

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

Form C-101

August 1, 2011

Permit 278844

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

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

1. Operator Name and Address BC OPERATING, INC. P.O. Box 50820 Midland, TX 79710		2. OGRID Number 160825
		3. API Number 30-015-46792
4. Property Code 327214	5. Property Name Fadeaway Ridge 32 TB State	6. Well No. 301H

7. Surface Location

UL - Lot H	Section 32	Township 19S	Range 28E	Lot Idn H	Feet From 1596	N/S Line N	Feet From 305	E/W Line E	County Eddy
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8. Proposed Bottom Hole Location

UL - Lot D	Section 32	Township 19S	Range 28E	Lot Idn D	Feet From 1000	N/S Line N	Feet From 50	E/W Line W	County Eddy
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9. Pool Information

WINCHESTER;BONE SPRING	65010
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3366
16. Multiple N	17. Proposed Depth 13957	18. Formation 3rd Bone Spring Sand	19. Contractor	20. Spud Date 3/31/2020
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	48	700	750	0
Int1	12.25	9.625	40	4025	750	0
Prod	8.75	7	29	7548	430	0
Prod	8.75	5.5	17	13957	1340	3000

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	3000	3000	

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.	OIL CONSERVATION DIVISION	
Signature:		
Printed Name: Electronically filed by Thomas A Wolfmueller	Approved By: Raymond Podany	
Title:	Title: Geologist	
Email Address: twolfmueller@bcoperating.com	Approved Date: 3/9/2020	Expiration Date: 3/9/2022
Date: 2/26/2020	Phone: 432-214-1985	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 65010	³ Pool Name WINCHESTER; BONE SPRING
⁴ Property Code	⁵ Property Name FADEAWAY RIDGE 32 TB STATE	⁶ Well Number 301H
⁷ OGRID No. 160825	⁸ Operator Name B.C. OPERATING, INC.	⁹ Elevation 3366'

¹⁰ Surface Location

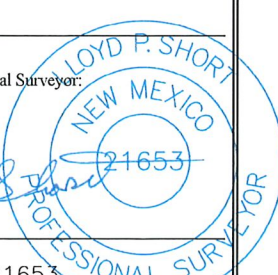
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	32	19S	28E		1596	NORTH	305	EAST	EDDY

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
D	32	19S	28E		1000	NORTH	50	WEST	EDDY

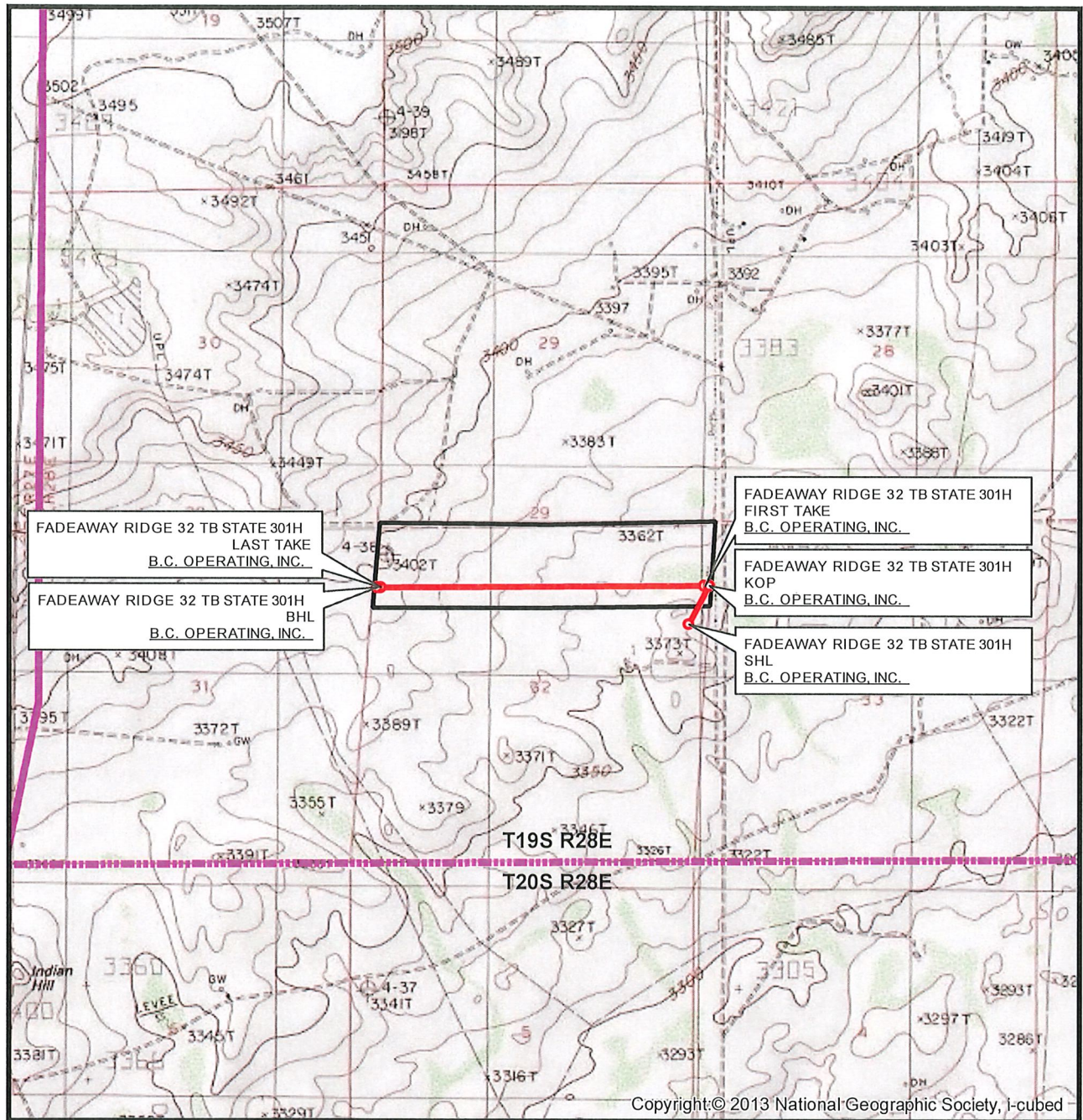
¹² Dedicated Acres 160.0	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

