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

Date:

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 335412

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

	ame and Address scosa Energy Partr	ners, L.L.C								2. OGR	ID Number 329748		
	1 W. Missouri Ave									3. API I			
	dland, TX 79701										30-015-5349	9	
4. Property Co			5. Property N							6. Well			
333	3128		BC	ONNEVILLE 16	STATE						305H		
					7. Sur	face Location							
UL - Lot	Section	Township	Rang	ge	Lot Idn	Feet From	N/S L		Feet From		E/W Line	County	
L	16	20	S	27E		1350		S	25	50	W	Ede	ły
					8. Proposed I	Bottom Hole Locatio	n						
UL - Lot	Section	Township	Ran		Lot Idn	Feet From	N/S		Feet From		E/W Line	County	
Р	16	20	S	27E	P	330		S	1	00	E	Ede	y
					9. Po	ol Information							
AVALON; BC	ONE SPRING									963	381		
					Additiona	I Well Information							
11. Work Type		12. Well Type		13. Cable/Ro	otary		1	4. Lease Ty	be	15. Grou	ind Level Elevatio	n	
	w Well				ate		3256						
16. Multiple		17. Proposed D	18. Formatio		0	1	19. Contractor 20.			20. Spud Date			
N Depth to Grou	nd water	1295	8		rd Bone Spring					Distance	3/15/2023 to nearest surface	water	
Depth to Grou	nu water			Distance iron	n nearest nesh wa	ler wen				Distance	to nearest surface	water	
	using a closed-loc			21		ing and Cement Pro					1		
Туре	Hole Size	Casing		Casir	ng Weight/ft	Setting De	epth		Sacks of C			Estimated TOC	
Surf Int1	17.5 12.25	13.3			40 36	500 3000					0		
Prod	12.958	5.			17		12958 222						
			- I	Casi		gram: Additional Co		ts		<u>.</u>			
				22	Proposed Blo	wout Prevention Pro	aram						
	Туре				g Pressure		Jgram	Test Pressu	re		Man	ufacturer	
	Double Ram			5	000			3000			Ca	meron	
knowledge a	tify I have complie	Ū.						o	IL CONSERV	ATION E	DIVISION		
Signature:													
Printed Name: Electronically filed by Kelly M Hardy						Approved By:	K	atherine Pi	ckford				
Title: Land Manager						Title:	Geoscientist						
Email Address	: khardy@ta	scosaep.com				Approved Date:	Date: 3/9/2023 Expiration Date: 3/9/2025						
Date:	3/1/2023	•	Phone	e: 432-695-69	70		Conditions of Approval Attached						

Received by OCD: 3/9/2023 7:44:37 AM

District I

1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 District III 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

Page 2 of 34 Form C-102

Revised August 1, 2011 Submit one copy to appropriate District Office

☐ AMENDED REPORT

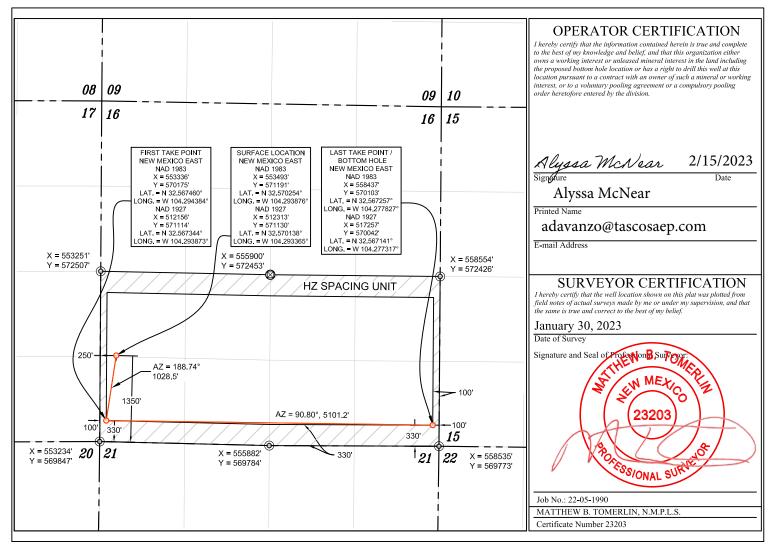
WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015- 53499	Pool Code 96381	Pool Name AVALON;BONE SPRING					
Property Code 333128		E 16 STATE	Well Number #305H				
OGRID No. 329748	1	or Name	Elevation 3256'				
I	Surface	Location					

					Surface Locatio	11			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	16	20 S	27 E		1350	SOUTH	250	WEST	EDDY

	Bottom Hole Location If Different From Surface												
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County				
Р	16	20 S	27 E		330	SOUTH	100	EAST	EDDY				
Dedicated Acres	Joint or	Infill	Consolidation Co	de O	rder No.	•		•					
320.00													

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.



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.

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

PERMIT COMMENTS

Operator Name and Ad	dress:	API Number:				
Tascosa E	nergy Partners, L.L.C [329748]	30-015-53499				
901 W. Mis	ssouri Ave	Well:				
Midland, T	X 79701	BONNEVILLE 16 STATE #305H				
Created By	Comment	Comment Date				
kpickford	Defining well 30-015-53498 BONNEVILLE 16 STATE #304H	3/9/2023				

Form APD Comments

Page 3 of 34

.

Permit 335412

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

PERMIT CONDITIONS OF APPROVAL

Operator N	ame and Address:	API Number:
	Tascosa Energy Partners, L.L.C [329748]	30-015-53499
	901 W. Missouri Ave	Well:
	Midland, TX 79701	BONNEVILLE 16 STATE #305H
OCD	Condition	
Reviewer		
kpickford	Notify OCD 24 hours prior to casing & cement	
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104	
kpickford	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud	
kpickford	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, water zone or zones and shall immediately set in cement the water protection string	the operator shall drill without interruption through the fresh
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing	

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

Form APD Conditions

Permit 335412

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Well name:

Bonneville 16 State #305H

Operator:Tascosa Energy Partners, LLCString type:Production Casing (± 12,780 ft MD) "FRAC"

Location: Eddy County, New Mexico. 1,350 FSL & 250 FWL, Sec 16, T20S, R27E BHL Planned: 330 FSL & 100 FEL, Sec 16, T20S, R27E

Design parameters:		Minimum d	lesign factors:		Environment:	
<u>Collapse</u>			<u>Collaps</u>	ie:	H2S considered?	No
Mud weight:		9.50 ppg	[DF 1.125	Surface temperature:	75.00 °F
Design is based on evacuated pip	e.				Bottom hole temp:	141 °F
					Temperature gradient:	0.80 °F/100ft
					Minimum section lgth:	2,500 ft
			Burs	<u>st:</u>	Minimum Drift:	4.653 in
			Γ	DF 1.12	Cement top:	Surface ft
<u>Burst</u>						
Max anticipated surface						
pressure FRAC @ RATE:	10,000.00 psi					
Internal gradient:	0.000 psi/ft	Tension:			Directional Info - Build & ⊢	lold
Calculated BHP	10,000.00 psi	8 Rd STC:	1.80	(J)	KOP #1 ±	2,500 ft
backup mud specified.	0.000 psi/ft	8 Rd LTC:	1.80	(J)	KOP #2 ±	7,313 ft
Net Injection Pressure Surface	10,000.00 psi	Buttress:	1.60	(J)	Departure at shoe:	4,996 ft
Net Injection Pressure TVD	4,768.00 psi	Premium:	1.50	(J)	Maximum dogleg:	10 °/100ft
Annular surface PSI	0 psi	Body yield:	1.50	(B)	Inclination at shoe:	87.27 °
Frac Gradient	12.50 ppg					
Frac Gradient	0.65 psi/ft	Tension is ba	ased on buoyed w	eight. (.8547	4 factor)	
		Neutral pt:	± 6,645 ft assu	mes no frict	tion calc from mid pt of curv	e

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (Ibs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	ID Diameter (in)	Internal Capacity (bbls)
1	12,958	5.5	17	P110RY	GEOCONN-SC	8,050	12,958	4.767	4.892	301.3
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor	
1	3,977	7480	1.88	10000	11550	1.155	355.6 100K over pi	546 ull at TD	1.54 yield	
Prepared by: Richard Wright					Phone: (432) 695 6970 Date: 05/02/22 FAX: (432) 695 6973 Midland, Texas			kas		

