		OCD Actas	LOVATI	<i>M</i> ON	15-2
: Form 3160-3		OCD AGAS	TETRICT	FORM APPROVE	
(March 2012)		NM OIL ARTESTAL	)12, Nai	OMD No. 1004-01 Expires October 31, 2	37 2014
	UNITED STATE DEPARTMENT OF THE	INTERIOR OF ?	2 2016	5. Lease Serial No.	
	BURBALLOFTAND MA	NAGEMENT DEC.		SHL:NMLC068282B I	
	APPLICATION FOR PERMIT TO	DRILL OR REENTER	CEIVEL	6. If Indian, Allotee or Tribe	Name
la. Type of work				7 If Unit or CA Agreement, No	nne and No.
lb. Type of Well	: X Oil Well Gas Well Other	Single Zone	ultiple Zone	8. Lease Name and Well No. Stampede 34 Federal C	COM 5H
2. Name of Ope		· · · ·		9. API Well No.	•
ConocoPl	nillips Company	3b. Phone No. (include area code	<u></u>	30-015- 44-013 10. Field and Pool, or Explorator	
3n. Aducss P.C 79	). Box 51810 Midland, TX 710	(432)688-6938	,	WOLFCAMP	y
	Tell (Report location clearly and in accordance with a			11. Sec., T. R. M. or Blk. and Sur	ryey of Area
	50' FSL & 1040' 'FWL (LOT 4) Sect.	• • • • • • • • •	THOE	Sect. 34, 26S, 32E	F
	ored. zone 50' FNL & 1040' FWL (NWI		VATIO		
	les and direction from nearest town or post office*		AHU	12. County or Parish	13. State
49.1 miles S	W of Jal, NM		· · ·	Eddy	NM
15. Distance from location to nea property or lea	rest DITL. SOL	16, No. of acres in lease NMLC 068282B: 900.8 NMLC 068282A: 1221.6	17. Specia 225.20	ng Unit dedicated to this well )	
	proposed location* 33'	19. Proposed Depth 18,643' MD	20. BLM/I ES008	BIA Bond No. on file 85	······
	how whether DF, KDB, RT, GL, etc.)	22. Approximate date work will	start*	23. Estimated duration	
3136.7		03/01/2016		30 Days	
	Plan (if the location is on National Forest System filed with the appropriate Forest Service Office).	6. Such other s BLM,	tification	brination and/or plans as may be re	quired by the
25. Signature	Up pergu	Name (Printed/Typed) Ashley Bergen			24/15
Tille Regulator	y Specialist				
Approved by (Signa		Name (Printed/Typed)		nec.	1 9 2016
		Office			
Title	FIELD MANAGER			RLSBAD FIELD OFFICE	
Application approv conduct operations Conditions of appr	al does not warrant or certify that the applicant hol thereon. oval, if any, are attached.	lds legal or equitable title to those r	ights in the subj	APPROVAL FOR	TWO YEAF
Title 18 U.S.C. Sect	ion 1001 and Title 43 U.S.C. Section 1212, make it a itlous or fraudulent statements or representations as	crime for any person knowingly an s to any matter within its jurisdiction	d willfully to m	ake to any department or sgency o	f the United
(Continued on	u nage 2)			*(Instructions	on page 2)
(00	, hafe 2)			/	out halfe 21
	st. fille for Drawla				
bad Contro	olled Water Basin				
		SEE A	TTAC!	HED FOR	
∆norova <sup>1</sup>	Subject to General Requirements	s COND	ITION	S OF APPROV	7.4.1
	Can botter		1111111	ふううだ みじじがした	V ALL

& Special Stipulations Attached

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# ENOVAL IJ

### **Operator Certification**

#### **CONOCOPHILLIPS COMPANY**

#### **CERTIFICATION:**

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application with bond coverage provided by Nationwide Bond ES0085. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

ting Mickens Date: 12-2-14

Kristina Mickens Sr. Regulatory Specialist

District 1

3

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

225.20

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 2 2 2016 ubmit one copy to appropriate OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

#### NM OIL CONSERVATION

Form C-102 ARTESIA DISTRICT Revised August 1, 2011

District Office

AMENDED REPORT RECEIVED

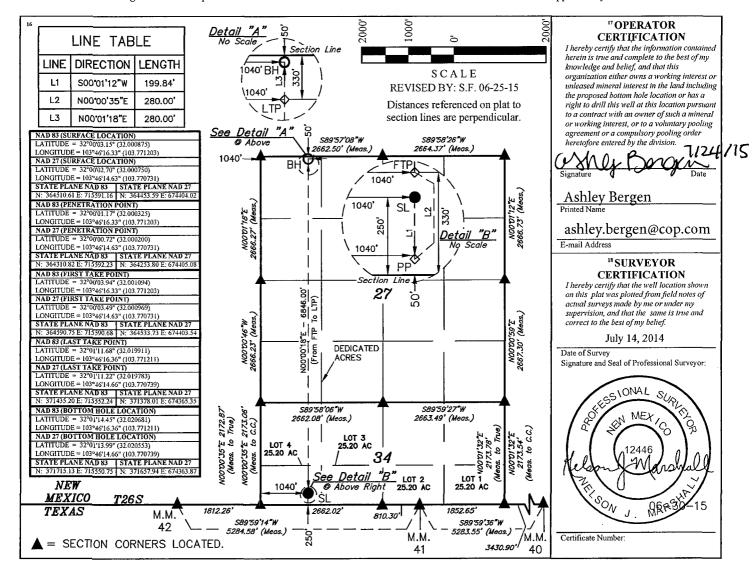
			WELL	LOCAT	ON AND AC	REAGE DEDIC	ATION PLAT		
30-015-	API Number 4401	3		2 Pool Code 980/2	L WCV	Volfcamp	ame		
<sup>1</sup> Property C 3171	<sup>2</sup> 45		<sup>5</sup> Property Name STAMPEDE 34 FEDERAL COM 5H						
<sup>7</sup> ogrid i 217817			<sup>8</sup> Operator Name <sup>9</sup> Elevation ConocoPhillips Company 3136.7'						
<sup>10</sup> Surface Location									
UL or lot no. 4	Section 34	Township 26S	Range 31E	Lot Idn	Feet from the 250	North/South line SOUTH	Feet from the 1040	East/West line WEST	County EDDY
"Bottom Hole Location If Different From Surface									
UL or lot no. D	Section 27	Township 26S	Range 31E	Lot Idn	Feet from the 50	North/South line NORTH	Feet from the 1040	East/West line WEST	County EDDY
12 Dedicated Acr	es 13 J	oint or Infill	14 Conso	lidation Code	15 Order No.	•			