INFILL WELL SECTION 19 SECTION 20 SECTION 30 SECTION 29 SECTION 31 SECTION 32 SECTION 6 SECTION 5 SECTION 3 SECTION 2 SECTION 1 SECTION 0 SHEET 1 OF 3 JOB No. R4037_002_A REV 1 TCS 2/4/2020	CORNER COORDINATES NAD 83, SPCS NM EAST A - X: 582920.93' / Y: 590848.98' B - X: 585541.30' / Y: 590906.81' C - X: 585456.63' / Y: 589591.76' D - X: 582827.52' / Y: 589553.68' E - X: 580205.38' / Y: 589555.59' F - X: 580314.87' / Y: 590871.14'	CORNER COORDINATES NAD 27, SPCS NM EAST A - X: 541740.98' / Y: 590787.26' B - X: 544361.34' / Y: 590845.07' C - X: 544276.65' / Y: 589530.04' D - X: 541647.55' / Y: 589491.98' E - X: 539025.41' / Y: 589493.92' F - X: 539134.93' / Y: 590809.43'	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 _____ Date _____ Printed Name _____ E-mail Address _____
	SURFACE HOLE LOCATION 1596' FNL 305' FEL, SECTION 32 NAD 83, SPCS NM EAST X: 585132.53' / Y: 589301.77' LAT: 32.61996058N / LON: 104.19108824W NAD 27, SPCS NM EAST X: 543952.55' / Y: 589240.07' LAT: 32.61984365N / LON: 104.19057990W	KICK OFF POINT 1000' FNL 25' FEL, SECTION 32 NAD 83, SPCS NM EAST X: 585451.72' / Y: 589904.59' LAT: 32.62161640N / LON: 104.19004887W NAD 27, SPCS NM EAST X: 544271.75' / Y: 589842.87' LAT: 32.62149947N / LON: 104.18954052W	
	FIRST TAKE POINT 1000' FNL 100' FEL, SECTION 32 NAD 83, SPCS NM EAST X: 585376.46' / Y: 589902.93' LAT: 32.62161211N / LON: 104.19029333W NAD 27, SPCS NM EAST X: 544196.49' / Y: 589841.21' LAT: 32.62149519N / LON: 104.18978497W	LAST TAKE POINT 1000' FNL 100' FWL, SECTION 32 NAD 83, SPCS NM EAST X: 580331.97' / Y: 589870.96' LAT: 32.62154180N / LON: 104.20667808W NAD 27, SPCS NM EAST X: 539152.01' / Y: 589809.27' LAT: 32.62142505N / LON: 104.20616932W	
	BOTTOM HOLE LOCATION 1000' FNL 50' FWL, SECTION 32 NAD 83, SPCS NM EAST X: 580281.83' / Y: 589871.38' LAT: 32.62154314N / LON: 104.20684092W NAD 27, SPCS NM EAST X: 539101.87' / Y: 589809.70' LAT: 32.62142639N / LON: 104.20633216W	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. FEBRUARY 12, 2020 Date of Survey Signature and Seal of Professional Surveyor: 	
	Certificate Number LLOYD P. SHORT 21653		

Distances/areas relative to NAD 83 Combined Scale Factor: 0.99974806 Convergence Angle: 00°04'09.18998"

LOCATION VERIFICATION MAP



SEC. 32 TWP. 19-S RGE. 28-E
 SURVEY: N.M.P.M.
 COUNTY: EDDY
 OPERATOR: B.C. OPERATING, INC.
 DESCRIPTION: 1596' FNL & 305' FEL
 ELEVATION: 3366'
 LEASE: FADEAWAY RIDGE 32 STATE
 U.S.G.S. TOPOGRAPHIC MAP: ANGEL DRAW, NM.

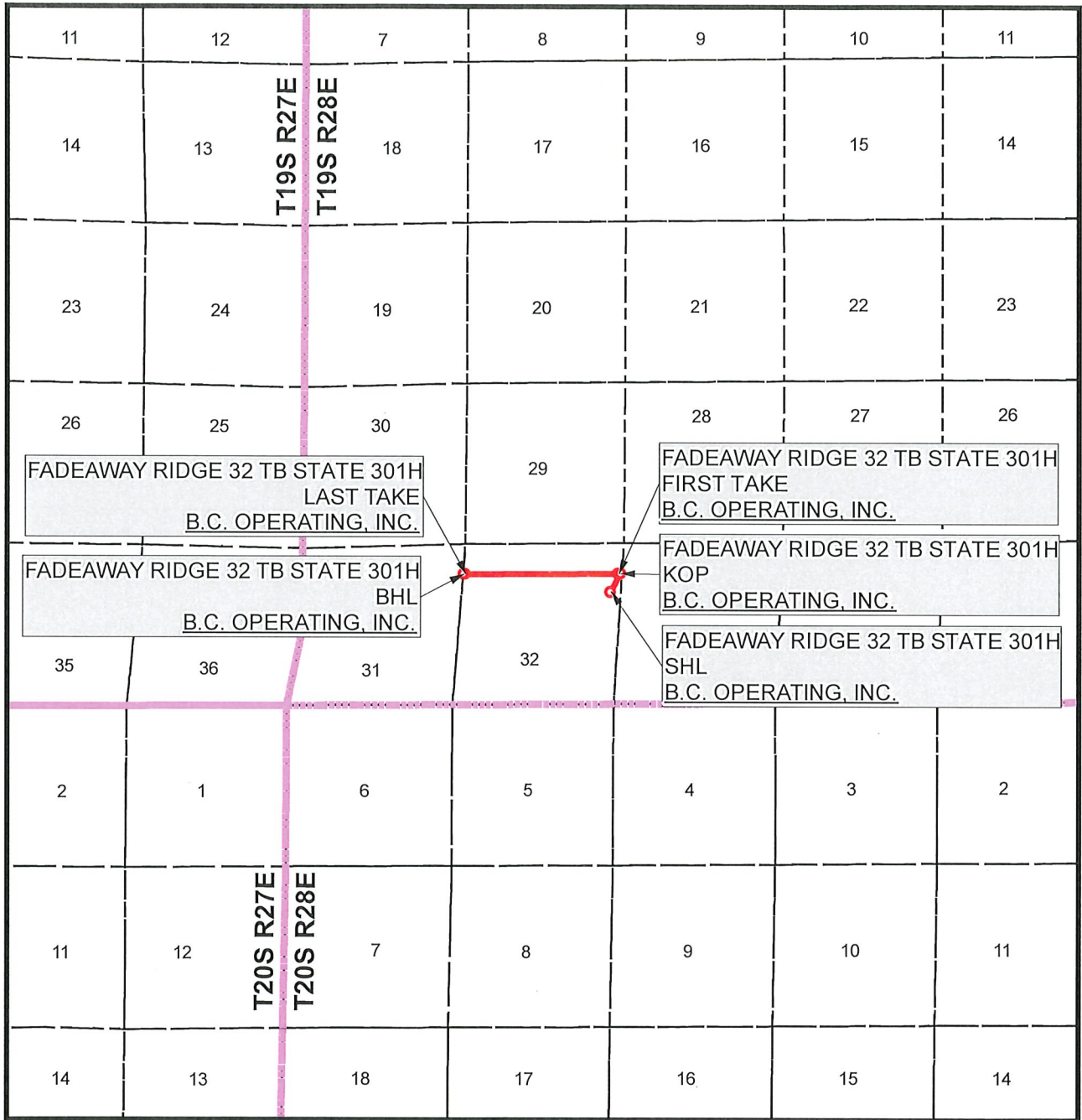
1" = 2,500'
 CONTOUR INTERVAL = 10'



SHEET 2 OF 3

PREPARED BY:
 R-SQUARED GLOBAL, LLC
 1309 LOUISVILLE AVENUE, MONROE, LA 71201
 318-323-6900 OFFICE
 JOB No. R4037_002_A

VICINITY MAP



SEC. 32 TWP. 19-S RGE. 28-E
SURVEY: N.M.P.M.
COUNTY: EDDY
OPERATOR: B.C. OPERATING, INC.
DESCRIPTION: 1596' FNL & 305' FEL
ELEVATION: 3366'
LEASE: FADEAWAY RIDGE 32 STATE
U.S.G.S. TOPOGRAPHIC MAP: ANGEL DRAW, NM.

