	88.98	0.46	8,263.72	1,486.99	797.12	1,493.34	0.00	0.00	0.00
10,400.00	88.98	0.46	8,265.50	1,586.97	797.92	1,593.33	0.00	0.00	0.00
10,500.00	88.98	0.46	8,267.28	1,686.95	798.71	1,693.31	0.00	0.00	0.00
10,600.00	88.98	0.46	8,269.07	1,786.93	799.51	1,793.29	0.00	0.00	0.00
10,700.00	88.98	0.46	8,270.85	1,886.91	800.30	1,893.28	0.00	0.00	0.00
10,800.00	88.98	0.46	8,272.63	1,986.89	801.10	1,993.26	0.00	0.00	0.00
10,900.00	88.98	0.46	8,274.42	2,086.88	801.90	2,093.25	0.00	0.00	0.00
11,000.00	88.98	0.46	8,276.20	2,186.86	802.69	2,193.23	0.00	0.00	0.00
11,100.00	88.98	0.46	8,277.98	2,286.84	803.49	2,293.21	0.00	0.00	0.00
11,200.00	88.98	0.46	8,279.76	2,386.82	804.28	2,393.20	0.00	0.00	0.00
11,300.00	88.98	0.46	8,281.55	2,486.80	805.08	2,493.18	0.00	0.00	0.00
11,400.00	88.98	0.46	8,283.33	2,586.78	805.87	2,593.17	0.00	0.00	0.00
11,500.00	88.98	0.46	8,285.11	2,686.76	806.67	2,693.15	0.00	0.00	0.00
, -			,	2,786.74	807.46	2,793.13	0.00	0.00	0.00
11,600.00	88.98	0.46	8,286.90	2,700.74	007.40	2,130.10	0.00	0.00	0.00





Database: USA Compass

Company: Titus Oil & Gas Production, LLC
Project: Eddy County, NM (NAD83 NME)

Site: Chicken Noodle Fed Com

Well: 402H Wellbore: OH

Design: Plan 2 09-24-21

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well 402H

RKB @ 3670.19usft (H&P 474) RKB @ 3670.19usft (H&P 474)