Remarks:

Collapse is based on a vertical depth of 8,050 ft, a mud weight of 9.5 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a tensile load which is added to the axial load

Well name:

Bonneville 16 State #305H

Operator: Tascosa Energy Partners, LLC

String type: Intermediate Casing (3,000)

Eddy County, New Mexico. 1,350 FSL & 250 FWL, Sec 16, T20S, R27E 330 FSL & 100 FEL, Sec 16, T20S, R27E

Design par <u>Collapse</u> Mud weight: Design is ba	rameters: sed on evacu	ated pipe.	9.50	Minimum ppg	design fact <u>Collapse:</u> DF <u>Burst:</u>	ors: 1.125	Environme H2S conside Surface tem BH Temp Temp Gradie Minimum Se Minimum Dr	ered? perature: ent ec Length	No 75.00 99 0.80 1500 8.75	°F °F °F/100ft ft in
					DF	1.15	Cement top:		Surface	
<u>Burst</u> Max anticipa	ted surface									
pressure:			1,902.00	psi						
Internal grad Calculated E No backup n			0.12 2,262.00	psi/ft psi	<u>Tension:</u> 8 Rd STC: 8 Rd LTC: Buttress: Premium:	1.80 1.80 1.60 1.50	Non-directio (J) (J) (J) (J)	nal string.		
					Body yield:	1.50		Re subsequ	lent strings	:
						Next setting	-	12,818		
					based on buo		Next setting	•	,	ft TVD
				Neutral pt:	± 2578	ft	Next mud we	•		ppg
							Next setting Fracture mu		3,893	•
							Safety Facto			ppg
							Fracture dep		3000	ppg ft
							Injection pre		2,262	
							njoodon pro	00010	2,202	, poi
Run Seq 1	Segment Length (ft) 3000	Size (in) 9.625	Nominal Weight (Ibs/ft) 36	Grade J-55	End Finish LT&C	True Vert Depth (ft) 3000	Measured Depth (ft) 3000	Drift Diameter (in) 8.796	ID Diameter (in) 8.921	Internal Capacity (bbls) 232
Run Seq 1	Collapse Load (psi) 1482	Collapse Strength (psi) 2020	Collapse Design Factor 1.36	Burst Load (psi) 1902	Burst Strength (psi) 3520	Burst Design Factor 1.85	Tension Load (Kips) 108	Tension Strength (Kips) 453	Tension Design Factor 4.19 J	
Domoriko	Prepared by:	Richard Wrig	ght		Phone: (432 FAX: (432) 6			05/02/22 Midland, Tex	kas	

Remarks:

Collapse is based on a vertical depth of 3,000 ft, a mud weight of 9.5 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:

Bonneville 16 State #305H

Operator: Tascosa Energy Partners, LLC String type: Surface Casing (500)

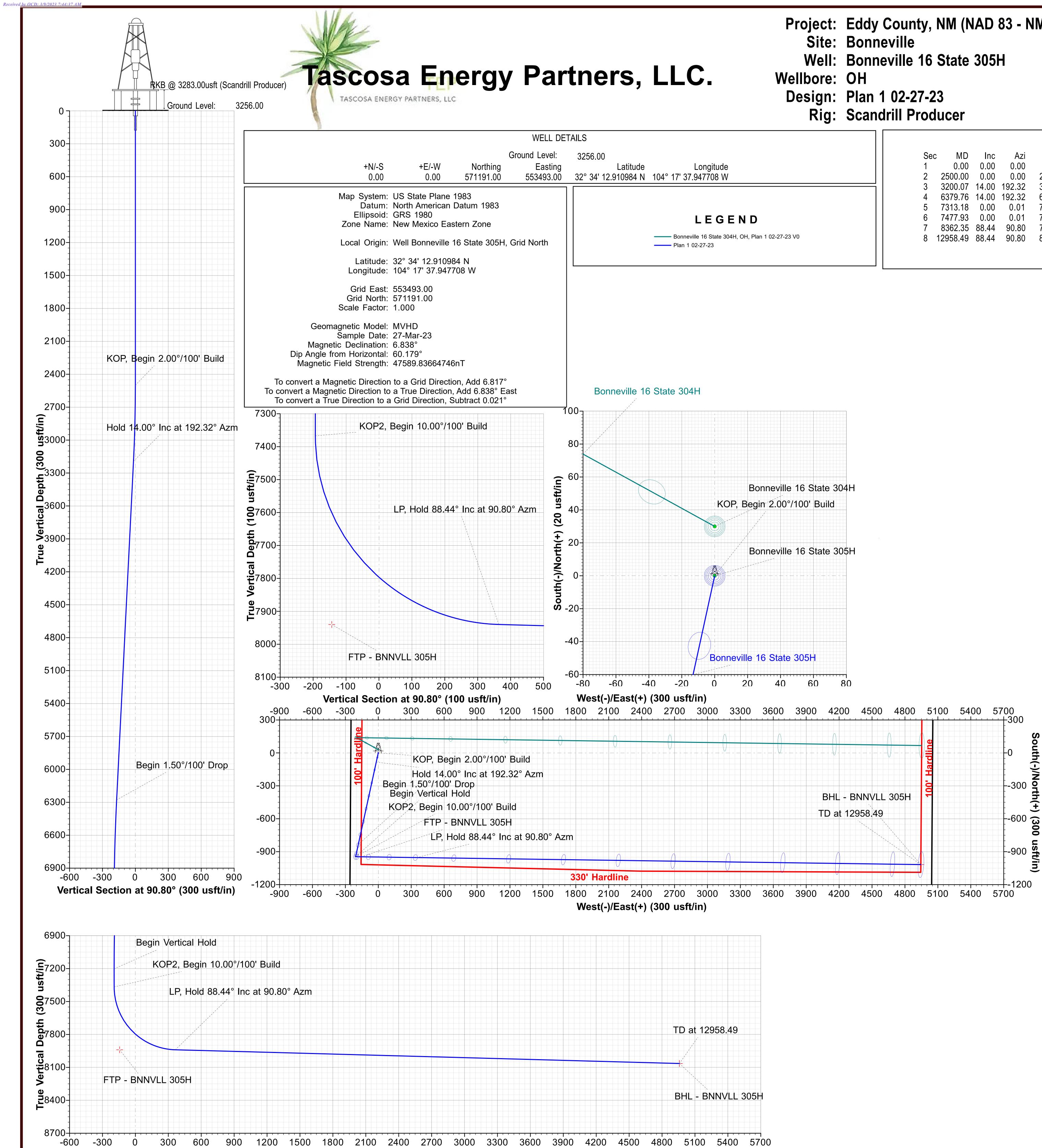
Eddy County, New Mexico. 1,350 FSL & 250 FWL, Sec 16, T20S, R27E 330 FSL & 100 FEL, Sec 16, T20S, R27E