1" = 1 MILE



SHEET 3 OF 3

PREPARED BY:
R-SQUARED GLOBAL, LLC
1309 LOUISVILLE AVENUE, MONROE, LA 71201
318-323-6900 OFFICE
JOB No. R4037_002_A

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

GAS CAPTURE PLAN

Date: 3/9/2020

☒ Original

Operator & OGRID No.: [160825] BC OPERATING, INC.

☐ 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
Fadeaway Ridge 32 TB State #301H	30-015-46792	H-32-19S-28E	1596N 0305E	10	Flared	

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 FRONTIER FIELD SERVICES, LLC and will be connected to FRONTIER FIELD SERVICES, LLC Low Pressure gathering system located in Eddy County, New Mexico. It will require 2000' of pipeline to connect the facility to Low Pressure gathering system. BC OPERATING, INC. provides (periodically) to FRONTIER FIELD SERVICES, LLC a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, BC OPERATING, INC. and FRONTIER FIELD SERVICES, LLC have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at FRONTIER FIELD SERVICES, LLC Processing Plant located in Sec. 03, Twn. 18S, Rng. 27E, Eddy 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 FRONTIER FIELD SERVICES, LLC system at that time. Based on current information, it is BC OPERATING, INC.'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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State of New Mexico
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1220 S. St Francis Dr.
Santa Fe, NM 87505

Form APD Comments

Permit 278844

PERMIT COMMENTS

Operator Name and Address: BC OPERATING, INC. [160825] P.O. Box 50820 Midland, TX 79710		API Number: 30-015-46792
		Well: Fadeaway Ridge 32 TB State #301H
Created By	Comment	Comment Date

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

Form APD Conditions

Permit 278844

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: BC OPERATING, INC. [160825] P.O. Box 50820 Midland, TX 79710	API Number: 30-015-46792
	Well: Fadeaway Ridge 32 TB State #301H

OCD Reviewer	Condition
ksimmons	Will require a directional survey with the C-104
ksimmons	Cement is required to circulate on both surface and intermediate1 strings of casing
ksimmons	Operator must notify operator(s) of other wells in same quarter-quarter section(s) before both drilling and completing well.

CASING / CEMENT DESIGN SUMMARY

Estimate only, confirm volumes and cement blends prior to job, adjust as required for hole conditions and changes in well bore construction. Re-calculate all volumes prior to pump.

Surface Casing

Setting Depth										
	TVD	MD	Length	Size	Weight	Grade	Threads	ID	Drift	Conn OD
1	700.0 ft	700.0 ft	700.0 ft	13.375 in	48.0 #/ft	H40	STC	12.715 in	12.559 in	14.375 in
2	- ft	- ft	- ft	- in	- #/ft	-	-	- in	- in	- in
3	- ft	- ft	- ft	- in	- #/ft	-	-	- in	- in	- in

BURST			COLLAPSE			TENSILE			Optimum Torque	
Rated	Load	S.F.	Rated	Load	S.F.	Rated	Load	S.F.		
1	1,730 psi	466 psi	3.72	740 psi	284 psi	2.6	352,000 lbs	133,600 lbs	2.6	3,220 ft*lbs
2	- psi	- psi	0.00	- psi	- psi	-	- lbs	100,000 lbs	-	- ft*lbs
3	- psi	- psi	0.00	- psi	- psi	-	- lbs	100,000 lbs	-	- ft*lbs

Cement to Surf	0 - 700	Lead	0 sx	C+4% Gel+2% CaCl2+1/4 #/sx Cello Flake	Yield	1.75 ft3/sx
Excess	100% Lead				Density	13.5 ppg
	100% Tail	Tail	750 sx	C+2% CaCl2+1-GAL/100-SX CF-41L	Yield	1.34 ft3/sx
					Density	14.8 ppg

Intermediate Casing

Setting Depth										
	TVD	MD	Length	Size	Weight	Grade	Threads	ID	Drift	Conn OD
1	4,025.0 ft	4,025.0 ft	4,025.0 ft	9.625 in	40.0 #/ft	J55	BTC	8.835 in	8.679 in	10.625 in
2	- ft	- ft	- ft	- in	- #/ft	-	-	- in	- in	- in
3	- ft	- ft	- ft	- in	- #/ft	-	-	- in	- in	- in

BURST			COLLAPSE			TENSILE			Optimum Torque	
Rated	Load	S.F.	Rated	Load	S.F.	Rated	Load	S.F.		
1	3,950 psi	1,421 psi	2.78	2,570 psi	1,421 psi	1.8	520,000 lbs	161,000 lbs	3.2	7,270 ft*lbs
2	- psi	1,884 psi	0.00	- psi	- psi	-	- lbs	- lbs	-	- ft*lbs
3	- psi	1,884 psi	0.00	- psi	- psi	-	- lbs	- lbs	-	- ft*lbs

Intermediate	0 - 4025	Lead	590 sx	C 50:50:10+6/10% SMS+1/4 #/sx CF	Yield	2.91 ft3/sx
3625 - 0	50% Lead			+5% SALT+1-GAL/100-SX CF-41L	Density	11.3 ppg
4025 - 3625	50% Tail	Tail	160 sx	C+1-GAL/100-SX CF-41L	Yield	1.33 ft3/sx
					Density	14.8 ppg

Production Liner

Production Line:

Setting Depth										
TVD	MD	Length	Size	Weight	Grade	Threads	ID	Drift	Conn OD	
7,548.0 ft	7,548.0 ft	7,548.0 ft	7.000 in	29.0 #/ft	HCP110	GBCD	6.276 in	6.151 in	7.656 in	
8,750.0 ft	6,409.0 ft	6,409.0 ft	5.500 in	17.0 #/ft	HCP110	GBCD	4.892 in	4.767 in	6.050 in	
- ft	- ft	- ft	- in	- #/ft	-	-	- in	- in	- in	

BURST			COLLAPSE			TENSILE			Optimum Torque
Rated	Load	S.F.	Rated	Load	S.F.	Rated	Load	S.F.	
9,950 psi	4,431 psi	2.25	6,230 psi	3,449 psi	1.81	639,000 lbs	239,326 lbs	2.67	6,930 ft*lbs
10,640 psi	5,136 psi	2.07	8,580 psi	3,999 psi	2.15	445,000 lbs	20,434 lbs	21.78	6,470 ft*lbs
- psi	- psi	0.00	- psi	- psi	-	- lbs	- lbs	-	- ft*lbs

Production	3025 - 13957	Lead	430 sx	0 Yield	1.72 ft3/sx
6500 - 3025	40% Lead			0 Density	13.2 ppg
13957 - 6500	40% Tail	Tail	1340 sx	Solucem Cement+.25lb/sk D-Air 5000 + .7% HR-601	Yield 1.18 ft3/sx
Preflush	Mud Compatible Spacer			0 Density	15.6 ppg



BC Operating, Inc.