Grid

ned 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)
11,800.00	88.98	0.46	8,290.46	2,986.70	809.05	2,993.10	0.00	0.00	0.00
11,900.00	88.98	0.46	8,292.25	3,086.68	809.85	3,093.09	0.00	0.00	0.00
12,000.00	88.98	0.46	8,294.03	3,186.67	810.64	3,193.07	0.00	0.00	0.00
12,100.00	88.98	0.46	8,295.81	3,286.65	811.44	3,293.06	0.00	0.00	0.00
12,200.00	88.98	0.46	8,297.59	3,386.63	812.23	3,393.04	0.00	0.00	0.00
12,300.00	88.98	0.46	8,299.38	3,486.61	813.03	3,493.02	0.00	0.00	0.00
12,400.00	88.98	0.46	8,301.16	3,586.59	813.82	3,593.01	0.00	0.00	0.00
12,500.00	88.98	0.46	8,302.94	3,686.57	814.62	3,692.99	0.00	0.00	0.00
12,600.00	88.98	0.46	8,304.73	3,786.55	815.41	3,792.98	0.00	0.00	0.00
12,700.00	88.98	0.46	8,306.51	3,886.53	816.21	3,892.96	0.00	0.00	0.00
12,800.00	88.98	0.46	8,308.29	3,986.51	817.00	3,992.94	0.00	0.00	0.00
12,900.00	88.98	0.46	8,310.08	4,086.49	817.80	4,092.93	0.00	0.00	0.00
13,000.00	88.98	0.46	8,311.86	4,186.48	818.59	4,192.91	0.00	0.00	0.00
13,100.00	88.98	0.46	8,313.64	4,286.46	819.39	4,292.90	0.00	0.00	0.00
13,200.00	88.98	0.46	8,315.42	4,386.44	820.19	4,392.88	0.00	0.00	0.00
13,300.00	88.98	0.46	8,317.21	4,486.42	820.98	4,492.86	0.00	0.00	0.00
13,400.00	88.98	0.46	8,318.99	4,586.40	821.78	4,592.85	0.00	0.00	0.00
13,500.00	88.98	0.46	8,320.77	4,686.38	822.57	4,692.83	0.00	0.00	0.00
13,600.00	88.98	0.46	8,322.56	4,786.36	823.37	4,792.82	0.00	0.00	0.00
13,700.00	88.98	0.46	8,324.34	4,886.34	824.16	4,892.80	0.00	0.00	0.00
13,800.00	88.98	0.46	8,326.12	4,986.32	824.96	4,992.79	0.00	0.00	0.00
13,900.00	88.98	0.46	8,327.91	5,086.30	825.75	5,092.77	0.00	0.00	0.00
14,000.00	88.98	0.46	8,329.69	5,186.28	826.55	5,192.75	0.00	0.00	0.00
14,100.00	88.98	0.46	8,331.47	5,286.27	827.34	5,292.74	0.00	0.00	0.00
14,200.00	88.98	0.46	8,333.26	5,386.25	828.14	5,392.72	0.00	0.00	0.00
14,300.00	88.98	0.46	8,335.04	5,486.23	828.93	5,492.71	0.00	0.00	0.00
14,400.00	88.98	0.46	8,336.82	5,586.21	829.73	5,592.69	0.00	0.00	0.00
14,500.00	88.98	0.46	8,338.60	5,686.19	830.52	5,692.67	0.00	0.00	0.00
14,600.00	88.98	0.46	8,340.39	5,786.17	831.32	5,792.66	0.00	0.00	0.00
14,700.00	88.98	0.46	8,342.17	5,886.15	832.11	5,892.64	0.00	0.00	0.00
14,800.00	88.98	0.46	8,343.95	5,986.13	832.91	5,992.63	0.00	0.00	0.00
14,900.00	88.98	0.46	8,345.74	6,086.11	833.70	6,092.61	0.00	0.00	0.00
15,000.00	88.98	0.46	8,347.52	6,186.09	834.50	6,192.59	0.00	0.00	0.00
15,100.00	88.98	0.46	8,349.30	6,286.08	835.29	6,292.58	0.00	0.00	0.00
15,200.00	88.98	0.46	8,351.09	6,386.06	836.09	6,392.56	0.00	0.00	0.00
15,300.00	88.98	0.46	8,352.87	6,486.04	836.89	6,492.55	0.00	0.00	0.00
15,400.00	88.98	0.46	8,354.65	6,586.02	837.68	6,592.53	0.00	0.00	0.00
15,500.00	88.98	0.46	8,356.43	6,686.00	838.48	6,692.52	0.00	0.00	0.00
15,600.00	88.98	0.46	8,358.22	6,785.98	839.27	6,792.50	0.00	0.00	0.00
15,700.00	88.98	0.46	8,360.00	6,885.96	840.07	6,892.48	0.00	0.00	0.00
15,800.00	88.98	0.46	8,361.78	6,985.94	840.86	6,992.47	0.00	0.00	0.00
15,900.00	88.98	0.46	8,363.57	7,085.92	841.66	7,092.45	0.00	0.00	0.00
16,000.00	88.98	0.46	8,365.35	7,185.90	842.45	7,192.44	0.00	0.00	0.00
16,100.00	88.98	0.46	8,367.13	7,285.88	843.25	7,292.42	0.00	0.00	0.00
16,200.00	88.98	0.46	8,368.92	7,385.87	844.04	7,392.40	0.00	0.00	0.00
16,300.00	88.98	0.46	8,370.70	7,485.85	844.84	7,492.39	0.00	0.00	0.00
16,400.00	88.98	0.46	8,372.48	7,585.83	845.63	7,592.37	0.00	0.00	0.00
16,485.16	88.98	0.46	8,374.00	7,670.97	846.31	7,677.52	0.00	0.00	0.00
TD at 16485	16								