Design pa	rameters:			Minimum	design fact	ors:	Environme				
<u>Collapse</u>					<u>Collapse:</u>		H2S conside		No		
Mud weight:			9.00	ppg	DF	1.125	Surface temperature: 75.00				
Design is ba	ised on evaci	uated pipe.					BHTemp		79 °F		
							Temp gradie	ent:	0.80 °F/100ft		
							Minimum se	c length:	500 ft		
					<u>Burst:</u>		Minimum Dr	ift:	12.25 in		
					DF	1.10	Cement top:		Surface		
<u>Burst</u>											
Max anticipa	ated surface										
pressure		=	250.00	psi							
Internal grad	lient:	=	0.12	psi/ft	Tension:		Non-directio	nal string.			
Calculated BHP = 310.00				psi	8 Rd STC:	1.80	(J)				
					8 Rd LTC:	1.80	(J)				
No backup	mud specifie	ed.			Buttress:	1.60	(J)				
					Premium:	1.50	(J)				
					Body yield:	1.50	(B)	Re subseq	uent strings:		
							Next setting	depth:	3,000.00	ft	
				Tension is	based on buoy	/ed wgt.	Next mud w	eight:	10.00	ppg	
				Neutral pt:	453.00	ft	Next setting	BHP:	1,482.00	psi	
Maximum Lif	t using 14.8 p	pg cmt to sur	face with 8.5	ppg mud fill	ed csg=		Fracture mu	d wt:	11.00	ppg	
23,014 lbs lift	t. String wgt =	= 24,600 lbs. (Chain down	casing prior t	o cmt job		Safety Facto	or Injection	1.00	ppg	
for Safety.					-		Fracture dep	oth:	500.00	ft	
							Injection pre	ssure	312.00	psi	
Run	Segment		Nominal		End	True Vert	Measured	Drift	Internal	Internal	
Seq	Length	Size	Weight	Grade	Finish	Depth	Depth	Diameter	Capacity	Capacity	
	(ft)	(in)	(lbs/ft)			(ft)	(ft)	(in)	(ft ³)	(bbls)	
1	45	13.375	48.00	H-40	ST&C	500	500	12.59	440.9	78.54	
Run	Collapse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension		
Seq	Load	Strength	Design	Load	Strength	Design	Load	Strength	Design		
	(psi)	(psi)	Factor	(psi)	(psi)	Factor	(Kips)	(Kips)	Factor		
1	234	740	3.16	312	1730	5.54	24	322	13.417		
	Prepared				Phone: (432) 695 6970	Date:	05/02/22			
	•	Richard Wrig	ght		FAX: (432) 6		Midland, Texas				
	by: Richard Wright				. ,						

Remarks:

Collapse is based on a vertical depth of 500 ft, a mud weight of 9.0 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

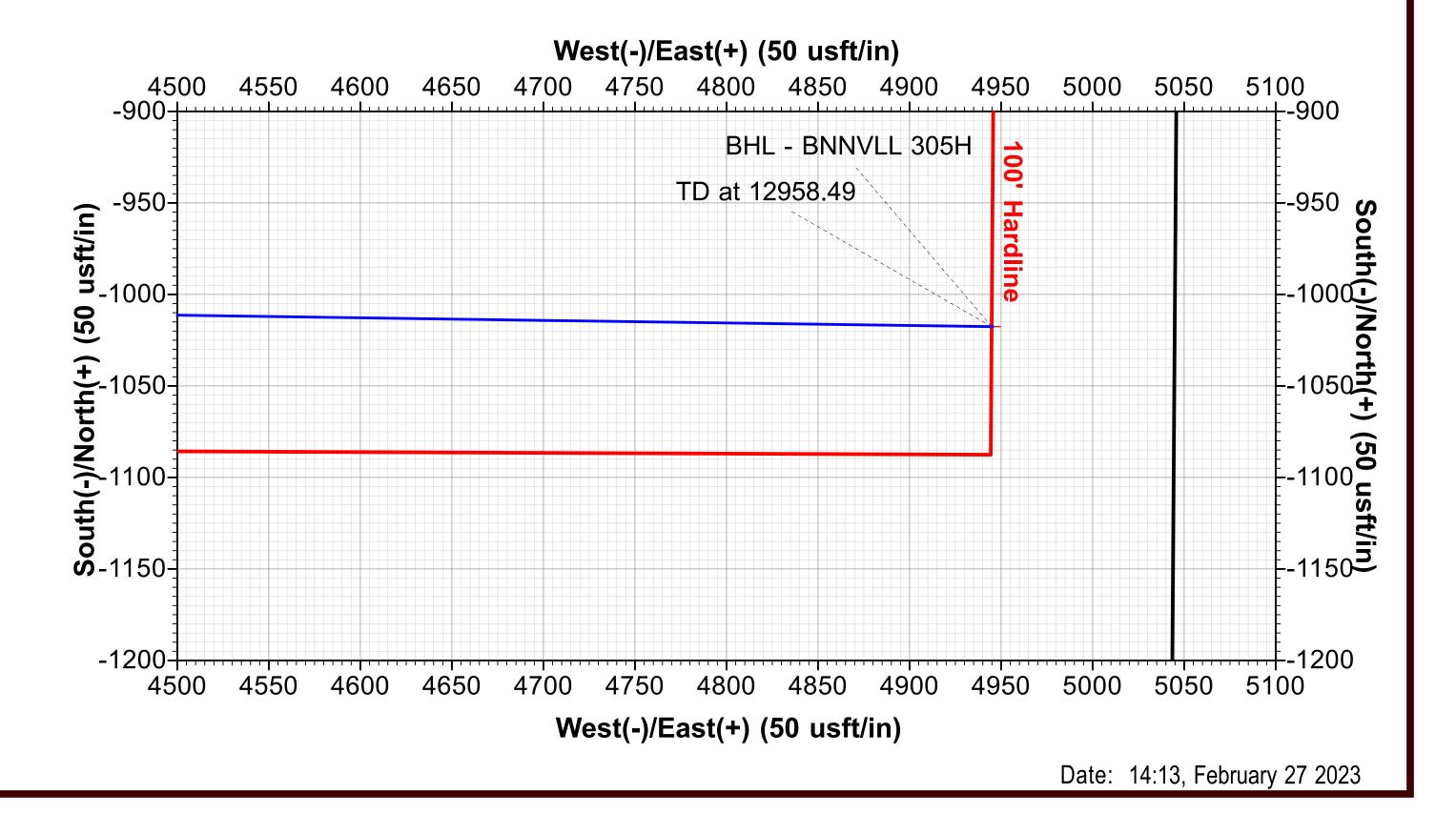
Burst strength is not adjusted for tension.



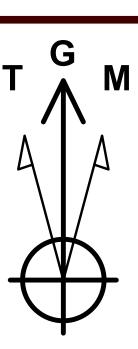
Vertical Section at 90.80° (300 usft/in)

ite: 'ell: ore: gn:	Bonn Bonn OH Plan	Count eville eville 1 02-2 drill Pr	16 7-2	State			NME)					H(chn
											SECTIO	N DETAI
			Sec 1 2 3 4	MD 0.00 2500.00 3200.07 6379.76	Inc 0.00 0.00 14.00 14.00	Azi 0.00 0.00 192.32 192.32	TVD 0.00 2500.00 3193.12 6278.34	+N/-S 0.00 0.00 -83.15 -834.76	+E/-W 0.00 0.00 -18.15 -182.25	Dleg 0.00 0.00 2.00 0.00	TFace 0.000 0.000 192.316 0.000	VSect 0.00 0.00 -16.99 -170.57

1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00
2	2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.000	0.00
3	3200.07	14.00	192.32	3193.12	-83.15	-18.15	2.00	192.316	-16.99
4	6379.76	14.00	192.32	6278.34	-834.76	-182.25	0.00	0.000	-170.57
5	7313.18	0.00	0.01	7202.50	-945.63	-206.45	1.50	180.000	-193.22
6	7477.93	0.00	0.01	7367.25	-945.63	-206.45	0.00	0.005	-193.22
7	8362.35	88.44	90.80	7940.00	-953.41	350.87	10.00	90.800	364.15
8	12958.49	88.44	90.80	8065.00	-1017.59	4944.86	0.00	0.000	4958.60







Azimuths to Grid North True North: -0.02° Magnetic North: 6.82°

> Magnetic Field Strength: 47589.8nT Dip Angle: 60.18° Date: 3/27/2023 Model: MVHD

AILS

Target

Annotation

KOP, Begin 2.00°/100' Build Hold 14.00° Inc at 192.32° Azm Begin 1.50°/100' Drop Begin Vertical Hold KOP2, Begin 10.00°/100' Build LP, Hold 88.44° Inc at 90.80° Azm TD at 12958.49

BHL - BNNVLL 305H



Tascosa Energy Partners, LLC.