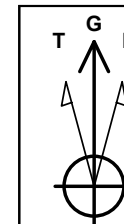
Fadeaway Ridge 32 SB State 301H
Eddy Co., NM (NAD 83 NME)
Job No. WT-20-***
Rig - N/A



Received by OCD: 3/9/2020 8:42:16 AM

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	0.000	0.00	0.00		
2	7548.97	0.00	0.00	7548.97	0.00	0.00	0.000	0.00	0.00		KOP: 10°/100' @ 7548.97' MD
3	8048.97	50.00	59.35	7987.88	104.34	176.08	10.000	59.35	-162.71		Build: 10°/100' @ 8048.97' MD
4	9368.42	90.62	269.64	8800.00	598.23	-262.05	10.000	-137.30	330.03		Hold: 90.62° Inc, 269.64° Azm
5	13957.43	90.62	269.64	8750.00	569.59	-4850.70	0.000	0.00	4884.03	PBHL - Fadeaway 301H	TD @ 13957.43' MD/8750.00' TVD



Azimuths to Grid North
True North: -0.08°
Magnetic North: 7.10°

Magnetic Field
Strength: 47909.7nT
Dip Angle: 60.32°
Date: 1/30/2020
Model: MVHD

PROJECT DETAILS: Eddy Co., NM (NAD 83 NME)

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

System Datum: Mean Sea Level

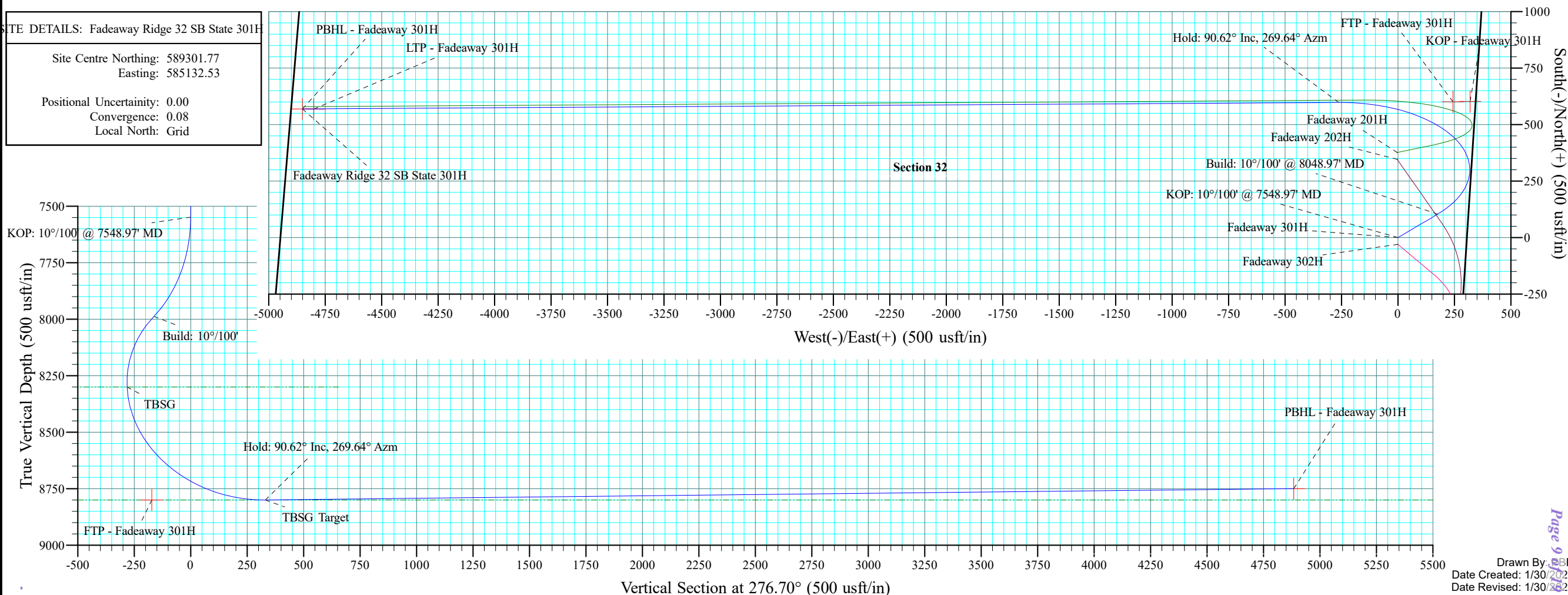
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
KOP - Fadeaway 301H	0.00	602.82	319.19	589904.59	585451.72	32° 37' 17.819 N	104° 11' 24.176 W
LTP - Fadeaway 301H	0.00	569.19	-4800.56	589870.96	580331.97	32° 37' 17.551 N	104° 12' 24.041 W
PBHL - Fadeaway 301H	8750.00	569.59	-4850.70	589871.36	580281.83	32° 37' 17.555 N	104° 12' 24.627 W
FTP - Fadeaway 301H	8800.00	601.16	243.93	589902.93	585376.46	32° 37' 17.804 N	104° 11' 25.056 W