Database: USA Compass

Company: Titus Oil & Gas Production, LLC
Project: Eddy County, NM (NAD83 NME)

Site: Chicken Noodle Fed Com

Well: 402H Wellbore: OH

Design: Plan 2 09-24-21

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well 402H

RKB @ 3670.19usft (H&P 474) RKB @ 3670.19usft (H&P 474)

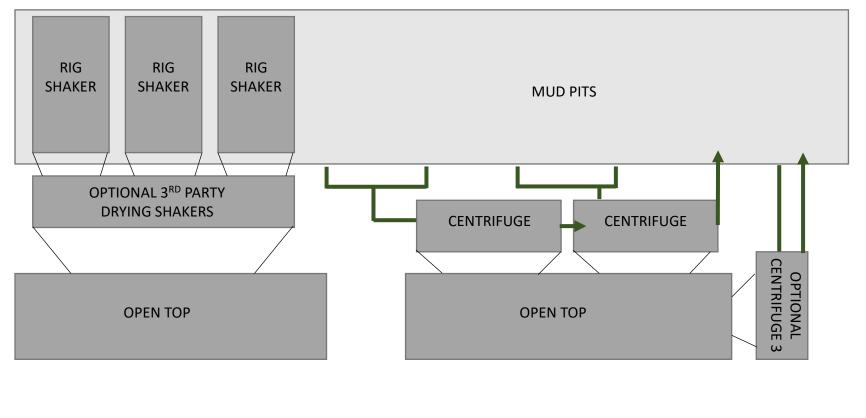
Grid

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
FTPv2 - Chicken Noodle - plan hits target cen - Point		360.00	8,234.00	-179.33	783.87	384,649.61	530,700.06	32° 3′ 26.917147 N	104° 22' 3.613489 W
LTPv2 - Chicken Noodle - plan misses target - Point	0.00 center by 1.72	360.00 2usft at 1639	8,374.00 5.18usft MD	7,580.97 (8372.40 TVD	846.21), 7581.00 N, 8	392,409.91 845.59 E)	530,762.40	32° 4' 43.715657 N	104° 22' 2.917592 W
BHLv2 - Chicken Noodle - plan hits target cen - Point		360.00	8,374.00	7,670.97	846.31	392,499.91	530,762.50	32° 4' 44.606324 N	104° 22' 2.916761 W

Casing Points					
	Measured	Vertical		Casing	Hole
	Depth	Depth		Diameter	Diameter
	(usft)	(usft)	Name	(")	(")
	16,484.22	8,373.98 20" Cas	sing	20	24

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coord +N/-S (usft)	dinates +E/-W (usft)	Comment
1,800.00	1,800.00	0.00	0.00	KOP, Begin 1.50°/100' Build
2,666.92	2,659.50	-64.96	73.32	Hold 13.00° Inc at 131.54° Azm
6,426.34	6,322.50	-625.94	706.48	Begin 1.50°/100' Drop
7,293.26	7,182.00	-690.90	779.80	Begin Vertical Hold
7,824.47	7,713.21	-690.90	779.80	KOP2, Begin 11.00°/100' Build
8,633.36	8,234.00	-179.33	783.87	LP, Hold 88.98° Inc at 0.46° Azm
16,485.16	8,374.00	7,670.97	846.31	TD at 16485.16

CLOSED LOOP SCHEMATIC



_____ 4" LINES

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

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 98091

CONDITIONS

Operator:	OGRID:
Titus Oil & Gas Production, LLC	373986
420 Throckmorton St, Ste 1150	Action Number:
Fort Worth, TX 76012	98091
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Will require a administrative order for non-standard location prior to placing the well on production	4/14/2022
kpickford	Notify OCD 24 hours prior to casing & cement	4/14/2022
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104	4/14/2022
kpickford	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	4/14/2022
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing	4/14/2022
kpickford	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	4/14/2022