Eddy County, NM (NAD 83 - NME) Bonneville Bonneville 16 State 305H

OH

Plan: Plan 1 02-27-23

Standard Planning Report

27 February, 2023



PHOENIX TECHNOLOGY SERVICES					Phoen Planning R						Тассия ривоч митики, це
Database: Company: Project: Site: Vell: Vellbore: Design:	Eddy Cour Bonneville	nergy Partne nty, NM (NAE 16 State 30	0 83 - NME)		TVD Ref MD Refe North Re			RKB (RKB (Grid		usft (Scand usft (Scand	5H rill Producer) rill Producer)
Project	Eddy Count	ty, NM (NAD	83 - NME)								
oco Datam.	US State Pla North Americ New Mexico	an Datum 19			System D	atum:		Mean S	ea Level		
Site	Bonneville										
Site Position: From: Position Uncertain	Мар ty:	0.00 usf	Northing Easting: t Slot Rad	-	,	904.00 usft 509.00 usft 13-3/16 "	Latitud Longitu Grid Co		e:		32° 34' 39.757451 N 4° 17' 37.748956 W 0.021 °
Well	Bonneville 1	6 State 305	H								
Well Position	+N/-S	-2,713.00 us	sft North	ning:		571,191.0		Latitude			82° 34' 12.910984 N
Position Uncertain	+E/-W ty	-16.00 us 1.00 us		ng: nead Elev	vation:	553,493.0) usft	Longitud Ground		10	4° 17' 37.947708 W 3,256.00 usfi
Position Uncertain Wellbore				•	vation:	553,493.0) usft	•		10	
	ty	1.00 us		head Elev	vation: Declina (°)	ation		•		Field S	
Wellbore	ty OH	1.00 us	Sft Wellh Sample D	head Elev	Declina	ation		Ground Dip Angle (°)		Field S (n	3,256.00 usft trength
Wellbore	ty OH	1.00 us l ame MVHD	Sft Wellh Sample D	ate	Declina	ation		Ground Dip Angle (°)	Level:	Field S (n	3,256.00 usft trength IT)
Wellbore Magnetics	ty OH Model N	1.00 us l ame MVHD	Sft Wellh Sample D	ate	Declina	ation 6.838		Ground Dip Angle (°) 6	Level:	Field S (n 47,58	3,256.00 usft trength IT)
Wellbore Magnetics Design Audit Notes:	ty OH Model N	1.00 us lame MVHD 7-23 Depth	sft Wellh Sample D 3/27	ate 7/2023	Declina (°)	ation 6.838 T + (Ground Dip Angle (°) 6	Level: 0.179	Field S (n 47,58 00 ion	3,256.00 usft trength IT)
Wellbore Magnetics Design Audit Notes: Version:	ty OH Model N Plan 1 02-2	1.00 us lame MVHD 7-23 Depth	Sample D 3/27 Phase: From (TVD (usft) 0.00	ate 7/2023	Declina (°) PLAN +N/-S (usft)	ation 6.838 T + (ie On Dep E/-W usft)	Ground Dip Angle (°) 6	Level: 0.179 0.0 Direct (°)	Field S (n 47,58 00 ion	3,256.00 usft trength IT)
Wellbore Magnetics Design Audit Notes: Version: Vertical Section: Plan Survey Tool F Depth From	ty OH Model N Plan 1 02-2 Program Depth To	1.00 us lame MVHD 7-23 Depth Date 2/2 Survey (W	Sample D 3/27 Phase: From (TVD (usft) 0.00 27/2023 /ellbore)	ate 7/2023	Declina (°) PLAN +N/-S (usft) 0.00	ation 6.838 T ((ie On Dep E/-W usft) D.00	Ground Dip Angle (°) 6	Level: 0.179 0.0 Direct (°)	Field S (n 47,58 00 ion	3,256.00 usft trength IT)
Wellbore Magnetics Design Audit Notes: Version: Vertical Section: Plan Survey Tool F Depth From (usft)	ty OH Model N Plan 1 02-2	1.00 us lame MVHD 7-23 Depth Date 2/2 Survey (W	Sample D 3/27 Phase: From (TVD (usft) 0.00 27/2023 /ellbore)	ate 7/2023	Declina (°) PLAN +N/-S (usft) 0.00 Tool Name MWD+HRGI	ation 6.838 T ((ie On Dep E/-W usft) D.00	Ground Dip Angle (°) 6	Level: 0.179 0.0 Direct (°)	Field S (n 47,58 00 ion	3,256.00 usft trength IT)

(usit)	()	0	(usit)	(usit)	(usit)	(/ iousit)	(/iousit) (/ Toousit)	(*)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.000	
3,200.07	14.00	192.32	3,193.12	-83.15	-18.15	2.00	2.00	0.00	192.316	
6,379.76	14.00	192.32	6,278.34	-834.76	-182.25	0.00	0.00	0.00	0.000	
7,313.18	0.00	0.01	7,202.50	-945.63	-206.45	1.50	-1.50	0.00	180.000	
7,477.93	0.00	0.01	7,367.25	-945.63	-206.45	0.00	0.00	0.00	0.005	
8,362.35	88.44	90.80	7,940.00	-953.41	350.87	10.00	10.00	10.27	90.800	
12,958.49	88.44	90.80	8,065.00	-1,017.59	4,944.87	0.00	0.00	0.00	0.000 BH	IL - BNNVLL 305

.



Phoenix Planning Report



Database: Company:	USA Compass Tascosa Energy Partners, LLC.	Local Co-ordinate Reference: TVD Reference:	Well Bonneville 16 State 305H RKB @ 3283.00usft (Scandrill Producer)
Project:	Eddy County, NM (NAD 83 - NME)	MD Reference:	RKB @ 3283.00usft (Scandrill Producer)
Site:	Bonneville	North Reference:	Grid
Well: Wellbore:	Bonneville 16 State 305H OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan 1 02-27-23		

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 2,500.00 KOP Beg	0.00 0.00 in 2.00°/100' Bu	0.00 0.00	0.00 2,500.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
2,600.00 2,700.00 2,800.00	2.00 4.00 6.00	192.32 192.32 192.32	2,599.98 2,699.84 2,799.45	-1.70 -6.82 -15.33	-0.37 -1.49 -3.35	-0.35 -1.39 -3.13	2.00 2.00 2.00	2.00 2.00 2.00	0.00 0.00 0.00
2,900.00 3,000.00 3,100.00 3,200.00 3,200.07	8.00 10.00 12.00 14.00 14.00	192.32 192.32 192.32 192.32 192.32 192.32	2,898.70 2,997.47 3,095.62 3,193.06 3,193.12	-27.24 -42.52 -61.16 -83.14 -83.15	-5.95 -9.28 -13.35 -18.15 -18.15	-5.57 -8.69 -12.50 -16.99 -16.99	2.00 2.00 2.00 2.00 2.00	2.00 2.00 2.00 2.00 2.00	0.00 0.00 0.00 0.00 0.00 0.00
Hold 14.0	0° Inc at 192.32								
3,300.00 3,400.00 3,500.00 3,600.00 3,700.00	14.00 14.00 14.00 14.00 14.00	192.32 192.32 192.32 192.32 192.32 192.32	3,290.08 3,387.11 3,484.14 3,581.17 3,678.20	-106.78 -130.41 -154.05 -177.69 -201.33	-23.31 -28.47 -33.63 -38.79 -43.95	-21.82 -26.65 -31.48 -36.31 -41.14	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
3,800.00 3,900.00 4,000.00 4,100.00 4,200.00	14.00 14.00 14.00 14.00 14.00	192.32 192.32 192.32 192.32 192.32 192.32	3,775.23 3,872.26 3,969.29 4,066.32 4,163.35	-224.96 -248.60 -272.24 -295.88 -319.51	-49.11 -54.28 -59.44 -64.60 -69.76	-45.97 -50.80 -55.63 -60.46 -65.29	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
4,300.00 4,400.00 4,500.00 4,600.00 4,700.00	14.00 14.00 14.00 14.00 14.00	192.32 192.32 192.32 192.32 192.32 192.32	4,260.37 4,357.40 4,454.43 4,551.46 4,648.49	-343.15 -366.79 -390.43 -414.06 -437.70	-74.92 -80.08 -85.24 -90.40 -95.56	-70.12 -74.95 -79.78 -84.61 -89.44	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
4,800.00 4,900.00 5,000.00 5,100.00 5,200.00	14.00 14.00 14.00 14.00 14.00	192.32 192.32 192.32 192.32 192.32 192.32	4,745.52 4,842.55 4,939.58 5,036.61 5,133.64	-461.34 -484.98 -508.62 -532.25 -555.89	-100.72 -105.88 -111.04 -116.20 -121.36	-94.27 -99.10 -103.93 -108.76 -113.59	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
5,300.00 5,400.00 5,500.00 5,600.00 5,700.00	14.00 14.00 14.00 14.00 14.00	192.32 192.32 192.32 192.32 192.32 192.32	5,230.66 5,327.69 5,424.72 5,521.75 5,618.78	-579.53 -603.17 -626.80 -650.44 -674.08	-126.52 -131.69 -136.85 -142.01 -147.17	-118.42 -123.25 -128.08 -132.91 -137.74	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00
5,800.00 5,900.00 6,000.00 6,100.00 6,200.00	14.00 14.00 14.00 14.00 14.00	192.32 192.32 192.32 192.32 192.32	5,715.81 5,812.84 5,909.87 6,006.90 6,103.93	-697.72 -721.35 -744.99 -768.63 -792.27	-152.33 -157.49 -162.65 -167.81 -172.97	-142.57 -147.40 -152.23 -157.06 -161.89	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
6,300.00 6,379.76	14.00 14.00	192.32 192.32	6,200.96 6,278.34	-815.90 -834.76	-178.13 -182.25	-166.72 -170.57	0.00 0.00	0.00 0.00	0.00 0.00
Begin 1.5 6.400.00	0°/100' Drop 13.70	192.32	6,298.00	-839.49	-183.28	-171.54	1.50	-1.50	0.00
6,500.00 6,600.00	12.20 10.70	192.32 192.32	6,395.45 6,493.46	-861.38 -880.77	-188.06 -192.29	-176.01 -179.97	1.50 1.50 1.50	-1.50 -1.50	0.00 0.00
6,700.00 6,800.00 6,900.00 7,000.00 7,100.00	9.20 7.70 6.20 4.70 3.20	192.32 192.32 192.32 192.32 192.32 192.32	6,591.95 6,690.87 6,790.13 6,889.67 6,989.43	-897.65 -912.00 -923.82 -933.09 -939.82	-195.98 -199.11 -201.69 -203.72 -205.18	-183.42 -186.35 -188.77 -190.66 -192.04	1.50 1.50 1.50 1.50 1.50	-1.50 -1.50 -1.50 -1.50 -1.50	0.00 0.00 0.00 0.00 0.00