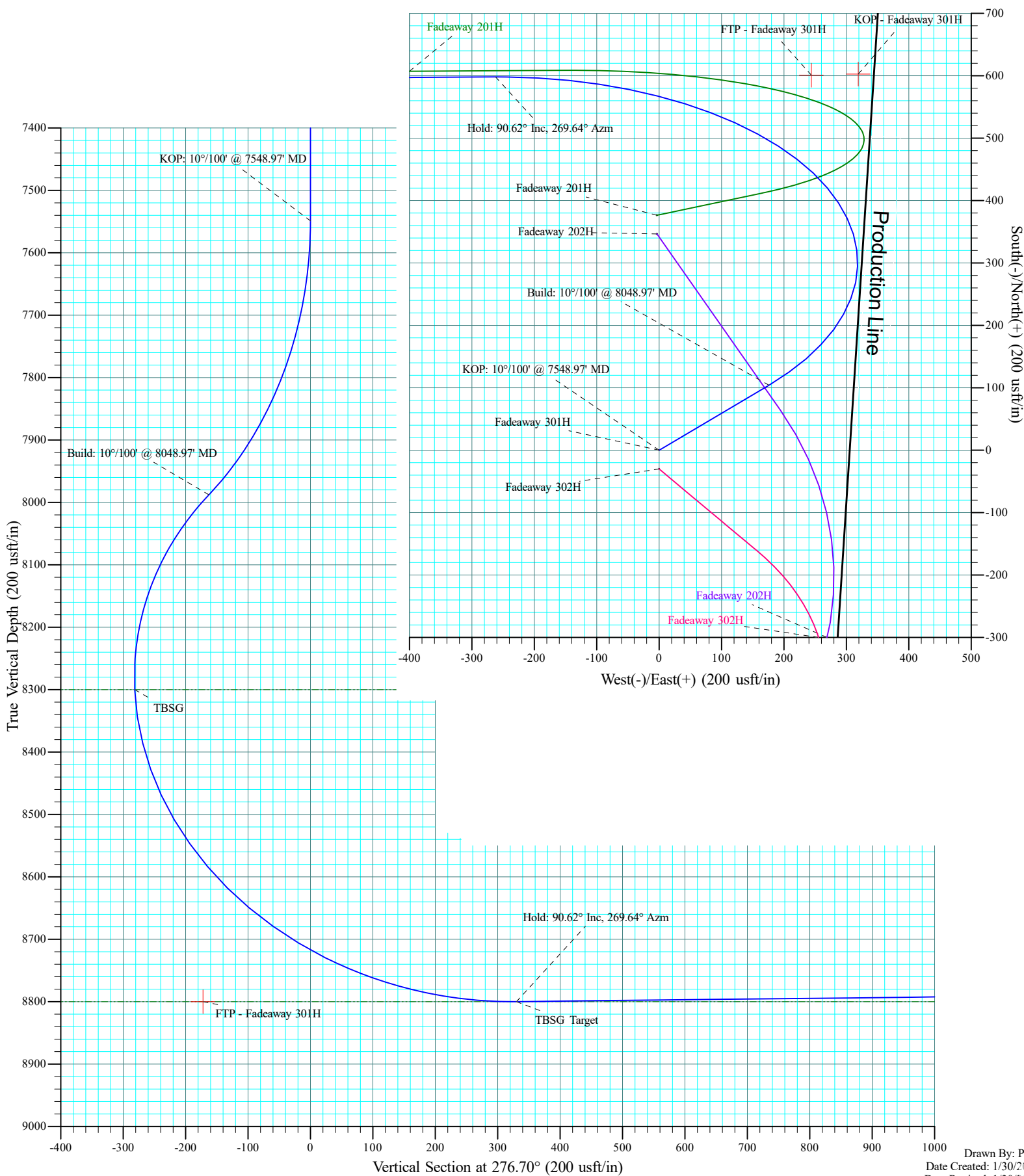
SITE DETAILS: Fadeaway Ridge 32 SB State 301H

Site Centre Northing: 589301.77
Easting: 585132.53

Positional Uncertainty: 0.00
Convergence: 0.08
Local North: Grid



Vertical Section at 276.70° (500 usft/in)





Survey Report

Company:	BC Operating, Inc.	Local Co-ordinate Reference:	Well Fadeaway 301H
Project:	Eddy Co., NM (NAD 83 NME)	TVD Reference:	Well @ 3385.00usft (Est. 20'KB)
Site:	Fadeaway Ridge 32 SB State 301H	MD Reference:	Well @ 3385.00usft (Est. 20'KB)
Well:	Fadeaway 301H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1r0	Database:	EDMRESTORED

Project	Eddy Co., NM (NAD 83 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	Fadeaway Ridge 32 SB State 301H		
Site Position:		Northing:	589,301.77 usft
From:	Map	Easting:	585,132.53 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 37' 11.858 N
		Longitude:	104° 11' 27.918 W
		Grid Convergence:	0.08 °

Well	Fadeaway 301H		
Well Position	+N/-S	0.00 usft	Northing: 589,301.77 usft
	+E/-W	0.00 usft	Easting: 585,132.53 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
		Latitude:	32° 37' 11.858 N
		Longitude:	104° 11' 27.918 W
		Ground Level:	3,365.00 usft

Wellbore	Planning		
Magnetics	Model Name	Sample Date	Declination (°)
	MVHD	1/30/2020	7.18
			Dip Angle (°) 60.32
			Field Strength (nT) 47,909.699

Design	Lateral 1r0		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.00	0.00	0.00
			Direction (°) 276.70

Survey Tool Program	Date	1/30/2020		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	13,956.43	Lateral 1r0 (Planning)	MWD+HRGM	OWSG MWD + HRGM

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.000	0.000	0.000
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.000	0.000	0.000
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.000	0.000	0.000
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.000	0.000	0.000
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.000	0.000	0.000
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.000	0.000	0.000
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.000	0.000	0.000
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.000	0.000	0.000
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.000	0.000	0.000



Survey Report

Company:	BC Operating, Inc.	Local Co-ordinate Reference:	Well Fadeaway 301H
Project:	Eddy Co., NM (NAD 83 NME)	TVD Reference:	Well @ 3385.00usft (Est. 20'KB)
Site:	Fadeaway Ridge 32 SB State 301H	MD Reference:	Well @ 3385.00usft (Est. 20'KB)
Well:	Fadeaway 301H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1r0	Database:	EDMRESTORED

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.000	0.000	0.000
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.000	0.000	0.000
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.000	0.000	0.000
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.000	0.000	0.000
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.000	0.000	0.000
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.000	0.000	0.000
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.000	0.000	0.000
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.000	0.000	0.000
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.000	0.000	0.000
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.000	0.000	0.000
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.000	0.000	0.000
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.000	0.000	0.000
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.000	0.000	0.000
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.000	0.000	0.000
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.000	0.000	0.000
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.000	0.000	0.000
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.000	0.000	0.000
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.000	0.000	0.000
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.000	0.000	0.000
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.000	0.000	0.000
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.000	0.000	0.000
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.000	0.000	0.000
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.000	0.000	0.000
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.000	0.000	0.000
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.000	0.000	0.000
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.000	0.000	0.000
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.000	0.000	0.000
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.000	0.000	0.000
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.000	0.000	0.000
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.000	0.000	0.000
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.000	0.000	0.000
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.000	0.000	0.000
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.000	0.000	0.000
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.000	0.000	0.000
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.000	0.000	0.000
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.000	0.000	0.000
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.000	0.000	0.000
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.000	0.000	0.000
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.000	0.000	0.000
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.000	0.000	0.000
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.000	0.000	0.000
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.000	0.000	0.000
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.000	0.000	0.000
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.000	0.000	0.000



Survey Report

Company:	BC Operating, Inc.	Local Co-ordinate Reference:	Well Fadeaway 301H
Project:	Eddy Co., NM (NAD 83 NME)	TVD Reference:	Well @ 3385.00usft (Est. 20'KB)
Site:	Fadeaway Ridge 32 SB State 301H	MD Reference:	Well @ 3385.00usft (Est. 20'KB)
Well:	Fadeaway 301H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1r0	Database:	EDMRESTORED

