

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

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

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-101
August 1, 2011

Permit 287867

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

1. Operator Name and Address CENTENNIAL RESOURCE PRODUCTION, LLC 1001 17th Street, Suite 1800 Denver, CO 80202		2. OGRID Number 372165
		3. API Number 30-025-47958
4. Property Code 322870	5. Property Name CHORIZO 12 STATE COM	6. Well No. 501H

7. Surface Location

UL - Lot E	Section 36	Township 21S	Range 34E	Lot Idn E	Feet From 2467	N/S Line N	Feet From 880	E/W Line W	County Lea
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8. Proposed Bottom Hole Location

UL - Lot E	Section 12	Township 22S	Range 34E	Lot Idn E	Feet From 2541	N/S Line N	Feet From 330	E/W Line W	County Lea
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9. Pool Information

GRAMA RIDGE;BONE SPRING, NE	28435
OJO CHISO;BONE SPRING	96553

Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3669
16. Multiple Y	17. Proposed Depth 20614	18. Formation 2nd Bone Spring Sand	19. Contractor	20. Spud Date 10/30/2020
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

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

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	54.5	1850	1572	0
Int1	12.25	9.625	40	5600	1372	0
Prod	8.5	5.5	20	20614	2060	9842
Prod	8.75	5.5	20	10742	1089	0

Casing/Cement Program: Additional Comments

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

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Pipe	10000	5000	Cameron

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.

Signature:

OIL CONSERVATION DIVISION

Printed Name: Electronically filed by Sarah Ferreyros	Approved By: Paul F Kautz
Title: Regulatory Lead	Title: Geologist
Email Address: Sarah.Ferreyros@cdevinc.com	Approved Date: 10/31/2020 Expiration Date: 10/31/2022
Date: 10/25/2020 Phone: 720-499-1454	Conditions of Approval Attached

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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 28435	³ Pool Name Grama Ridge; Bone Spring, NE
⁴ Property Code 322870	⁵ Property Name CHORIZO 12 STATE COM	⁶ Well Number 501H
⁷ OGRID No. 372165	⁸ Operator Name CENTENNIAL RESOURCE PRODUCTION, LLC	⁹ Elevation 3669.9'

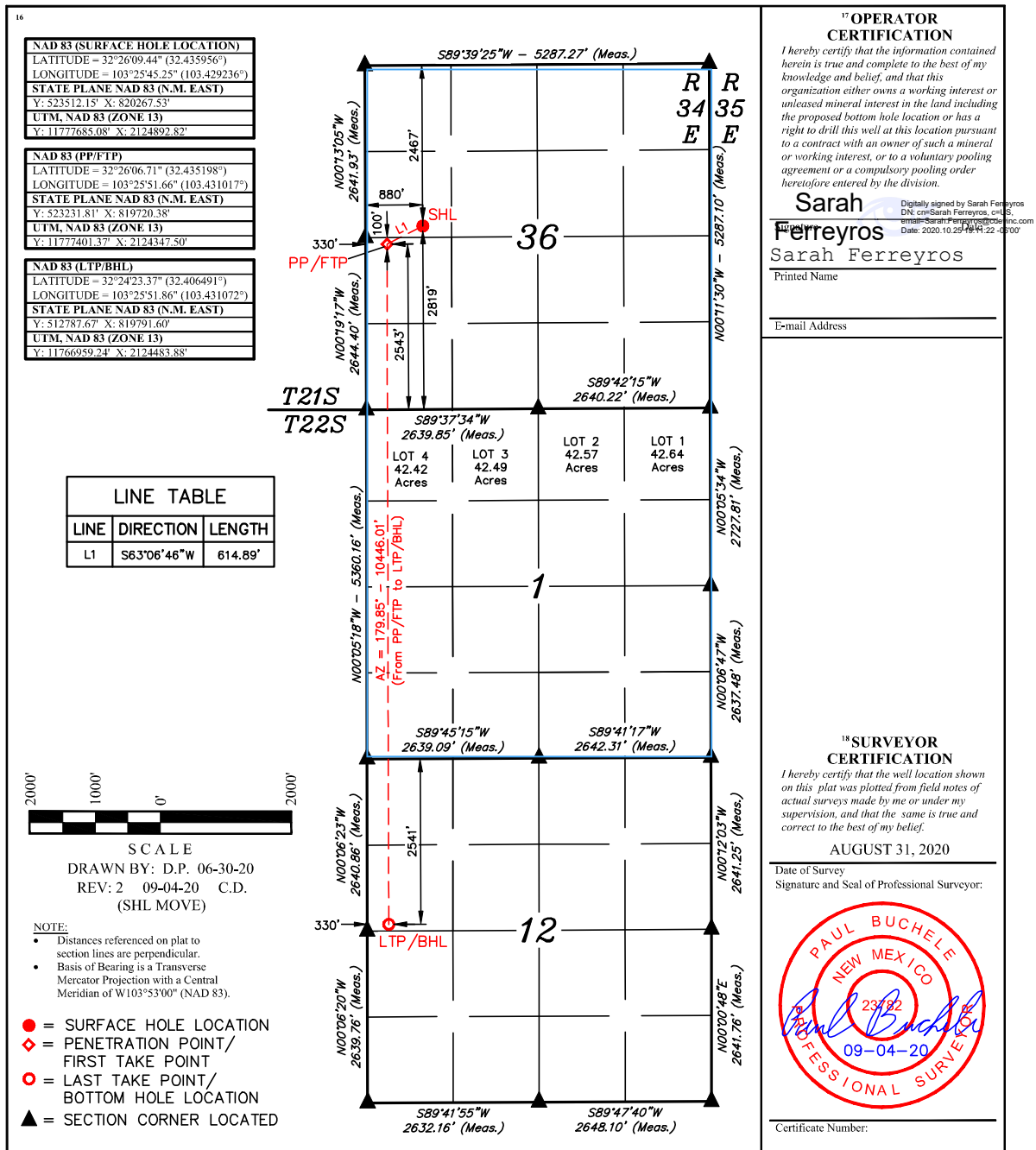
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	36	21S	34E		2467	NORTH	880	WEST	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
E	12	22S	34E		2541	NORTH	330	WEST	LEA
¹² Dedicated Acres = 64.91	¹³ Joint or Infill 484.91	¹⁴ Consolidation Code	¹⁵ Order No.						

No allowance will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



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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 96553	³ Pool Name Ojo Chiso; Bone Spring
⁴ Property Code 322870	⁵ Property Name CHORIZO 12 STATE COM	⁶ Well Number 501H
⁷ OGRID No. 372165	⁸ Operator Name CENTENNIAL RESOURCE PRODUCTION, LLC	⁹ Elevation 3669.9'