Phoenix Planning Report



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Company:	Tascosa Energy Partners, LLC.	TVD Reference:	RKB @ 3283.00usft (Scandrill Producer)
Project:	Eddy County, NM (NAD 83 - NME)	MD Reference:	RKB @ 3283.00usft (Scandrill Producer)
Site:	Bonneville	North Reference:	Grid
Well:	Bonneville 16 State 305H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
Design:	Plan 1 02-27-23		

Planned Survey

l l	easured 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)
	7,200.00 7,300.00 7,313.18	1.70 0.20 0.00	192.32 192.32 0.00	7,089.34 7,189.32 7,202.50	-943.99 -945.61 -945.63	-206.10 -206.45 -206.45	-192.89 -193.22 -193.22	1.50 1.50 1.50	-1.50 -1.50 -1.50	0.00 0.00 0.00
E	Begin Vert	ical Hold								
	7,477.93	0.00	0.00	7,367.25	-945.63	-206.45	-193.22	0.00	0.00	0.00
	(OP2, Beg 7.500.00	in 10.00°/100' 2.21	Build 90.80	7,389.32	-945.63	-206.03	-192.80	10.00	10.00	0.00
	,									
	7,600.00 7,700.00 7,800.00 7,900.00 8,000.00	12.21 22.21 32.21 42.21 52.21	90.80 90.80 90.80 90.80 90.80 90.80	7,488.40 7,583.80 7,672.63 7,752.17 7,820.02	-945.81 -946.22 -946.86 -947.70 -948.73	-193.50 -163.96 -118.30 -57.91 15.37	-180.27 -150.72 -105.06 -44.67 28.62	10.00 10.00 10.00 10.00 10.00	10.00 10.00 10.00 10.00 10.00	0.00 0.00 0.00 0.00 0.00 0.00
	8,100.00 8,200.00 8,300.00 8,362.35	62.21 72.21 82.21 88.44	90.80 90.80 90.80 90.80	7,874.11 7,912.81 7,934.92 7,940.00	-949.90 -951.19 -952.55 -953.41	99.32 191.38 288.77 350.87	112.58 204.65 302.04 364.15	10.00 10.00 10.00 10.00	10.00 10.00 10.00 10.00	0.00 0.00 0.00 0.00
		3.44° Inc at 90.		7 041 02	052.04	200 50	401 70	0.00	0.00	0.00
	8,400.00 8,500.00 8,600.00 8,700.00 8,800.00 8,900.00	88.44 88.44 88.44 88.44 88.44 88.44	90.80 90.80 90.80 90.80 90.80 90.80	7,941.02 7,943.74 7,946.46 7,949.18 7,951.90 7,954.62	-953.94 -955.34 -956.73 -958.13 -959.53 -960.92	388.50 488.46 588.41 688.36 788.32 888.27	401.79 501.75 601.72 701.68 801.64 901.61	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00 0.00
	9,000.00 9,100.00 9,200.00 9,300.00 9,400.00	88.44 88.44 88.44 88.44 88.44	90.80 90.80 90.80 90.80 90.80	7,957.34 7,960.06 7,962.78 7,965.50 7,968.22	-962.32 -963.71 -965.11 -966.51 -967.90	988.22 1,088.18 1,188.13 1,288.08 1,388.04	1,001.57 1,101.53 1,201.50 1,301.46 1,401.42	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00
	9,500.00 9,600.00 9,700.00 9,800.00 9,900.00	88.44 88.44 88.44 88.44 88.44	90.80 90.80 90.80 90.80 90.80 90.80	7,970.94 7,973.66 7,976.38 7,979.10 7,981.82	-969.30 -970.70 -972.09 -973.49 -974.89	1,487.99 1,587.94 1,687.90 1,787.85 1,887.80	1,501.38 1,601.35 1,701.31 1,801.27 1,901.24	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00
1 1 1	0,000.00 0,100.00 0,200.00 0,300.00 0,400.00	88.44 88.44 88.44 88.44 88.44	90.80 90.80 90.80 90.80 90.80	7,984.54 7,987.26 7,989.98 7,992.70 7,995.42	-976.28 -977.68 -979.07 -980.47 -981.87	1,987.76 2,087.71 2,187.66 2,287.62 2,387.57	2,001.20 2,101.16 2,201.13 2,301.09 2,401.05	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00
1 1 1 1	0,500.00 0,600.00 0,700.00 0,800.00 0,900.00	88.44 88.44 88.44 88.44 88.44	90.80 90.80 90.80 90.80 90.80 90.80	7,998.14 8,000.86 8,003.58 8,006.30 8,009.02	-983.26 -984.66 -986.06 -987.45 -988.85	2,487.52 2,587.48 2,687.43 2,787.38 2,887.33	2,501.01 2,600.98 2,700.94 2,800.90 2,900.87	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
1 1 1 1	1,000.00 1,100.00 1,200.00 1,300.00 1,400.00	88.44 88.44 88.44 88.44 88.44	90.80 90.80 90.80 90.80 90.80	8,011.74 8,014.46 8,017.17 8,019.89 8,022.61	-990.25 -991.64 -993.04 -994.43 -995.83	2,987.29 3,087.24 3,187.19 3,287.15 3,387.10	3,000.83 3,100.79 3,200.76 3,300.72 3,400.68	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
1 1 1	1,500.00 1,600.00 1,700.00 1,800.00 1,900.00	88.44 88.44 88.44 88.44 88.44	90.80 90.80 90.80 90.80 90.80 90.80	8,025.33 8,028.05 8,030.77 8,033.49 8,036.21	-997.23 -998.62 -1,000.02 -1,001.42 -1,002.81	3,487.05 3,587.01 3,686.96 3,786.91 3,886.87	3,500.64 3,600.61 3,700.57 3,800.53 3,900.50	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00