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.000	0.000	0.000
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.000	0.000	0.000
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.000	0.000	0.000
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.000	0.000	0.000
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.000	0.000	0.000
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.000	0.000	0.000
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.000	0.000	0.000
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.000	0.000	0.000
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.000	0.000	0.000
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.000	0.000	0.000
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.000	0.000	0.000
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.000	0.000	0.000
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.000	0.000	0.000
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.000	0.000	0.000
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.000	0.000	0.000
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.000	0.000	0.000
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.000	0.000	0.000
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.000	0.000	0.000
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.000	0.000	0.000
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.000	0.000	0.000
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.000	0.000	0.000
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.000	0.000	0.000
7,548.97	0.00	0.00	7,548.97	0.00	0.00	0.00	0.000	0.000	0.000
KOP: 10°/100' @ 7548.97' MD									
7,550.00	0.10	59.35	7,550.00	0.00	0.00	0.00	10.000	10.000	0.000
7,600.00	5.10	59.35	7,599.93	1.16	1.95	-1.81	10.000	10.000	0.000
7,650.00	10.10	59.35	7,649.48	4.53	7.64	-7.06	10.000	10.000	0.000
7,700.00	15.10	59.35	7,698.26	10.09	17.03	-15.73	10.000	10.000	0.000
7,750.00	20.10	59.35	7,745.90	17.80	30.03	-27.75	10.000	10.000	0.000
7,800.00	25.10	59.35	7,792.05	27.59	46.56	-43.02	10.000	10.000	0.000
7,850.00	30.10	59.35	7,836.34	39.40	66.48	-61.43	10.000	10.000	0.000
7,900.00	35.10	59.35	7,878.45	53.13	89.65	-82.84	10.000	10.000	0.000
7,950.00	40.10	59.35	7,918.05	68.67	115.89	-107.09	10.000	10.000	0.000
8,000.00	45.10	59.35	7,954.84	85.92	145.00	-133.99	10.000	10.000	0.000
8,048.97	50.00	59.35	7,987.88	104.34	176.08	-162.71	10.000	10.000	0.000
Build: 10°/100' @ 8048.97' MD									
8,050.00	49.92	59.26	7,988.54	104.74	176.75	-163.33	10.000	-7.346	-8.862
8,100.00	46.34	54.57	8,021.92	125.02	207.95	-191.95	10.000	-7.159	-9.382
8,150.00	42.98	49.30	8,057.49	146.63	235.63	-216.92	10.000	-6.728	-10.533
8,200.00	39.89	43.36	8,094.98	169.42	259.57	-238.04	10.000	-6.182	-11.888
8,250.00	37.14	36.64	8,134.12	193.20	279.60	-255.16	10.000	-5.495	-13.429
8,300.00	34.82	29.10	8,174.60	217.80	295.57	-268.15	10.000	-4.640	-15.091
8,350.00	33.02	20.73	8,216.11	243.04	307.34	-276.90	10.000	-3.602	-16.732



Survey Report

Company:	BC Operating, Inc.	Local Co-ordinate Reference:	Well Fadeaway 301H
Project:	Eddy Co., NM (NAD 83 NME)	TVD Reference:	Well @ 3385.00usft (Est. 20'KB)
Site:	Fadeaway Ridge 32 SB State 301H	MD Reference:	Well @ 3385.00usft (Est. 20'KB)
Well:	Fadeaway 301H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1r0	Database:	EDMRESTORED

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
8,400.00	31.83	11.67	8,258.34	268.71	314.83	-281.35	10.000	-2.385	-18.128	
8,450.00	31.31	2.16	8,300.96	294.62	317.99	-281.46	10.000	-1.028	-19.015	
8,500.00	31.51	352.57	8,343.66	320.58	316.79	-277.24	10.000	0.397	-19.187	
8,550.00	32.41	343.27	8,386.11	346.38	311.24	-268.72	10.000	1.796	-18.600	
8,600.00	33.95	334.57	8,427.98	371.84	301.38	-255.95	10.000	3.082	-17.398	
8,650.00	36.05	326.65	8,468.95	396.76	287.28	-239.05	10.000	4.202	-15.834	
8,700.00	38.62	319.57	8,508.72	420.94	269.06	-218.14	10.000	5.137	-14.159	
8,750.00	41.57	313.30	8,546.98	444.21	246.86	-193.37	10.000	5.895	-12.552	
8,800.00	44.82	307.74	8,583.44	466.38	220.83	-164.93	10.000	6.501	-11.110	
8,850.00	48.31	302.81	8,617.82	487.30	191.18	-133.05	10.000	6.980	-9.869	
8,900.00	51.99	298.39	8,649.87	506.79	158.14	-97.96	10.000	7.358	-8.827	
8,950.00	55.82	294.41	8,679.33	524.72	121.96	-59.93	10.000	7.656	-7.966	
9,000.00	59.76	290.78	8,705.98	540.93	82.91	-19.26	10.000	7.891	-7.264	
9,050.00	63.80	287.43	8,729.62	555.32	41.29	23.76	10.000	8.075	-6.697	
9,100.00	67.91	284.31	8,750.07	567.77	-2.59	68.79	10.000	8.220	-6.243	
9,150.00	72.08	281.36	8,767.18	578.19	-48.38	115.48	10.000	8.332	-5.887	
9,200.00	76.28	278.56	8,780.81	586.50	-95.75	163.50	10.000	8.416	-5.615	
9,250.00	80.52	275.85	8,790.86	592.63	-144.33	212.46	10.000	8.477	-5.416	
9,300.00	84.78	273.21	8,797.26	596.53	-193.75	262.00	10.000	8.518	-5.284	
9,350.00	89.05	270.60	8,799.95	598.19	-243.63	311.73	10.000	8.540	-5.212	
9,368.42	90.62	269.64	8,800.00	598.23	-262.05	330.03	10.000	8.545	-5.195	
Hold: 90.62° Inc, 269.64° Azm										
9,400.00	90.62	269.64	8,799.66	598.03	-293.63	361.37	0.000	0.000	0.000	
9,500.00	90.62	269.64	8,798.57	597.41	-393.62	460.61	0.000	0.000	0.000	
9,600.00	90.62	269.64	8,797.48	596.78	-493.61	559.84	0.000	0.000	0.000	
9,700.00	90.62	269.64	8,796.39	596.16	-593.61	659.08	0.000	0.000	0.000	
9,800.00	90.62	269.64	8,795.30	595.53	-693.60	758.32	0.000	0.000	0.000	
9,900.00	90.62	269.64	8,794.21	594.91	-793.59	857.55	0.000	0.000	0.000	
10,000.00	90.62	269.64	8,793.12	594.29	-893.58	956.79	0.000	0.000	0.000	
10,100.00	90.62	269.64	8,792.03	593.66	-993.57	1,056.03	0.000	0.000	0.000	
10,200.00	90.62	269.64	8,790.94	593.04	-1,093.57	1,155.27	0.000	0.000	0.000	
10,300.00	90.62	269.64	8,789.85	592.41	-1,193.56	1,254.50	0.000	0.000	0.000	
10,400.00	90.62	269.64	8,788.76	591.79	-1,293.55	1,353.74	0.000	0.000	0.000	
10,500.00	90.62	269.64	8,787.67	591.16	-1,393.54	1,452.98	0.000	0.000	0.000	
10,600.00	90.62	269.64	8,786.58	590.54	-1,493.53	1,552.21	0.000	0.000	0.000	
10,700.00	90.62	269.64	8,785.49	589.92	-1,593.53	1,651.45	0.000	0.000	0.000	
10,800.00	90.62	269.64	8,784.40	589.29	-1,693.52	1,750.69	0.000	0.000	0.000	
10,900.00	90.62	269.64	8,783.31	588.67	-1,793.51	1,849.92	0.000	0.000	0.000	
11,000.00	90.62	269.64	8,782.22	588.04	-1,893.50	1,949.16	0.000	0.000	0.000	
11,100.00	90.62	269.64	8,781.13	587.42	-1,993.49	2,048.40	0.000	0.000	0.000	
11,200.00	90.62	269.64	8,780.04	586.80	-2,093.49	2,147.64	0.000	0.000	0.000	
11,300.00	90.62	269.64	8,778.95	586.17	-2,193.48	2,246.87	0.000	0.000	0.000	
11,400.00	90.62	269.64	8,777.87	585.55	-2,293.47	2,346.11	0.000	0.000	0.000	
11,500.00	90.62	269.64	8,776.78	584.92	-2,393.46	2,445.35	0.000	0.000	0.000	