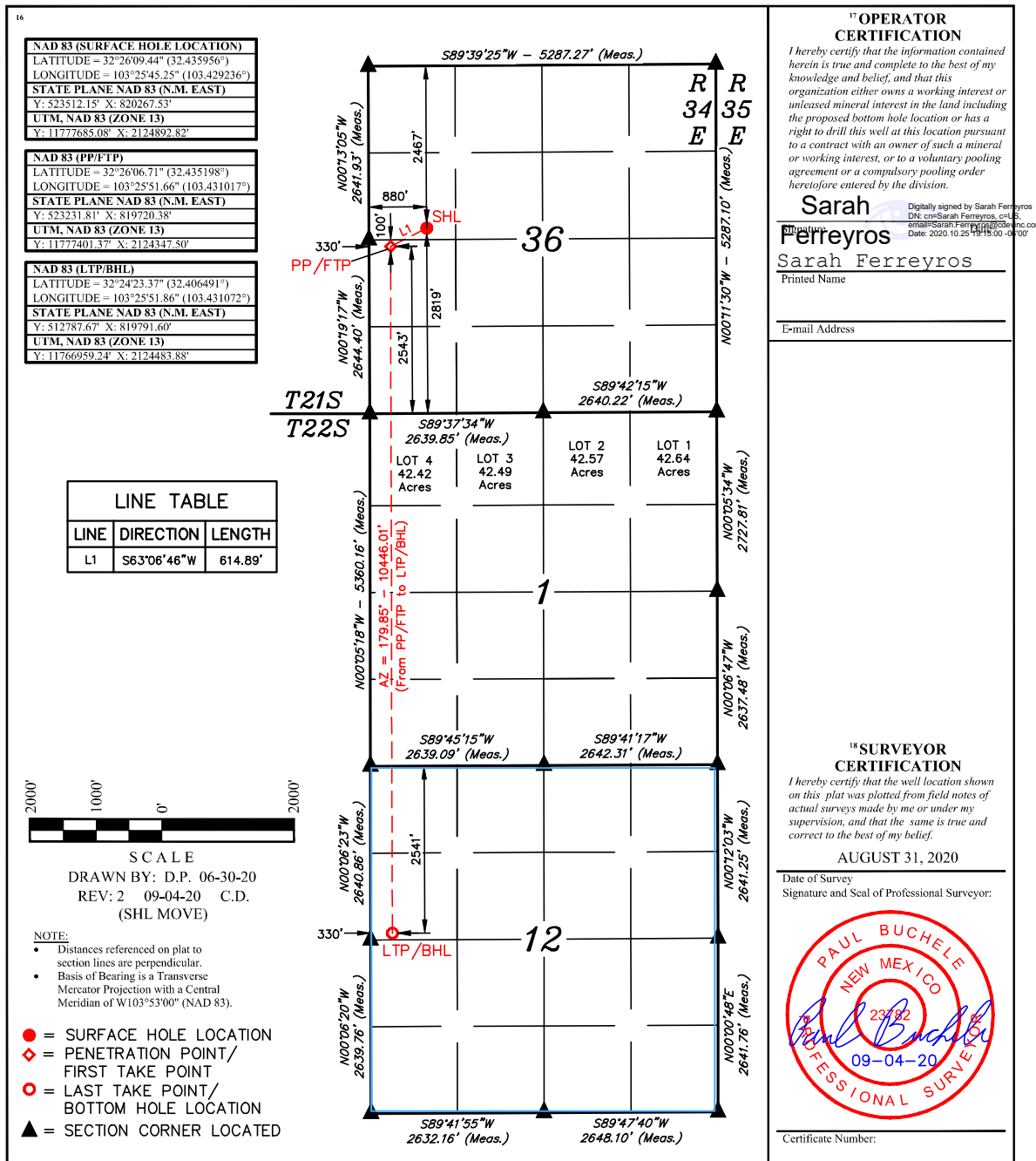
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	36	21S	34E		2467	NORTH	880	WEST	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
E	12	22S	34E		2541	NORTH	330	WEST	LEA
¹² Dedicated Acres 6.49	¹³ Joint or Infill 160	¹⁴ Consolidation Code	¹⁵ Order No.						

No allowance will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



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Santa Fe, NM 87505

GAS CAPTURE PLAN

Date: 10/31/2020

☒ Original

Operator & OGRID No.: [372165] CENTENNIAL RESOURCE PRODUCTION, LLC

☐ Amended - Reason for
Amendment: _____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomple to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
CHORIZO 12 STATE COM #501H	30-025-47958	E-36-21S-34E	2467N 0880W	2500	None	The Facility is already connected to gas, water, and oil gathering.

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to VERSADO GAS PROCESSORS,LLC and will be connected to VERSADO GAS PROCESSORS,LLC High/Low Pressure gathering system located in Lea County, New Mexico. It will require 15' of pipeline to connect the facility to High/Low Pressure gathering system. CENTENNIAL RESOURCE PRODUCTION, LLC provides (periodically) to VERSADO GAS PROCESSORS,LLC a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, CENTENNIAL RESOURCE PRODUCTION, LLC and VERSADO GAS PROCESSORS,LLC have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at VERSADO GAS PROCESSORS,LLC Processing Plant located in Sec. 03, Twn. 22S, Rng. 37E, Lea County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on VERSADO GAS PROCESSORS,LLC system at that time. Based on current information, it is CENTENNIAL RESOURCE PRODUCTION, LLC's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
 - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
 - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
 - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

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Form APD Comments

Permit 287867

PERMIT COMMENTS

Operator Name and Address: CENTENNIAL RESOURCE PRODUCTION, LLC [372165] 1001 17th Street, Suite 1800 Denver, CO 80202		API Number: 30-025-47958
		Well: CHORIZO 12 STATE COM #501H
Created By	Comment	Comment Date
sferreyros	Spudder rig will preset surface casing.	10/25/2020

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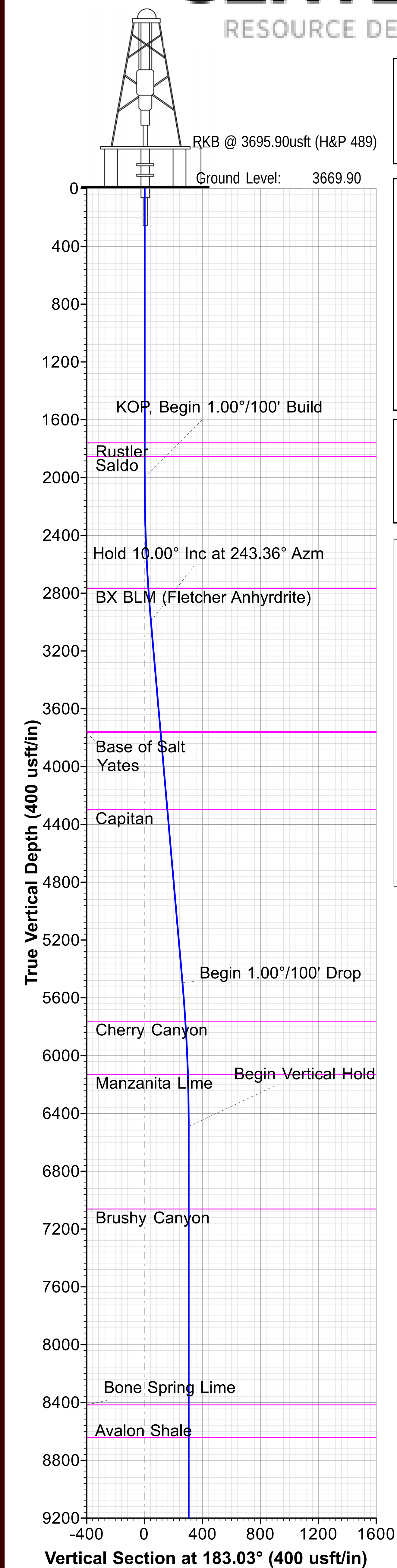
Form APD Conditions

Permit 287867

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: CENTENNIAL RESOURCE PRODUCTION, LLC [372165] 1001 17th Street, Suite 1800 Denver, CO 80202	API Number: 30-025-47958
	Well: CHORIZO 12 STATE COM #501H