Phoenix Planning Report



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Project:	Eddy County, NM (NAD 83 - NME)	MD Reference:	RKB @ 3283.00usft (Scandrill Producer)
Site:	Bonneville	North Reference:	Grid
Well:	Bonneville 16 State 305H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
Design:	Plan 1 02-27-23		

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)
12,000.00	88.44	90.80	8,038.93	-1,004.21	3,986.82	4,000.46	0.00	0.00	0.00
12,100.00	88.44	90.80	8,041.65	-1,005.61	4,086.77	4,100.42	0.00	0.00	0.00
12,200.00	88.44	90.80	8,044.37	-1,007.00	4,186.73	4,200.39	0.00	0.00	0.00
12,300.00	88.44	90.80	8,047.09	-1,008.40	4,286.68	4,300.35	0.00	0.00	0.00
12,400.00	88.44	90.80	8,049.81	-1,009.80	4,386.63	4,400.31	0.00	0.00	0.00
12,500.00	88.44	90.80	8,052.53	-1,011.19	4,486.59	4,500.27	0.00	0.00	0.00
12,600.00	88.44	90.80	8,055.25	-1,012.59	4,586.54	4,600.24	0.00	0.00	0.00
12,700.00	88.44	90.80	8,057.97	-1,013.98	4,686.49	4,700.20	0.00	0.00	0.00
12,800.00	88.44	90.80	8,060.69	-1,015.38	4,786.45	4,800.16	0.00	0.00	0.00
12,900.00	88.44	90.80	8,063.41	-1,016.78	4,886.40	4,900.13	0.00	0.00	0.00
12,958.49	88.44	90.80	8,065.00	-1,017.59	4,944.87	4,958.60	0.00	0.00	0.00
TD at 1295	8.49								

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
FTP - BNNVLL 305H - plan misses targe - Point	0.00 t center by		7,940.00 at 7955.35	-946.33 usft MD (779	-156.46 1.31 TVD, -9	570,244.68 948.25 N, -18.81		32° 34' 3.547161 N	4° 17' 39.780145 W
BHL - BNNVLL 305H - plan hits target ce - Point	0.00 enter	0.00	8,065.00	-1,017.59	4,944.87	570,173.41	558,437.87	32° 34' 2.819535 N	4° 16' 40.166969 W

Plan Annotations

Measured	Vertical	Local Coor	dinates	
Depth (usft)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
2,500.00	2,500.00	0.00	0.00	KOP, Begin 2.00°/100' Build
3,200.07	3,193.12	-83.15	-18.15	Hold 14.00° Inc at 192.32° Azm
6,379.76	6,278.34	-834.76	-182.25	Begin 1.50°/100' Drop
7,313.18	7,202.50	-945.63	-206.45	Begin Vertical Hold
7,477.93	7,367.25	-945.63	-206.45	KOP2, Begin 10.00°/100' Build
8,362.35	7,940.00	-953.41	350.87	LP, Hold 88.44° Inc at 90.80° Azm
12,958.49	8,065.00	-1,017.59	4,944.87	TD at 12958.49

Receive

by O	C D: 3/9/2	2023 7:44:3	7 AM									Po
nten	t	As Drill	led									
API #]									
Ope	rator Nar	me:	<u>I</u>			Property	/ Name:	:				Well Number
	Off Point		T	· · ·	.		/0	1 - - +	5.0	- / 4/		
UL	Section	Township	Range	Lot	Feet		m N/S	Feet	Fro	m E/W	County	
Latitu	ide			<u> </u>	Longitu	Jde					NAD	
irst 7	Take Poin	it (FTP)									<u> </u>	
UL	Section	Township	Range	Lot	Feet	Fror	m N/S	Feet	Fro	m E/W	County	
Latitu	ıde	<u> </u>	L	<u> </u>	Longitu	Jde			I		NAD	
ast T	ake Poin	+ (I TP)										
UL	Section	Township	Range	Lot	Feet	From N/S	S Feet	:	From E/W	Coun	tv	
Latitu					Longitu					NAD	- 1	
Lduu	lae				LUIIgitu	lae				NAD		
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Ope	rator Nar	me:	1			Property	y Name	:				Well Numbe
-+:	- La d Fam											
:Stim	ateu Fori	mation Top)S									
Form	ation:				Тор:		Formatio	n:				Тор:
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SEC 16, T20S, R27E, Eddy County, New Mexico

Bonneville 16 State wells and their anticipated facility are <u>not</u> expected to have Hydrogen Sulfide releases. However, there may be Hydrogen Sulfide production in the nearby area. There are no occupied dwellings within a mile of the area but a contingency plan has been orchestrated. Tascosa Energy Partners, LLC will have a Company Representative living on location throughout the drilling and completion of this well. If Hydrogen Sulfide is detected or suspected, monitoring equipment will be available for monitoring and/or testing. An unmanned H2S safety trailer and monitoring equipment will also be station on location during the drilling operation below the Surface Casing depth of \pm 500 ft. to total drilling depth of \pm 13,000 ft.

Tascosa Energy Partners, LLC Bonneville 16 State Hydrogen Sulfide Contingency Plan For Drilling/Workover/Facility SEC 16, T20S, R27E, Eddy County, New Mexico

EMERGENCY CALL LIST: (Start and continue until ONE of these people have been contacted)

	OFFICE	MOBILE	HOME
Tascosa Energy ,LLC.	432 695-6970		
Alyssa McNear		720 244 4417	
Jeff Birkelbach	432 695-6970	432 553 0391	
Brian Kirkland		432 770-2325	
Kevin Herrmann	432 695-6970	432 254-9106	
EMERGENCY RESPONSE N	IUMBERS:		
State Police:	Eddy County		575 748 9718
State Police:	Lea County		575 392 5588
Sheriff Sheriff	Eddy County Lea County		575 746 2701
Emergency Medical Ser	Eddy County		911 or 575 746 2701
(Ambulance)	Lea County	Eunice	911 or 575 394 3258
Emergency Response	Eddy County SERC		575 476 9620
Artesia Police Dept			575 746 5001
Artesia Fire Dept			575 746 5001
Carlsbad Police Dept			575 885 2111
Carlsbad Fire Dept			575 885 3125
Loco Hills Police Dept			575 677 2349
Jal Police Dept			575 395 2501
Jal Fire Dept			575 395 2221
Jal ambulance			575 395 2221
Eunice Police Dept			575 394 0112
Eunice Fire Dept			575 394 3258

Tascosa Energy Partners, LLC Bonneville 16 State Hydrogen Sulfide Contingency Plan For Drilling/Workover/Facility SEC 16, T20S, R27E, Eddy County, New Mexico

Eunice Ambulance		575 394 3258
Hobbs Police Dept		
NMOCD	District 1 (Lea, Roosevelt, Curry) District 2 (Eddy Chavez)	575 393 6161 575 748 1283
BLM Carlsbad BLM Hobbs		575 234 5972 575 393 3612
Lea County Information		575 393 8203
Midland Safety	Lea/Eddy County	432 520 3838 888 262 4964
American Safety	Lea/Eddy County	575 746 1096 575 393 3093
Halliburton	Artesia Hobbs Midland	800 844 8451 800 844 8451 800 844 8451
Wild Well Control	Midland	281 784 4700 281 443 4873

Tascosa Energy Partners, LLC Bonneville 16 State Hydrogen Sulfide Contingency Plan For Drilling/Workover/Facility SEC 16, T20S, R27E, Eddy County, New Mexico

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SEC 16, T20S, R27E, Eddy County, New Mexico

1. Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well

- 1. The hazards and characteristics of hydrogen sulfide (H2S)
- 2. The proper use and maintenance of personal protective equipment and life support systems.
- 3. The proper use of H2S detectors, alarms, warning systems, briefing areas, evacuation procedures and prevailing winds.
- 4. The proper techniques for first aid and rescue procedures

In addition, supervisory personnel will be trained in the following areas:

- 1. The effects of H2S on metal components. If high tensile tubulars are to be used, personnel will be trained in the special maintenance requirements.
- 2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- 3. The contents and requirements of H2S Drilling Operations Plan and the Public Protection plan.