Survey Report

Company:	BC Operating, Inc.	Local Co-ordinate Reference:	Well Fadeaway 301H
Project:	Eddy Co., NM (NAD 83 NME)	TVD Reference:	Well @ 3385.00usft (Est. 20'KB)
Site:	Fadeaway Ridge 32 SB State 301H	MD Reference:	Well @ 3385.00usft (Est. 20'KB)
Well:	Fadeaway 301H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1r0	Database:	EDMRESTORED

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
11,600.00	90.62	269.64	8,775.69	584.30	-2,493.46	2,544.58	0.000	0.000	0.000
11,700.00	90.62	269.64	8,774.60	583.68	-2,593.45	2,643.82	0.000	0.000	0.000
11,800.00	90.62	269.64	8,773.51	583.05	-2,693.44	2,743.06	0.000	0.000	0.000
11,900.00	90.62	269.64	8,772.42	582.43	-2,793.43	2,842.29	0.000	0.000	0.000
12,000.00	90.62	269.64	8,771.33	581.80	-2,893.42	2,941.53	0.000	0.000	0.000
12,100.00	90.62	269.64	8,770.24	581.18	-2,993.42	3,040.77	0.000	0.000	0.000
12,200.00	90.62	269.64	8,769.15	580.56	-3,093.41	3,140.01	0.000	0.000	0.000
12,300.00	90.62	269.64	8,768.06	579.93	-3,193.40	3,239.24	0.000	0.000	0.000
12,400.00	90.62	269.64	8,766.97	579.31	-3,293.39	3,338.48	0.000	0.000	0.000
12,500.00	90.62	269.64	8,765.88	578.68	-3,393.38	3,437.72	0.000	0.000	0.000
12,600.00	90.62	269.64	8,764.79	578.06	-3,493.38	3,536.95	0.000	0.000	0.000
12,700.00	90.62	269.64	8,763.70	577.44	-3,593.37	3,636.19	0.000	0.000	0.000
12,800.00	90.62	269.64	8,762.61	576.81	-3,693.36	3,735.43	0.000	0.000	0.000
12,900.00	90.62	269.64	8,761.52	576.19	-3,793.35	3,834.67	0.000	0.000	0.000
13,000.00	90.62	269.64	8,760.43	575.56	-3,893.35	3,933.90	0.000	0.000	0.000
13,100.00	90.62	269.64	8,759.34	574.94	-3,993.34	4,033.14	0.000	0.000	0.000
13,200.00	90.62	269.64	8,758.25	574.32	-4,093.33	4,132.38	0.000	0.000	0.000
13,300.00	90.62	269.64	8,757.16	573.69	-4,193.32	4,231.61	0.000	0.000	0.000
13,400.00	90.62	269.64	8,756.07	573.07	-4,293.31	4,330.85	0.000	0.000	0.000
13,500.00	90.62	269.64	8,754.98	572.44	-4,393.31	4,430.09	0.000	0.000	0.000
13,600.00	90.62	269.64	8,753.89	571.82	-4,493.30	4,529.32	0.000	0.000	0.000
13,700.00	90.62	269.64	8,752.81	571.20	-4,593.29	4,628.56	0.000	0.000	0.000
13,800.00	90.62	269.64	8,751.72	570.57	-4,693.28	4,727.80	0.000	0.000	0.000
13,900.00	90.62	269.64	8,750.63	569.95	-4,793.27	4,827.04	0.000	0.000	0.000
13,957.43	90.62	269.64	8,750.00	569.59	-4,850.70	4,884.03	0.000	0.000	0.000
TD @ 13957.43' MD/8750.00' TVD									

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
KOP - Fadeaway 301 - plan misses target center by 682.11usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E) - Point	0.00	0.00	0.00	602.82	319.19	589,904.59	585,451.72	32° 37' 17.819 N	104° 11' 24.176 W
LTP - Fadeaway 301H - plan misses target center by 4834.19usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E) - Point	0.00	0.00	0.00	569.19	-4,800.56	589,870.96	580,331.97	32° 37' 17.551 N	104° 12' 24.041 W
PBHL - Fadeaway 301 - plan hits target center - Point	0.00	0.00	8,750.00	569.59	-4,850.70	589,871.36	580,281.83	32° 37' 17.555 N	104° 12' 24.627 W
FTP - Fadeaway 301H - plan misses target center by 187.84usft at 8950.00usft MD (8679.33 TVD, 524.72 N, 121.96 E) - Point	0.00	0.00	8,800.00	601.16	243.93	589,902.93	585,376.46	32° 37' 17.804 N	104° 11' 25.056 W



Survey Report

Company:	BC Operating, Inc.	Local Co-ordinate Reference:	Well Fadeaway 301H
Project:	Eddy Co., NM (NAD 83 NME)	TVD Reference:	Well @ 3385.00usft (Est. 20'KB)
Site:	Fadeaway Ridge 32 SB State 301H	MD Reference:	Well @ 3385.00usft (Est. 20'KB)
Well:	Fadeaway 301H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1r0	Database:	EDMRESTORED

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
640.00	640.00	Tansill		0.00	
790.00	790.00	Yates		0.00	
1,250.00	1,250.00	Seven Rivers		0.00	
1,700.00	1,700.00	Queen		0.00	
2,190.00	2,190.00	Grayburg		0.00	
2,780.00	2,780.00	San Andres		0.00	
3,750.00	3,750.00	Bone Spring Lime		0.00	
6,775.00	6,775.00	FBSG Sand		0.00	
7,155.00	7,155.00	SBSG Sand		0.00	
8,448.87	8,300.00	TBSG		0.00	
9,368.46	8,800.00	TBSG Target		0.00	

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7549	7549	0	0	KOP: 10°/100' @ 7548.97' MD
8049	7988	104	176	Build: 10°/100' @ 8048.97' MD
9368	8800	598	-262	Hold: 90.62° Inc, 269.64° Azm
13,957	8750	570	-4851	TD @ 13957.43' MD/8750.00' TVD

Checked By: _____ Approved By: _____ Date: _____

Hydrogen Sulfide Drilling Operations Plan

BC Operating, Inc.