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

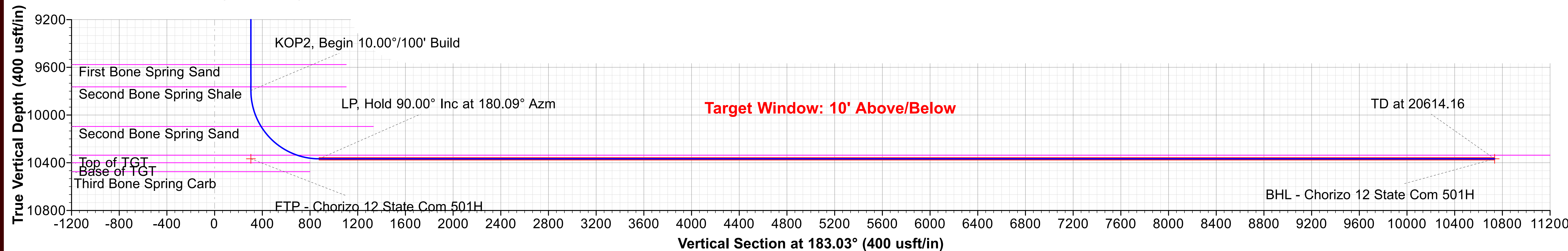
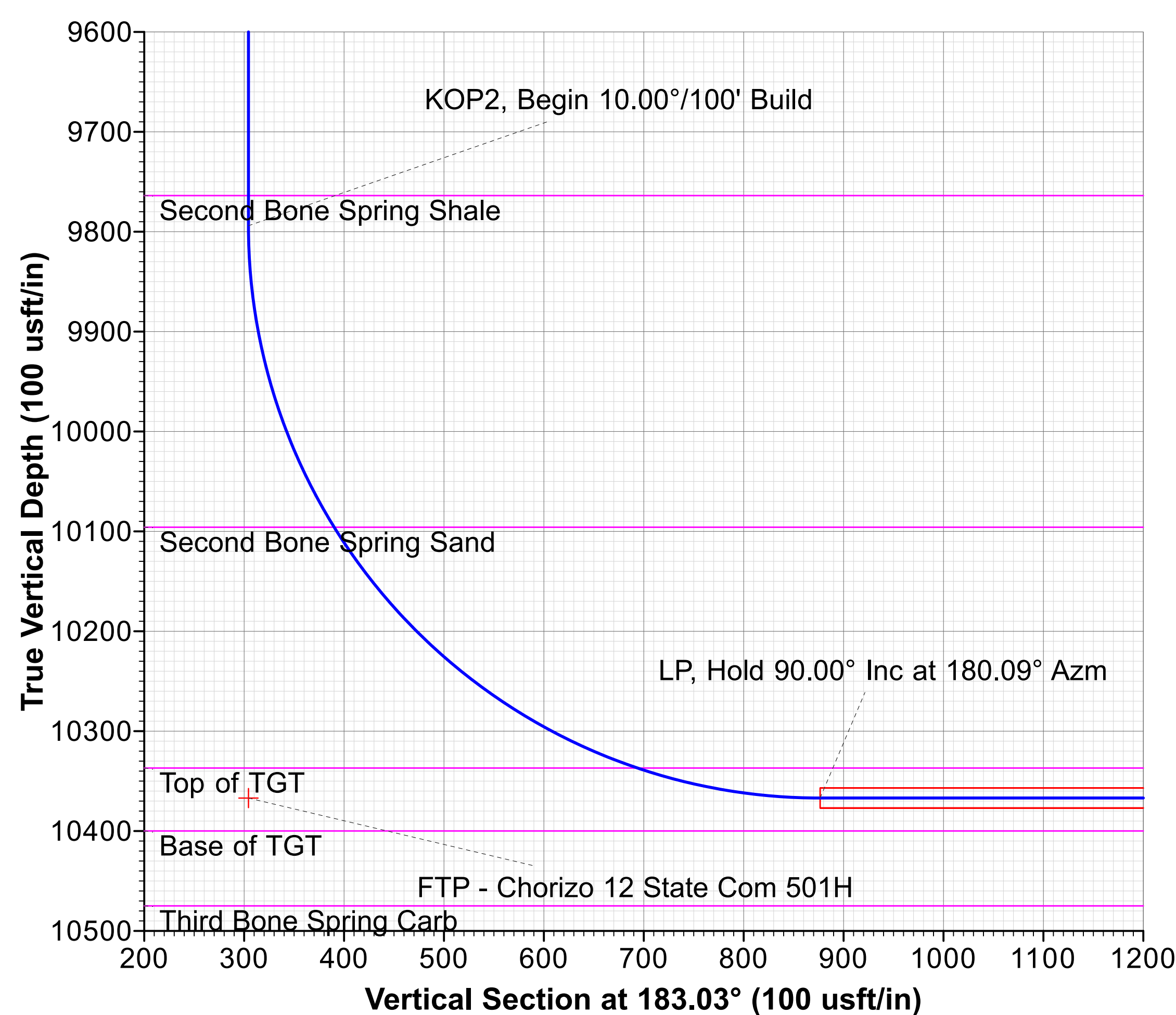
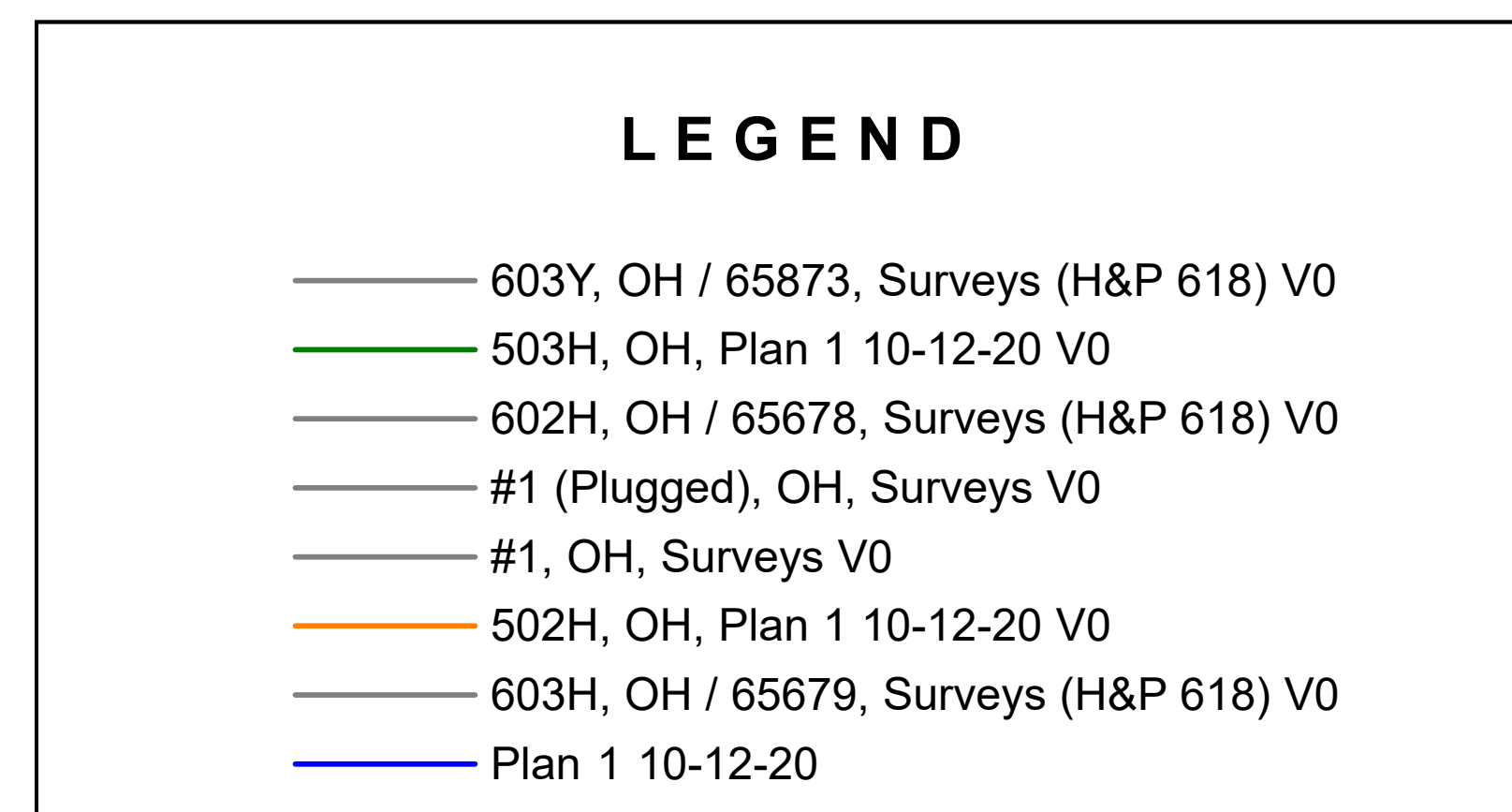


WELL DETAILS									
+N/-S	+E/-W	Northing	Ground Level:	Easting	Latitude	Longitude			
0.00	0.00	11777685.08	3669.90	2124892.82	32° 26' 9.440212 N	103° 25' 45.251059 W			