There will be an initial training session just prior to encountering a known or probable H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H2S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

2. H2S Safety Equipment and Systems

Note: All H2S safety equipment and systems will be installed, tested and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H2S. If H2S greater than 100 ppm is encountered in the gas stream we will shut-in and install H2S equipment.

- 1. Well Control Equipment:
 - a. Flare Line
 - b. Choke manifold with remotely operated choke
 - c. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.

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- d. Auxiliary equipment to include; annular preventer, mud gas separator, rotating head.
- 2. Protective equipment for essential personnel:
 - a. Mark II Survive air 30 minute units located in the dog house and at the briefing areas.
- 3. H2S detection and monitoring equipment:
 - a. 2-portable H2S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 ppm are reached.
- 4. Visual warning systems:
 - a. Caution/Danger signs shall be posted on roads providing direct access to the location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate.
- 5. Mud Program:
 - a. The mud program has been designed to minimize the volume of H2S circulated to the surface.
- 6. Metallurgy:
 - a. All drill strings, casing, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
- 7. Communications:
 - a. Company vehicles equipped with cellular telephone.

Tascosa Energy Partners, LLC has conducted a review to determine if an H2S contingency plan is required for the subject well. We were able to conclude that any potential hazardous volume would be minimal. H2S concentrations of wells in this area from surface to TD are low enough; therefore, **we do not believe that an H2S contingency plan is necessary**

General H2S Emergency Actions:

- 1. All personnel will immediately evacuate to an up-wind and if possible up-hill "safe area"
- 2. If for any reason a person must enter the hazardous area, they must wear a SCBA (Self Contained Breathing Apparatus)
- 3. Always use the "buddy system"
- 4. Isolate the well/problem if possible
- 5. Account for all personnel
- 6. Display the proper colors warning all unsuspecting personnel of the danger at hand.
- 7. Contact the Company personnel as soon as possible if not at the location. (use the enclosed call list as instructed

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At this point the company representative will evaluate the situation and coordinate the necessary duties to bring the situation under control, and if necessary, the notification of the emergency response agencies and nearby residents.

EMERGENCY PROCEDURES FOR AN UNCONTROLLABLE RELEASE OF H2S

- 1. All personnel will wear the self-contained breathing apparatus.
- 2. Remove all personnel to the "safe area". (always use the buddy system).
- 3. Contact company personnel if not on location.
- 4. Set in motion the steps to protect and or remove the general public to an upwind "safe area". Maintain strict security & safety procedures while dealing with the source.
- 5. No entry to any unauthorized personnel.
- Notify the appropriate agencies: City Police-City Street (s) State Police- State Rd County Sheriff – County Rd.
- 7. Call the BLM &/or NMOCD

PROTECTION OF THE GENERAL PUBLIC (Radius of Exposure):

- 100 ppm at any public area (any place not associated with this site)
- 500 ppm at any public road (any road which the general public may travel)
- 100 ppm radius of ¼ mile in New Mexico will be assumed if there is insufficient data to do the calculations, and there is a reasonable expectation that H2S could be present in concentrations greater than 100 ppm in the gas mixture

CALCULATIONS FOR THE 100 PPM (ROE) "Pasquill-Gifford equation"

X = [(1.589) (mole fraction) (Q- volume in std cu ft)] to the power of (0.6258)

CALCULATION FOR THE 500 PPM ROE:

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X = [(.4546) (mole fraction) (Q-volume in std cu ft)] to the power of (0.6258)

Example:

If a well/facility has been determined to have 150 / 500 ppm H2S in the gas mixture and the well/facility is producing at a gas rate of 100 MCFPD then:

150 ppm X= [(1.589) (.00015) (100,000 cfd)] to the power of (.6258) X= 7 ft

500 ppm X= [(.4546) (.0005) (100,000 cfd)] to the power of (.6258) X = 3.3 ft.

(These calculations will be forwarded to the appropriate District NMOCD office when Applicable)

PUBLIC EVACUATION PLAN:

- 1. Notification of the emergency response agencies of the hazardous condition and implement evacuation procedures.
- A trained person in H2S safety, shall monitor with detection equipment the H2S concentration, wind and area exposure (ROE). This person will determine the outer perimeter of the hazardous area. The extent of the evacuation area will be determined from the data being collected. Monitoring shall continue until the situation has been resolved. (All monitoring equipment shall be UL approved, for use in class 1 groups A,B,C & D, Division 1, hazardous locations. All monitor will have a minimum capability of measuring H2S, oxygen, and flammable values).
- Law enforcement shall be notified to set up necessary barriers and maintain such for the duration of the situation as well as aid in the evacuation procedure.
- The company supervising personnel shall stay in communication with all agencies throughout the duration of the situation and inform such agencies when the situation has been contained and the affected area(s) is safe to enter.

PROCEDURE FOR IGNITING AN UNCONTROLABLE CONDITION:

- 1. Human life and/or property are in danger
- 2. There is no hope of bringing the situation under control with the prevailing conditions at the site.

INSTRUCTION FOR IGNITION:

• 1. Two people are required. They must be equipped with positive pressure, "self - contained breathing apparatus" and a "D" ring style full body, OSHA approved safety harness. Nonflammable rope will be attached.

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- 2. One of the people will be qualified safety person who will test the atmosphere for H2S, Oxygen & LFL. The other person will be the company supervisor; he is responsible for igniting the well.
- 3. Ignite up wind from a distance no closer than necessary. Make sure that where you ignite from has the maximum escape avenue available. A 25 mm flare gun shall be used, with a ± 500 ft. range to ignite the gas.
- 4. Prior to ignition, make a final check for combustible gases.
- 5. Following ignition, continue with the emergency actions & procedures as before.

A. All personnel shall receive proper H2S training in accordance with Onshore Order III.C.3.a.

- B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.
- C. Required Emergency Equipment:
 - Well control equipment
 - a. Flare line 100' from wellhead to be ignited by flare gun or automatic striker.
 - b. Choke manifold with a remotely operated choke.
 - c. Mud/gas separator
 - Protective equipment for essential personnel.

Breathing apparatus:

- a. Rescue Packs (SCBA) 1 unit shall be placed at each breathing area, 2 shall be stored in the safety trailer.
- b. Work/Escape packs —4 packs shall be stored on the rig floor th sufficient air hose not to restrict work activity.
- c. Emergency Escape Packs —4 packs shall be stored in the doghouse for emergency evacuation.

Auxiliary Rescue Equipment:

- a. Stretcher
- b. Two OSHA full body harness
- c. 100 ft 5/8inch OSHA approved rope
- d. 1-20# class ABC fire extinguisher
- H2S detection and monitoring equipment:

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The stationary detector with three sensors will be placed in the upper dog house if equipped, set to visually alarm @ 10 ppm and audible @ 14 ppm. Calibrate a minimum of every 30 days or as needed. The sensors will be placed in the following places: Rig floor / Bell nipple / End of flow line or where well bore fluid is being discharged. (Gas sample tubes will be stored in the safety trailer)

■ Visual warning systems.

- a. One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site.
- b. A colored condition flag will be on display, reflecting the current condition at the site at the time.
- c. Two wind socks will be placed in strategic locations, visible from all angles.

■ Mud program: Only utilized if H2S has been detected

The mud program has been designed to minimize the volume of H2S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H2S bearing zones.

- Metallurgy: Only utilized if H2S has been detected
 - a. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
 - b. All elastomers used for packing and seals shall be H2S trim.
- Communication: Only utilized if H2S has been detected Communication will be via two way radio in emergency and company vehicles. Cell phones and land lines where available.

USING SELF CONTAINED BREATHING AIR EQUIPMENT (SCBA):

- (SCBA) SHOULD BE WORN WHEN ANY OF THE FOLLOWING ARE PERFORMED: Only utilized if H2S has been detected
 - > Working near the top or on top of a tank
 - Disconnecting any line where H2S can reasonably be expected
 - > Sampling air in the area to determine if toxic concentrations of H2S exist.
 - > Working in areas where over 10 ppm on H2S has been detected.
 - > At any time there is a doubt as the level of H2S in the area.
- All personnel shall be trained in the use of SCBA prior to working in a potentially hazardous location.
- Facial hair and standard eyeglasses are not allowed with SCBA.
- Contact lenses are never allowed with SCBA.