Fadeaway Ridge 32 TB State 301H

SHL: 1596' FNL & 305' FEL, Section 32

BHL: 1000' FNL & 50' FWL, Section 32

T19S-R28E

Eddy County, New Mexico

1. H2S Detection and Alarm Systems
 - A. H2S detectors and audio alarm system to be located at bell nipple, end of flow line (mud pit) and on derrick floor or doghouse.
2. Windsock and/or wind streamers
 - A. Windsock at mudpit area should be high enough to be visible.
 - B. Windsock at briefing area should be high enough to be visible.
3. Condition Flags and Signs
 - A. Warning sign on access road to location.
 - B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H2S present in dangerous concentration. Only emergency personnel admitted to location.
4. Well control equipment
 - A. See "Pressure Control Equipment"
5. Communication
 - A. While working under masks chalkboards will be used for communication.
 - B. Hand signals will be used where chalk board is inappropriate.
 - C. Two-way radio will be used to communicate off location in case emergency help is required.
In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.
6. Drillstem testing is not anticipated.
7. Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubular goods and other mechanical equipment.
8. If H2S is encountered, mud system will be altered if necessary, to maintain control of formation. A mud gas separator will be brought into service along with H2S scavengers if necessary.

BC Operating, Inc.
Fadeaway Ridge 32 TB State 301H
SHL: 1596' FNL & 305' FEL, Section 32
BHL: 1000' FNL & 50' FWL, Section 32
T19S-R28E
Eddy County, New Mexico

Emergency Contact list

BC Operating, Inc.	432-684-9696
Thomas Wolfmueller	432-214-1985
Jason Wacker	432-631-2142
Bruce Madden	432-894-0721

EMERGENCY RESPONSE NUMBERS

State Police	575-748-9718
State Police Lea Co.	575-392-5588
Eddy County Sheriff	575-746-2701
Lea County Sheriff	575-396-3611
Emergency Medical Services	911 or 575-746-2701
Artesia Fire and Ambulance	575-746-5050
Maljamar Fire and Ambulance	575-674-4100
Artesia General Hospital	575-748-3333
702 N. 13th St. Artesia	
Carlsbad Medical Center	575-887-4100
2430 West Pierce Street	
Lea County Emergency Response	575-396-8602
Lea County Ambulance Eunice	911 or 575-396-8602
Carlsbad Police Department	575-885-2111
Eddy County Emergency Management	575-887-9511
Carlsbad Fire Department	575-885-3125

Fadeaway Ridge 32 TB State 301H

Drilling Program



API No: <pending>

Permit: <pending>

SHL: 1596 FNL & 305 FEL, Sec 32, T19S R28E, NMPM

Eddy County

BHL: 1000 FNL & 50 FWL, Sec 32, T19S R28E, NMPM

Field: Winchester; Bone Spring

NM

AFE #: 318051-01H

Contractor: <pending>

Date: 9-Jan-20

WELLBORE SCHEMATIC		MD	TVD	Dev deg	SECTION COMMENTS	Survey x:y Coordinates
Hole Size	Formation				Pre-Drill Prognosis	
17 1/2	KB	3,392.0	feet		Daily Reports in by 06:30 Thomas Wolfmueller- 432-214-1985 twolfmueller@bcoperating.com	SHL x: 585132.53
	Ground	3,365.0	feet			y: 589301.77
	Csg Flng	3,363.8	feet			BHL x: 580281.83
						y: 589871.38
	Base Ogallala	325			Pre-Set Surface Casing	Planned 5264' VS, 4589' lateral
	Ground Water	700			If no inc/azi tool: Gyro Surface Hole * CEMENT TO SURFACE *	
				0.0		Mud
	Surface Casing	700		700	13.375in, 48.lb, H40, STC	Lead 0 sx, 13.5 ppg
		TOC	0			Tail 750 sx, 14.8 ppg
	Yates	790	790	0.0	Confirm 12 1/4" BHA with engineering	Drill out with 10# brine
12 1/4	Seven Rivers	1,250	1,250			
	Queen	1,700	1,700			
	Grayburg	2,190	2,190			Add 10# brine for make up to
	San Andres	2,780	2,780			
	Bone Spring Lime	3,750	3,750	0.0	Run fluid caliper to calc cement vol to Surface	MW 10.0
	Intermediate Casing	4,025		4,025	9.625in, 40.lb, J55, BTC	Lead 590 sx, 11.3 ppg
		TOC	0			Tail 160 sx, 14.8 ppg
	FBSG Sand	6,775	6,775	0.0	Drill out shoe with cut brine	Cut Brine
	SBSG Sand	7,155	7,155	0.0	Confirm 8 3/4" BHA w/ engineering	MW 8.9-9.1
					Drill down to KOP as per program	pH 10-10.5
8 3/4					Reduce flow as needed for seepage	Losses in Canyon Sands
					Survey every stand	Maintain LCM sweeps
					At KOP increase MW with 10#, if necessary	
					P/U 8 3/4" Dir BHA. Confirm w/ engineering	
	KOP	7,548	7,548	0	Drill curve as per plan	
					Confirm landing point.	
	TBSG	8,450	8,300	31		
	50°	8,048	7,987	50		
	3rd BS	9,368	8,800	90.0		
	EOB	9,368	8,800	90.6	P/U 8 3/4" BHA, Confirm with Engineering	
					Drill curve/lateral section as prog	
					Drill to TD and condition lateral for csg	
					Confirm TD	
					Follow Clean up program at TD	
	Total Depth	13,957	8,750	90.6	Planned 5264' VS, 4589' lateral	
	Production Casing	13,957		7,548	7.in, 29.lb, HCP110, GBCD	Lead 430 sx, 13.2 ppg
		TOC	3,025	6,409	5.5in, 17.lb, HCP110, GBCD	Tail 1340 sx, 15.6 ppg
Wellhead Data		Primary Contacts				Phone
		Multibowl				
		Tubing Spool				
		13-5/8"5M x 7-1/16" 10M				
		Multi Bowl				
		13-5/8"5M x 13-5/8"5M				
		x 10 3/4"x 7 5/8"x 51/2"				
		Casing Flange				
		13-5/8"5Mx13-3/8 SOW				
		Drilling				
		Drilling Fluids				
		Casing				
		Directional				
		Cement (Surf)				
		Cement (Prod)				
		Rental - Centrifuges				
		Mud Logging				
		Wellhead				

Directions

From the intersection 285 and N Loop Rd (north of Carlsbad). Go East on N Loop Rd for 3.25 miles to 206(Illinois Camp Rd). Go north on 206 for 12 miles. Turn right and go 2.17 miles. Turn right to rig.

Lat: #

Lon: 104.2