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		KOP, Begin 1.00°/100' Build	
2	2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00		Hold 10.00° Inc at 243.36° Azm	
3	2999.68	10.00	243.36	2994.62	-39.01	-77.75	1.00	243.36	43.06		Begin 1.00°/100' Drop	
4	5539.00	10.00	243.36	5495.38	-236.69	-471.75	0.00	0.00	261.26		Begin Vertical Hold	
5	6538.68	0.00	0.00	6490.00	-275.70	-549.51	1.00	180.00	304.32		KOP2, Begin 10.00°/100' Build	
6	9842.72	0.00	0.00	9794.04	-275.70	-549.51	0.00	0.00	304.32		LP, Hold 90.00° Inc at 180.09° Azm	
7	10742.72	90.00	180.09	10367.00	-848.65	-550.45	10.00	180.09	876.53		TD at 20614.16	
8	20614.16	90.00	180.09	10367.00-10720.07	-566.72	0.00	0.00	10735.04	BHL - Chorizo 12 State Com 501H			

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
BHL - Chorizo 12 State Com 501H	10367.00	-10720.07	-566.72	11766959.24	2124483.88	32° 24' 23.366545 N	103° 25' 51.860424 W
FTP - Chorizo 12 State Com 501H	10367.00	-275.70	-549.51	11777401.37	2124347.50	32° 26' 6.712201 N	103° 25' 51.662548 W

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
1759.90	1759.90	Rustler
1854.90	1854.90	Saldo
2767.90	2770.22	BX BLM (Fletcher Anhydrite)
3756.90	3773.72	Base of Salt
3763.90	3780.82	Yates
4298.90	4324.07	Capitan
5761.90	5808.61	Cherry Canyon
6129.90	6178.34	Manzanita Lime
7061.90	7110.58	Brushy Canyon
8416.90	8465.58	Bone Spring Lime
8641.90	8690.58	Avalon Shale
9576.90	9625.58	First Bone Spring Sand
9763.90	9812.58	Second Bone Spring Shale
10095.90	10160.65	Second Bone Spring Sand
10336.90	10556.18	Top of TGT



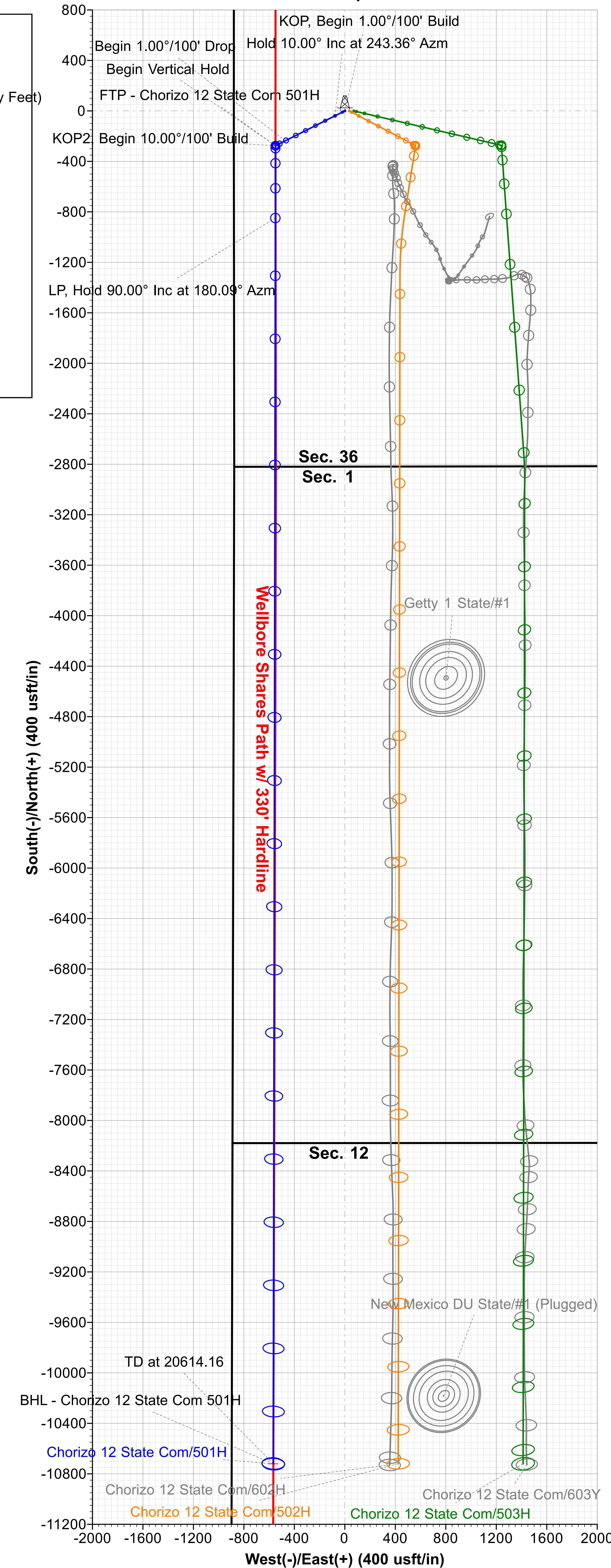
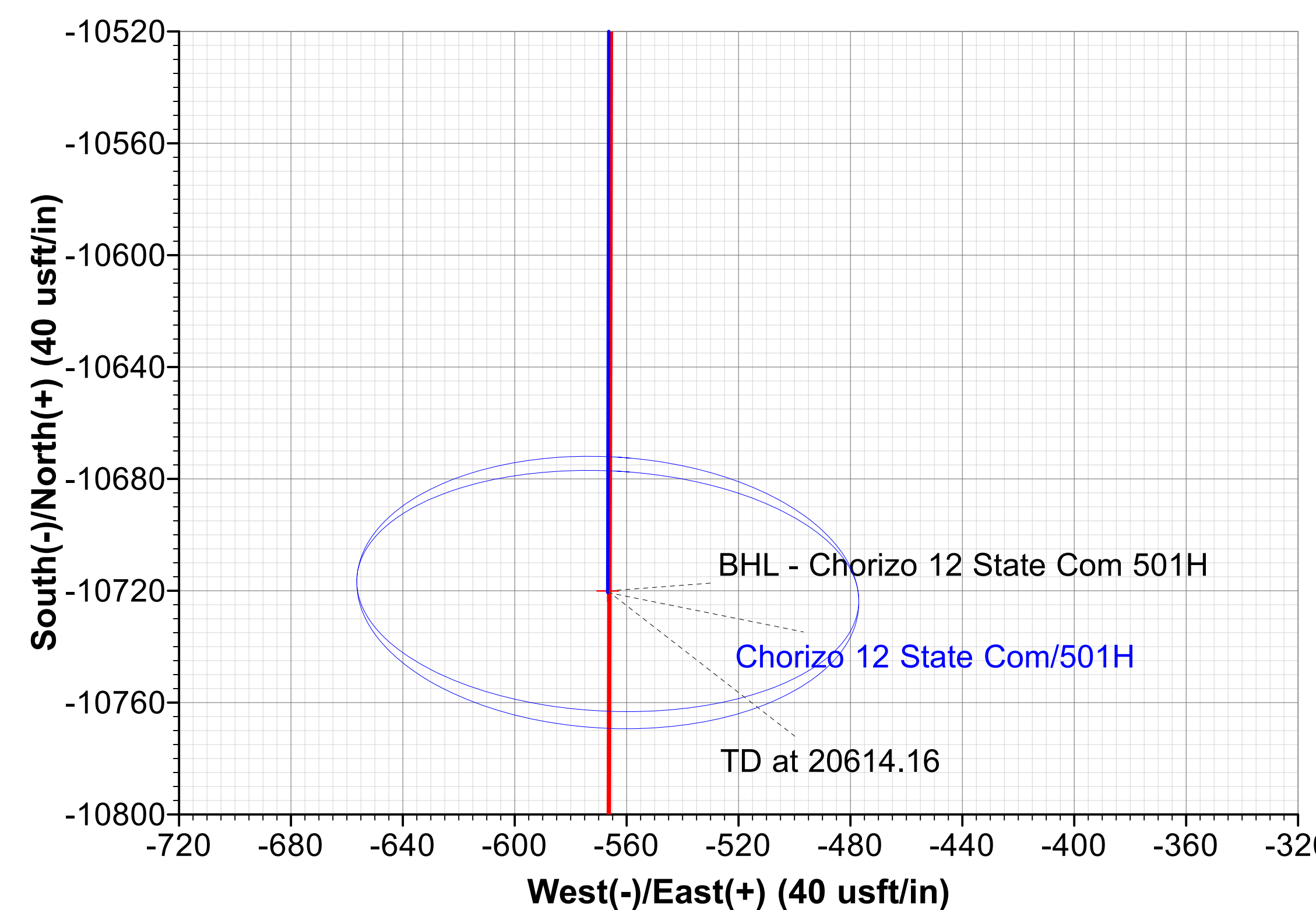
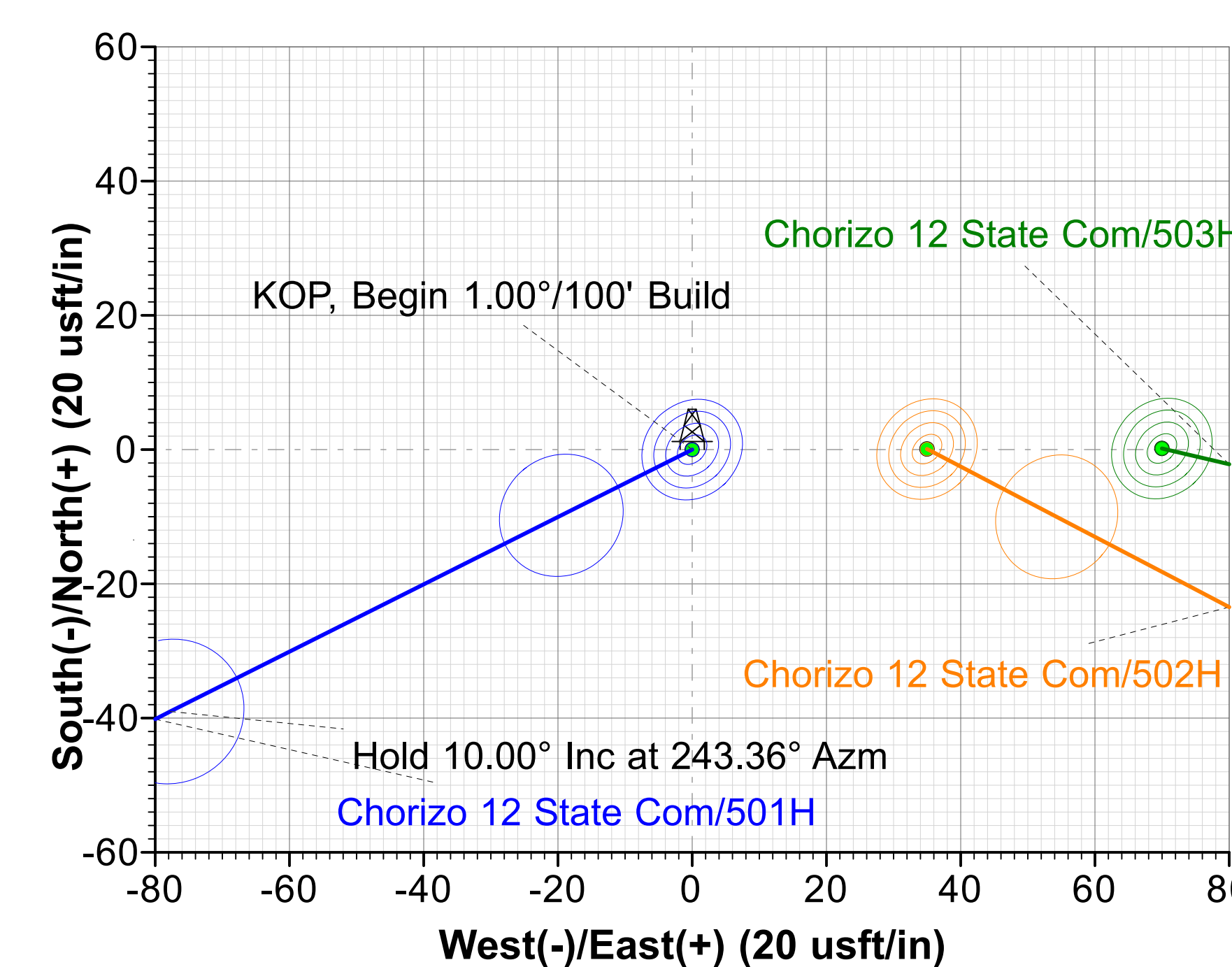
Map System:
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone Name: Zone 13N (108 W to 102 W)
Local Origin: Well 501H, True North