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- Air quality shall be continuously be checked during the entire operation.
- After each use, the SCBA unit shall be cleaned, disinfected, serviced and inspected
- All SCBA shall be inspected monthly.

RESCUE AND FIRST AID FOR VICTIMS OF HYDROGEN SULFIDE (H2S) POISONING:

- Do not panic
- Remain Calm & think
- Get on the breathing apparatus
- Remove the victim to the safe breathing area as quickly as possible. Up wind an uphill from source or cross wind to achieve upwind.
- Notify emergency response personnel.
- Provide artificial respiration and or CPR, as necessary
- Remove all contaminated clothing to avoid further exposure.
- A minimum of two personnel on location shall be trained in CPR and First Aid.

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Hydrogen Sulfide (H2S) Toxic Effects

H2S is extremely toxic. The acceptable ceiling for eight hours of exposure is 10 ppm, which is .001% by volume. H2S is approximately 20% heavier than air (Sp. Gr=1.19)(Air = 1) and H2S is colorless. It forms an explosive mixture with air between 4.3% and 46%. By volume hydrogen sulfide is almost as toxic as hydrogen cyanide and 5-6 times more toxic than carbon monoxide.

		Various Gas	es		
	CHEMICAL	SPECIFIC	THRESHOLD	HAZARDOUS	LETHAL
COMMON NAME	ABBREV.	GRVTY.	LIMITS	LIMITS	CONCENTRATIONS

Hydrogen Sulfide	H2S	1.19	10ppm 15 ppm	100 ppm/hr	600 ppm
Hydrogen Cyanide	HCN	0.94	10 ppm	150 ppm/hr	300 ppm
Sulfur Dioxide	SO2	2.21	2 ppm	N/A	1000 ppm
Chlorine	CL2	2.45	1 ppm	4 ppm/hr	1000 ppm
Carbon Monoxide	CO	0.97	50 ppm	400 ppm/hr	1000 ppm
Carbon Dioxide	CO2	1.52	5000 ppm	5%	10%
Methane	CH4	0.55	90,000	Combustible@ 5%	N/A

Threshold Limit: Concentrations at which it is believed that all workers may be repeatedly exposed, day after day without adverse effects.

Hazardous Limit: Concentrations that may cause death.

Lethal Concentrations: Concentrations that will cause death with short term exposure.

Threshold Limit- 10 ppm: NIOSH guide to chemical hazards.

PHYSICAL EFFECTS OF HYDROGEN SULFIDE:

CONCE	NTRATION	PHYSICAL EFFECTS
.001%	10 PPM	Obvious and unpleasant odor. Safe for 8 hour exposure
.005%	50 ppm	Can cause some flu like symptoms and can cause pneumonia
.01%	100 ppm	Kills the sense of smell in 3-15 minutes. May irritate the eyes and throat.
.02%	200 ppm	Kills the sense of smell rapidly. Severly irritates the eyes and throat. Severe flu like symptoms after 4 or more hours. May cause lung damage and or death.
.06%	600 ppm	Loss of consciousness quickly, death will result if not rescued promptly.



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VI. Separation Equipment:

Tascosa has sized a FWKO and a high pressure, 3-phase separator to allow for complete separation at our anticipated rates, with adequate retention times. Tank vapors will also be captured through a vapor recovery unit and sent to the DCP sales line through a compressor at the gathering station.

VII. Operational Practices:

- a. Drilling Operations Tascosa will ensure that a flare stack is set at least 100' from the wellbore during drilling operations. This flare stack will be properly sized to handle the maximum expected release, ensuring that all natural gas produced during drilling operations can be flared (unless there is an equipment malfunction or if venting is necessary for safety reasons).
- b. Completion Operations Prior to flowback, Tascosa will ensure that the well is connected to a gathering system that can handle the expected gas volumes. During flowback, natural gas will be separated and flared until it is within the specs of the contracted gathering system (DCP).
- c. Production Operations Tascosa will conduct weekly AVO inspections and tackle equipment failures with haste. The emergency flare on location will be equipped with an auto-ignition, capable of handling the maximum expected release. Sight glasses will be installed on all tanks to eliminate gas releases due to gauging through thief hatches. A VRU will also be installed to capture tank vapors and reduce waste. In preparation of a VRU failure or planned maintenance, a backup combustor will be placed at the facility.
- d. Performance Standards
 - a. Tascosa will design completion and production equipment for maximum expected output and pressure to eliminate venting.
 - b. A properly sized flare stack will be placed at the facility with an automatic ignitor.
 - c. AVO inspections will be conducted at least once a week to prevent releases due to equipment failure. These inspections will be recorded for future review.
 - d. Tascosa is obligated to eliminate waste and will repair equipment failures as soon as possible.
- e. Measurement and Estimation A meter will be placed on the combustor and the flare stack to ensure combusted gas readings are accurate during a release event. If for any reason a meter reading is unavailable, released volumes will be estimated and reported.



VIII. Best Management Practices:

Tascosa will aim to conduct surface maintenance without venting or flaring as much as possible. If planned maintenance is prolonged due to wait times for labor and equipment, Tascosa will shut in the producing well to prevent excess emissions. Tascosa will also minimized venting during downhole operations.

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			e of New Mex			Subr	nit Electronically
	E	nergy, Minerals a	nd Natural Reso	ources Departme	ent		E-permitting
Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505							
	N	ATURAL GA	AS MANAC	GEMENT PI	LAN		
This Natural Gas Manag	omont Dlan m	ust he submitted wi	th analy Application	on for Dormit to F	רדם (א סר) for a naw a	r recompleted well
This Natural Gas Manag	ement Plan m	ust be submitted wi	ui each Applicat	ion for Permit to L	Jilli (APD) for a new of	r recompleted wen.
			<u>1 – Plan De</u> fective May 25,				
I. Operator:Tasc	cosa Energy	Partners, LLC.	OGRID:	329748			/15/2023
II. Type: 🛛 Original 🗆] Amendment	due to □ 19.15.27.	9.D(6)(a) NMAC	C □ 19.15.27.9.D(6)(b) NM.	AC □ Other.	
If Other, please describe	:						
III. Well(s): Provide the be recompleted from a since the second secon					vells prop	osed to be dri	lled or proposed to
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Gas MCF/D Produced		Anticipated roduced Water BBL/D
Bonneville 16 State #304H		L-16-20S-27E	1380 FSL,250 FWL	640	640 2560 760		760
Bonneville 16 State #305H		L-16-20S-27E	1350 FSL,250 FWL	640	2560	0	760
IV. Central Delivery Po	oint Name:	Catalina 30_		[S	See 19.15.	27.9(D)(1) N	MAC]
V. Anticipated Schedu or proposed to be recom						t of wells prop	posed to be drilled
Well Name	API	Spud Date	TD Reached Date	-	CompletionInitial Flowamencement DateBack Date		First Production Date
Bonneville 16 State #304H		3/14/2023	5/31/23	7/15/2023		8/15/2023	8/20/23
Bonneville 16 State #305H		3/15/2023	6/17/23	7/15/2023		8/15/2023	8/20/23
VI. Separation Equipm	ent: 🛛 Attach	a complete descrip	otion of how Ope	rator will size sepa	aration eq	uipment to op	otimize gas capture.
VII. Operational Pract Subsection A through F		1	piption of the act	ions Operator will	l take to c	comply with t	he requirements of
VIII. Best Managemen during active and planne			te description of	Operator's best m	nanagemer	nt practices to	o minimize venting

Section 2 – Enhanced Plan EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. \Box Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system \Box will \Box will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator \Box does \Box does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

□ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: \Box Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

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

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

 \square 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

 \Box 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. \Box 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. \Box 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:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices

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

(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: Alyasa McNear Printed Name: Alyssa McNear
Printed Name: Alyssa McNear
Title: Engineering Manger
E-mail Address: adavanzo@tascosaep.com
Date: 2/15/2023
Phone: 720-244-4417
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Americanaly
Conditions of Approval:



Bonneville 16 State DSU – Natural Gas Management Plan

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