Latitude: 32° 26' 9.440212 N
Longitude: 103° 25' 45.251059 W

Grid East: 2124892.82
Grid North: 11777685.08
Scale Factor: 1.000

Geomagnetic Model: MVHD
Sample Date: 12-Dec-20
Magnetic Declination: 6.50°
Dip Angle from Horizontal: 60.18°
Magnetic Field Strength: 47917.61073021nT

To convert a Magnetic Direction to a Grid Direction, Add 5.66°
To convert a Magnetic Direction to a True Direction, Add 6.50° East
To convert a True Direction to a Grid Direction, Subtract 0.84°





Centennial Resources Development, Inc.

**Lea County, NM (NAD83 - UTM Zone 13)
Chorizo 12 State Com
501H**

OH

Plan: Plan 1 10-12-20

Standard Planning Report

12 October, 2020





Planning Report



Database:	USA Compass	Local Co-ordinate Reference:	Well 501H
Company:	Centennial Resources Development, Inc.	TVD Reference:	RKB @ 3695.90usft (H&P 489)
Project:	Lea County, NM (NAD83 - UTM Zone 13)	MD Reference:	RKB @ 3695.90usft (H&P 489)
Site:	Chorizo 12 State Com	North Reference:	True
Well:	501H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1 10-12-20		

Project	Lea County, NM (NAD83 - UTM Zone 13)		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Zone 13N (108 W to 102 W)		Using geodetic scale factor

Site	Chorizo 12 State Com		
Site Position:		Northing:	11,776,359.14 usft
From:	Map	Easting:	2,125,745.97 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 25' 56.195697 N
		Longitude:	103° 25' 35.524351 W

Well	501H		
Well Position	+N/-S	1,338.54 usft	Northing:
	+E/-W	-833.63 usft	Easting:
Position Uncertainty	1.00 usft		Wellhead Elevation:
			Latitude:
			Longitude:
			Ground Level:

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	MVHD	12/12/2020	6.50
			Dip Angle (°)
			60.18
			Field Strength (nT)
			47,917.61073020

Design	Plan 1 10-12-20		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.00	0.00	0.00
			Direction (°)
			183.03

Plan Survey Tool Program	Date	10/12/2020		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	20,614.16	Plan 1 10-12-20 (OH)	MWD+IFR1+MS
				OWSG MWD + IFR1 + Multi-St

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	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,999.68	10.00	243.36	2,994.62	-39.01	-77.75	1.00	1.00	0.00	243.36	
5,539.00	10.00	243.36	5,495.38	-236.69	-471.75	0.00	0.00	0.00	0.00	
6,538.68	0.00	0.00	6,490.00	-275.70	-549.51	1.00	-1.00	0.00	180.00	
9,842.72	0.00	0.00	9,794.04	-275.70	-549.51	0.00	0.00	0.00	0.00	
10,742.72	90.00	180.09	10,367.00	-848.65	-550.45	10.00	10.00	-19.99	180.09	
20,614.16	90.00	180.09	10,367.00	-10,720.07	-566.72	0.00	0.00	0.00	0.00	BHL - Chorizo 12 Stat



Planning Report



Database:	USA Compass	Local Co-ordinate Reference:	Well 501H
Company:	Centennial Resources Development, Inc.	TVD Reference:	RKB @ 3695.90usft (H&P 489)
Project:	Lea County, NM (NAD83 - UTM Zone 13)	MD Reference:	RKB @ 3695.90usft (H&P 489)
Site:	Chorizo 12 State Com	North Reference:	True
Well:	501H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1 10-12-20		

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
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP, Begin 1.00°/100' Build									
2,100.00	1.00	243.36	2,099.99	-0.39	-0.78	0.43	1.00	1.00	0.00
2,200.00	2.00	243.36	2,199.96	-1.57	-3.12	1.73	1.00	1.00	0.00
2,300.00	3.00	243.36	2,299.86	-3.52	-7.02	3.89	1.00	1.00	0.00
2,400.00	4.00	243.36	2,399.68	-6.26	-12.47	6.91	1.00	1.00	0.00
2,500.00	5.00	243.36	2,499.37	-9.78	-19.49	10.79	1.00	1.00	0.00
2,600.00	6.00	243.36	2,598.90	-14.08	-28.05	15.54	1.00	1.00	0.00
2,700.00	7.00	243.36	2,698.26	-19.15	-38.17	21.14	1.00	1.00	0.00
2,800.00	8.00	243.36	2,797.40	-25.00	-49.84	27.60	1.00	1.00	0.00
2,900.00	9.00	243.36	2,896.30	-31.63	-63.05	34.92	1.00	1.00	0.00
2,999.68	10.00	243.36	2,994.62	-39.01	-77.75	43.06	1.00	1.00	0.00
Hold 10.00° Inc at 243.36° Azm									
3,000.00	10.00	243.36	2,994.93	-39.03	-77.80	43.09	0.00	0.00	0.00
3,100.00	10.00	243.36	3,093.41	-46.82	-93.32	51.68	0.00	0.00	0.00
3,200.00	10.00	243.36	3,191.89	-54.60	-108.83	60.27	0.00	0.00	0.00
3,300.00	10.00	243.36	3,290.38	-62.39	-124.35	68.87	0.00	0.00	0.00
3,400.00	10.00	243.36	3,388.86	-70.17	-139.87	77.46	0.00	0.00	0.00
3,500.00	10.00	243.36	3,487.34	-77.96	-155.38	86.05	0.00	0.00	0.00
3,600.00	10.00	243.36	3,585.82	-85.74	-170.90	94.64	0.00	0.00	0.00
3,700.00	10.00	243.36	3,684.30	-93.53	-186.41	103.24	0.00	0.00	0.00
3,800.00	10.00	243.36	3,782.78	-101.31	-201.93	111.83	0.00	0.00	0.00
3,900.00	10.00	243.36	3,881.27	-109.10	-217.45	120.42	0.00	0.00	0.00
4,000.00	10.00	243.36	3,979.75	-116.88	-232.96	129.02	0.00	0.00	0.00
4,100.00	10.00	243.36	4,078.23	-124.67	-248.48	137.61	0.00	0.00	0.00
4,200.00	10.00	243.36	4,176.71	-132.45	-263.99	146.20	0.00	0.00	0.00
4,300.00	10.00	243.36	4,275.19	-140.23	-279.51	154.79	0.00	0.00	0.00
4,400.00	10.00	243.36	4,373.68	-148.02	-295.03	163.39	0.00	0.00	0.00
4,500.00	10.00	243.36	4,472.16	-155.80	-310.54	171.98	0.00	0.00	0.00
4,600.00	10.00	243.36	4,570.64	-163.59	-326.06	180.57	0.00	0.00	0.00
4,700.00	10.00	243.36	4,669.12	-171.37	-341.57	189.17	0.00	0.00	0.00
4,800.00	10.00	243.36	4,767.60	-179.16	-357.09	197.76	0.00	0.00	0.00
4,900.00	10.00	243.36	4,866.08	-186.94	-372.61	206.35	0.00	0.00	0.00
5,000.00	10.00	243.36	4,964.57	-194.73	-388.12	214.94	0.00	0.00	0.00
5,100.00	10.00	243.36	5,063.05	-202.51	-403.64	223.54	0.00	0.00	0.00
5,200.00	10.00	243.36	5,161.53	-210.30	-419.15	232.13	0.00	0.00	0.00
5,300.00	10.00	243.36	5,260.01	-218.08	-434.67	240.72	0.00	0.00	0.00
5,400.00	10.00	243.36	5,358.49	-225.86	-450.19	249.31	0.00	0.00	0.00
5,500.00	10.00	243.36	5,456.97	-233.65	-465.70	257.91	0.00	0.00	0.00
5,539.00	10.00	243.36	5,495.38	-236.69	-471.75	261.26	0.00	0.00	0.00
Begin 1.00°/100' Drop									
5,600.00	9.39	243.36	5,555.51	-241.29	-480.93	266.34	1.00	-1.00	0.00
5,700.00	8.39	243.36	5,654.31	-248.22	-494.74	273.99	1.00	-1.00	0.00
5,800.00	7.39	243.36	5,753.36	-254.37	-507.00	280.78	1.00	-1.00	0.00
5,900.00	6.39	243.36	5,852.64	-259.75	-517.72	286.72	1.00	-1.00	0.00
6,000.00	5.39	243.36	5,952.11	-264.35	-526.89	291.79	1.00	-1.00	0.00
6,100.00	4.39	243.36	6,051.75	-268.17	-534.50	296.01	1.00	-1.00	0.00
6,200.00	3.39	243.36	6,151.52	-271.21	-540.56	299.37	1.00	-1.00	0.00
6,300.00	2.39	243.36	6,251.39	-273.47	-545.06	301.86	1.00	-1.00	0.00
6,400.00	1.39	243.36	6,351.33	-274.94	-548.01	303.49	1.00	-1.00	0.00
6,500.00	0.39	243.36	6,451.32	-275.64	-549.39	304.25	1.00	-1.00	0.00
6,538.68	0.00	0.00	6,490.00	-275.70	-549.51	304.32	1.00	-1.00	0.00



Planning Report



Database:	USA Compass	Local Co-ordinate Reference:	Well 501H
Company:	Centennial Resources Development, Inc.	TVD Reference:	RKB @ 3695.90usft (H&P 489)
Project:	Lea County, NM (NAD83 - UTM Zone 13)	MD Reference:	RKB @ 3695.90usft (H&P 489)
Site:	Chorizo 12 State Com	North Reference:	True
Well:	501H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1 10-12-20		

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)
Begin Vertical Hold									
9,842.72	0.00	0.00	9,794.04	-275.70	-549.51	304.32	0.00	0.00	0.00
KOP2, Begin 10.00°/100' Build									
9,900.00	5.73	180.09	9,851.22	-278.56	-549.51	307.18	10.00	10.00	0.00
10,000.00	15.73	180.09	9,949.35	-297.15	-549.54	325.74	10.00	10.00	0.00
10,100.00	25.73	180.09	10,042.76	-332.49	-549.60	361.04	10.00	10.00	0.00
10,200.00	35.73	180.09	10,128.61	-383.52	-549.68	412.01	10.00	10.00	0.00
10,300.00	45.73	180.09	10,204.30	-448.69	-549.79	477.08	10.00	10.00	0.00
10,400.00	55.73	180.09	10,267.52	-526.00	-549.92	554.30	10.00	10.00	0.00
10,500.00	65.73	180.09	10,316.35	-613.12	-550.06	641.31	10.00	10.00	0.00
10,600.00	75.73	180.09	10,349.32	-707.40	-550.22	735.46	10.00	10.00	0.00
10,700.00	85.73	180.09	10,365.41	-805.97	-550.38	833.90	10.00	10.00	0.00
10,742.72	90.00	180.09	10,367.00	-848.65	-550.45	876.53	10.00	10.00	0.00
LP, Hold 90.00° Inc at 180.09° Azm									
10,800.00	90.00	180.09	10,367.00	-905.93	-550.54	933.73	0.00	0.00	0.00
10,900.00	90.00	180.09	10,367.00	-1,005.93	-550.71	1,033.60	0.00	0.00	0.00
11,000.00	90.00	180.09	10,367.00	-1,105.93	-550.87	1,133.47	0.00	0.00	0.00
11,100.00	90.00	180.09	10,367.00	-1,205.93	-551.04	1,233.33	0.00	0.00	0.00
11,200.00	90.00	180.09	10,367.00	-1,305.93	-551.20	1,333.20	0.00	0.00	0.00
11,300.00	90.00	180.09	10,367.00	-1,405.93	-551.37	1,433.07	0.00	0.00	0.00
11,400.00	90.00	180.09	10,367.00	-1,505.93	-551.53	1,532.94	0.00	0.00	0.00
11,500.00	90.00	180.09	10,367.00	-1,605.93	-551.70	1,632.81	0.00	0.00	0.00
11,600.00	90.00	180.09	10,367.00	-1,705.93	-551.86	1,732.68	0.00	0.00	0.00
11,700.00	90.00	180.09	10,367.00	-1,805.93	-552.03	1,832.55	0.00	0.00	0.00
11,800.00	90.00	180.09	10,367.00	-1,905.93	-552.19	1,932.42	0.00	0.00	0.00
11,900.00	90.00	180.09	10,367.00	-2,005.93	-552.36	2,032.29	0.00	0.00	0.00
12,000.00	90.00	180.09	10,367.00	-2,105.93	-552.52	2,132.16	0.00	0.00	0.00
12,100.00	90.00	180.09	10,367.00	-2,205.93	-552.69	2,232.03	0.00	0.00	0.00
12,200.00	90.00	180.09	10,367.00	-2,305.93	-552.85	2,331.90	0.00	0.00	0.00
12,300.00	90.00	180.09	10,367.00	-2,405.93	-553.02	2,431.76	0.00	0.00	0.00
12,400.00	90.00	180.09	10,367.00	-2,505.93	-553.18	2,531.63	0.00	0.00	0.00
12,500.00	90.00	180.09	10,367.00	-2,605.93	-553.35	2,631.50	0.00	0.00	0.00
12,600.00	90.00	180.09	10,367.00	-2,705.93	-553.51	2,731.37	0.00	0.00	0.00
12,700.00	90.00	180.09	10,367.00	-2,805.93	-553.68	2,831.24	0.00	0.00	0.00
12,800.00	90.00	180.09	10,367.00	-2,905.93	-553.84	2,931.11	0.00	0.00	0.00
12,900.00	90.00	180.09	10,367.00	-3,005.92	-554.01	3,030.98	0.00	0.00	0.00
13,000.00	90.00	180.09	10,367.00	-3,105.92	-554.17	3,130.85	0.00	0.00	0.00
13,100.00	90.00	180.09	10,367.00	-3,205.92	-554.34	3,230.72	0.00	0.00	0.00
13,200.00	90.00	180.09	10,367.00	-3,305.92	-554.50	3,330.59	0.00	0.00	0.00
13,300.00	90.00	180.09	10,367.00	-3,405.92	-554.67	3,430.46	0.00	0.00	0.00
13,400.00	90.00	180.09	10,367.00	-3,505.92	-554.83	3,530.32	0.00	0.00	0.00
13,500.00	90.00	180.09	10,367.00	-3,605.92	-554.99	3,630.19	0.00	0.00	0.00
13,600.00	90.00	180.09	10,367.00	-3,705.92	-555.16	3,730.06	0.00	0.00	0.00
13,700.00	90.00	180.09	10,367.00	-3,805.92	-555.32	3,829.93	0.00	0.00	0.00
13,800.00	90.00	180.09	10,367.00	-3,905.92	-555.49	3,929.80	0.00	0.00	0.00
13,900.00	90.00	180.09	10,367.00	-4,005.92	-555.65	4,029.67	0.00	0.00	0.00
14,000.00	90.00	180.09	10,367.00	-4,105.92	-555.82	4,129.54	0.00	0.00	0.00
14,100.00	90.00	180.09	10,367.00	-4,205.92	-555.98	4,229.41	0.00	0.00	0.00
14,200.00	90.00	180.09	10,367.00	-4,305.92	-556.15	4,329.28	0.00	0.00	0.00
14,300.00	90.00	180.09	10,367.00	-4,405.92	-556.31	4,429.15	0.00	0.00	0.00
14,400.00	90.00	180.09	10,367.00	-4,505.92	-556.48	4,529.02	0.00	0.00	0.00
14,500.00	90.00	180.09	10,367.00	-4,605.92	-556.64	4,628.89	0.00	0.00	0.00
14,600.00	90.00	180.09	10,367.00	-4,705.92	-556.81	4,728.75	0.00	0.00	0.00



Planning Report



Database:	USA Compass	Local Co-ordinate Reference:	Well 501H
Company:	Centennial Resources Development, Inc.	TVD Reference:	RKB @ 3695.90usft (H&P 489)
Project:	Lea County, NM (NAD83 - UTM Zone 13)	MD Reference:	RKB @ 3695.90usft (H&P 489)
Site:	Chorizo 12 State Com	North Reference:	True
Well:	501H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1 10-12-20		

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)
14,700.00	90.00	180.09	10,367.00	-4,805.92	-556.97	4,828.62	0.00	0.00	0.00
14,800.00	90.00	180.09	10,367.00	-4,905.92	-557.14	4,928.49	0.00	0.00	0.00
14,900.00	90.00	180.09	10,367.00	-5,005.92	-557.30	5,028.36	0.00	0.00	0.00
15,000.00	90.00	180.09	10,367.00	-5,105.92	-557.47	5,128.23	0.00	0.00	0.00
15,100.00	90.00	180.09	10,367.00	-5,205.92	-557.63	5,228.10	0.00	0.00	0.00
15,200.00	90.00	180.09	10,367.00	-5,305.92	-557.80	5,327.97	0.00	0.00	0.00
15,300.00	90.00	180.09	10,367.00	-5,405.92	-557.96	5,427.84	0.00	0.00	0.00
15,400.00	90.00	180.09	10,367.00	-5,505.92	-558.13	5,527.71	0.00	0.00	0.00
15,500.00	90.00	180.09	10,367.00	-5,605.92	-558.29	5,627.58	0.00	0.00	0.00
15,600.00	90.00	180.09	10,367.00	-5,705.92	-558.46	5,727.45	0.00	0.00	0.00
15,700.00	90.00	180.09	10,367.00	-5,805.92	-558.62	5,827.32	0.00	0.00	0.00
15,800.00	90.00	180.09	10,367.00	-5,905.92	-558.79	5,927.18	0.00	0.00	0.00
15,900.00	90.00	180.09	10,367.00	-6,005.92	-558.95	6,027.05	0.00	0.00	0.00
16,000.00	90.00	180.09	10,367.00	-6,105.92	-559.12	6,126.92	0.00	0.00	0.00
16,100.00	90.00	180.09	10,367.00	-6,205.92	-559.28	6,226.79	0.00	0.00	0.00
16,200.00	90.00	180.09	10,367.00	-6,305.92	-559.44	6,326.66	0.00	0.00	0.00
16,300.00	90.00	180.09	10,367.00	-6,405.92	-559.61	6,426.53	0.00	0.00	0.00
16,400.00	90.00	180.09	10,367.00	-6,505.92	-559.77	6,526.40	0.00	0.00	0.00
16,500.00	90.00	180.09	10,367.00	-6,605.92	-559.94	6,626.27	0.00	0.00	0.00
16,600.00	90.00	180.09	10,367.00	-6,705.92	-560.10	6,726.14	0.00	0.00	0.00
16,700.00	90.00	180.09	10,367.00	-6,805.92	-560.27	6,826.01	0.00	0.00	0.00
16,800.00	90.00	180.09	10,367.00	-6,905.92	-560.43	6,925.88	0.00	0.00	0.00
16,900.00	90.00	180.09	10,367.00	-7,005.92	-560.60	7,025.74	0.00	0.00	0.00
17,000.00	90.00	180.09	10,367.00	-7,105.92	-560.76	7,125.61	0.00	0.00	0.00
17,100.00	90.00	180.09	10,367.00	-7,205.92	-560.93	7,225.48	0.00	0.00	0.00
17,200.00	90.00	180.09	10,367.00	-7,305.92	-561.09	7,325.35	0.00	0.00	0.00
17,300.00	90.00	180.09	10,367.00	-7,405.92	-561.26	7,425.22	0.00	0.00	0.00
17,400.00	90.00	180.09	10,367.00	-7,505.92	-561.42	7,525.09	0.00	0.00	0.00
17,500.00	90.00	180.09	10,367.00	-7,605.92	-561.59	7,624.96	0.00	0.00	0.00
17,600.00	90.00	180.09	10,367.00	-7,705.92	-561.75	7,724.83	0.00	0.00	0.00
17,700.00	90.00	180.09	10,367.00	-7,805.92	-561.92	7,824.70	0.00	0.00	0.00
17,800.00	90.00	180.09	10,367.00	-7,905.92	-562.08	7,924.57	0.00	0.00	0.00
17,900.00	90.00	180.09	10,367.00	-8,005.92	-562.25	8,024.44	0.00	0.00	0.00
18,000.00	90.00	180.09	10,367.00	-8,105.92	-562.41	8,124.31	0.00	0.00	0.00
18,100.00	90.00	180.09	10,367.00	-8,205.92	-562.58	8,224.17	0.00	0.00	0.00
18,200.00	90.00	180.09	10,367.00	-8,305.92	-562.74	8,324.04	0.00	0.00	0.00
18,300.00	90.00	180.09	10,367.00	-8,405.92	-562.91	8,423.91	0.00	0.00	0.00
18,400.00	90.00	180.09	10,367.00	-8,505.92	-563.07	8,523.78	0.00	0.00	0.00
18,500.00	90.00	180.09	10,367.00	-8,605.92	-563.24	8,623.65	0.00	0.00	0.00
18,600.00	90.00	180.09	10,367.00	-8,705.92	-563.40	8,723.52	0.00	0.00	0.00
18,700.00	90.00	180.09	10,367.00	-8,805.92	-563.57	8,823.39	0.00	0.00	0.00
18,800.00	90.00	180.09	10,367.00	-8,905.92	-563.73	8,923.26	0.00	0.00	0.00
18,900.00	90.00	180.09	10,367.00	-9,005.92	-563.90	9,023.13	0.00	0.00	0.00
19,000.00	90.00	180.09	10,367.00	-9,105.92	-564.06	9,123.00	0.00	0.00	0.00
19,100.00	90.00	180.09	10,367.00	-9,205.92	-564.22	9,222.87	0.00	0.00	0.00
19,200.00	90.00	180.09	10,367.00	-9,305.92	-564.39	9,322.73	0.00	0.00	0.00
19,300.00	90.00	180.09	10,367.00	-9,405.92	-564.55	9,422.60	0.00	0.00	0.00
19,400.00	90.00	180.09	10,367.00	-9,505.92	-564.72	9,522.47	0.00	0.00	0.00
19,500.00	90.00	180.09	10,367.00	-9,605.92	-564.88	9,622.34	0.00	0.00	0.00
19,600.00	90.00	180.09	10,367.00	-9,705.92	-565.05	9,722.21	0.00	0.00	0.00
19,700.00	90.00	180.09	10,367.00	-9,805.92	-565.21	9,822.08	0.00	0.00	0.00
19,800.00	90.00	180.09	10,367.00	-9,905.92	-565.38	9,921.95	0.00	0.00	0.00
19,900.00	90.00	180.09	10,367.00	-10,005.92	-565.54	10,021.82	0.00	0.00	0.00
20,000.00	90.00	180.09	10,367.00	-10,105.92	-565.71	10,121.69	0.00	0.00	0.00



Planning Report



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Project:	Lea County, NM (NAD83 - UTM Zone 13)	MD Reference:	RKB @ 3695.90usft (H&P 489)
Site:	Chorizo 12 State Com	North Reference:	True
Well:	501H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1 10-12-20		

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)
20,100.00	90.00	180.09	10,367.00	-10,205.92	-565.87	10,221.56	0.00	0.00	0.00
20,200.00	90.00	180.09	10,367.00	-10,305.92	-566.04	10,321.43	0.00	0.00	0.00
20,300.00	90.00	180.09	10,367.00	-10,405.92	-566.20	10,421.30	0.00	0.00	0.00
20,400.00	90.00	180.09	10,367.00	-10,505.91	-566.37	10,521.16	0.00	0.00	0.00
20,500.00	90.00	180.09	10,367.00	-10,605.91	-566.53	10,621.03	0.00	0.00	0.00
20,600.00	90.00	180.09	10,367.00	-10,705.91	-566.70	10,720.90	0.00	0.00	0.00
20,614.16	90.00	180.09	10,367.00	-10,720.07	-566.72	10,735.04	0.00	0.00	0.00
TD at 20614.16									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
BHL - Chorizo 12 State (	0.00	180.09	10,367.00	-10,720.07	-566.72	11,766,959.24	2,124,483.88	32° 24' 23.366545 N 103° 25' 51.860425 W	
- plan hits target center									
- Rectangle (sides W0.00 H9,871.43 D20.00)									
FTP - Chorizo 12 State (	0.00	0.00	10,367.00	-275.70	-549.51	11,777,401.37	2,124,347.50	32° 26' 6.712201 N 103° 25' 51.662548 W	
- plan misses target center by 237.48usft at 10300.00usft MD (10204.30 TVD, -448.69 N, -549.79 E)									
- Point									

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,759.90	1,759.90	Rustler		0.00	183.03
1,854.90	1,854.90	Saldo		0.00	183.03
2,770.22	2,767.90	BX BLM (Fletcher Anhydrite)		0.00	183.03
3,773.72	3,756.90	Base of Salt		0.00	183.03
3,780.82	3,763.90	Yates		0.00	183.03
4,324.07	4,298.90	Capitan		0.00	183.03
5,808.61	5,761.90	Cherry Canyon		0.00	183.03
6,178.34	6,129.90	Manzanita Lime		0.00	183.03
7,110.58	7,061.90	Brushy Canyon		0.00	183.03
8,465.58	8,416.90	Bone Spring Lime		0.00	183.03
8,690.58	8,641.90	Avalon Shale		0.00	183.03
9,625.58	9,576.90	First Bone Spring Sand		0.00	183.03
9,812.58	9,763.90	Second Bone Spring Shale		0.00	183.03
10,160.65	10,095.90	Second Bone Spring Sand		0.00	183.03
10,556.18	10,336.90	Top of TGT		0.00	183.03



Planning Report



Database:	USA Compass	Local Co-ordinate Reference:	Well 501H
Company:	Centennial Resources Development, Inc.	TVD Reference:	RKB @ 3695.90usft (H&P 489)
Project:	Lea County, NM (NAD83 - UTM Zone 13)	MD Reference:	RKB @ 3695.90usft (H&P 489)
Site:	Chorizo 12 State Com	North Reference:	True
Well:	501H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1 10-12-20		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,000.00	2,000.00	0.00	0.00	KOP, Begin 1.00°/100' Build
2,999.68	2,994.62	-39.01	-77.75	Hold 10.00° Inc at 243.36° Azm
5,539.00	5,495.38	-236.69	-471.75	Begin 1.00°/100' Drop
6,538.68	6,490.00	-275.70	-549.51	Begin Vertical Hold
9,842.72	9,794.04	-275.70	-549.51	KOP2, Begin 10.00°/100' Build
10,742.72	10,367.00	-848.65	-550.45	LP, Hold 90.00° Inc at 180.09° Azm
20,614.16	10,367.00	-10,720.07	-566.72	TD at 20614.16

Intent ☐ As Drilled ☐

API #		
Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Is this well the defining well for the Horizontal Spacing Unit? ☐Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018