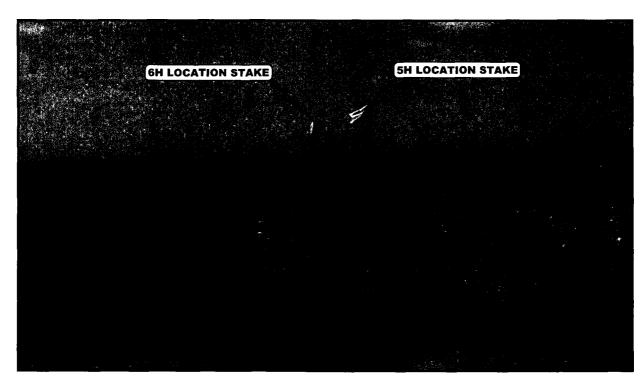
WELL LOCATION AND ACDEACE DEDICATION DLAT

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.

NSL

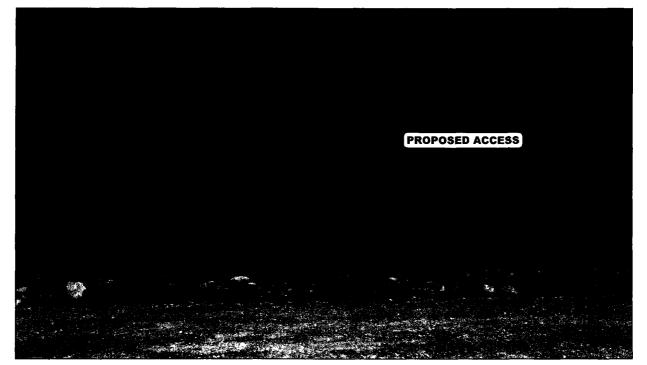
Pendino





**PHOTO: VIEW OF LOCATION STAKES** 

**CAMERA ANGLE: NORTHERLY** 



**PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS** 

**CAMERA ANGLE: EASTERLY** 

**ConocoPhillips Company** 

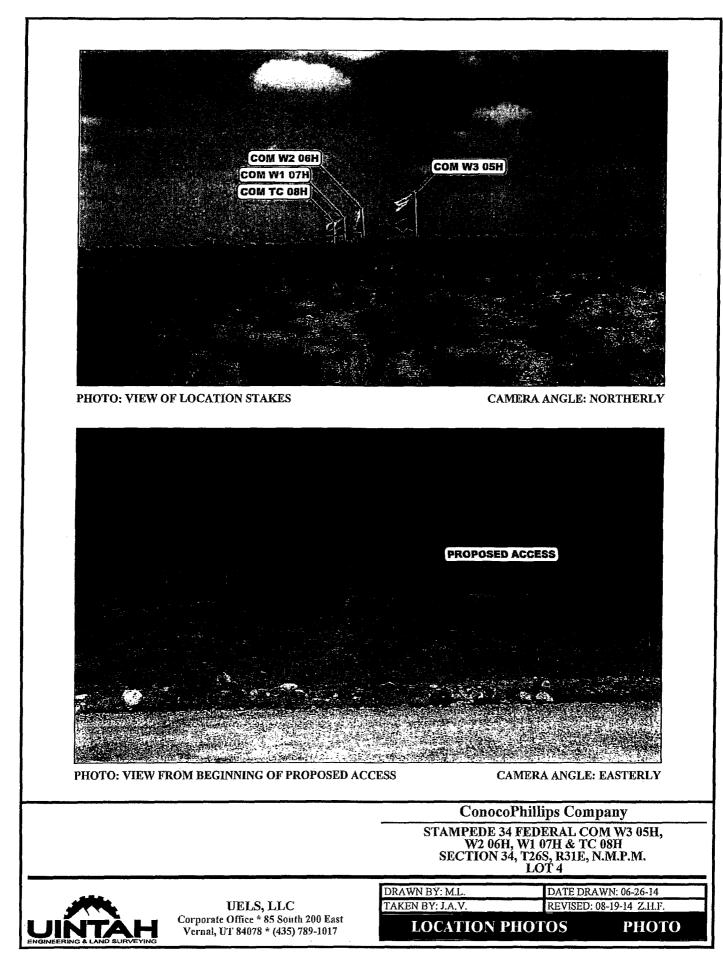
STAMPEDE 34 FEDERAL COM 5H & 6H LOT 4, SECTION 34, T26S, R31E, N.M.P.M. EDDY COUNTY, NEW MEXICO

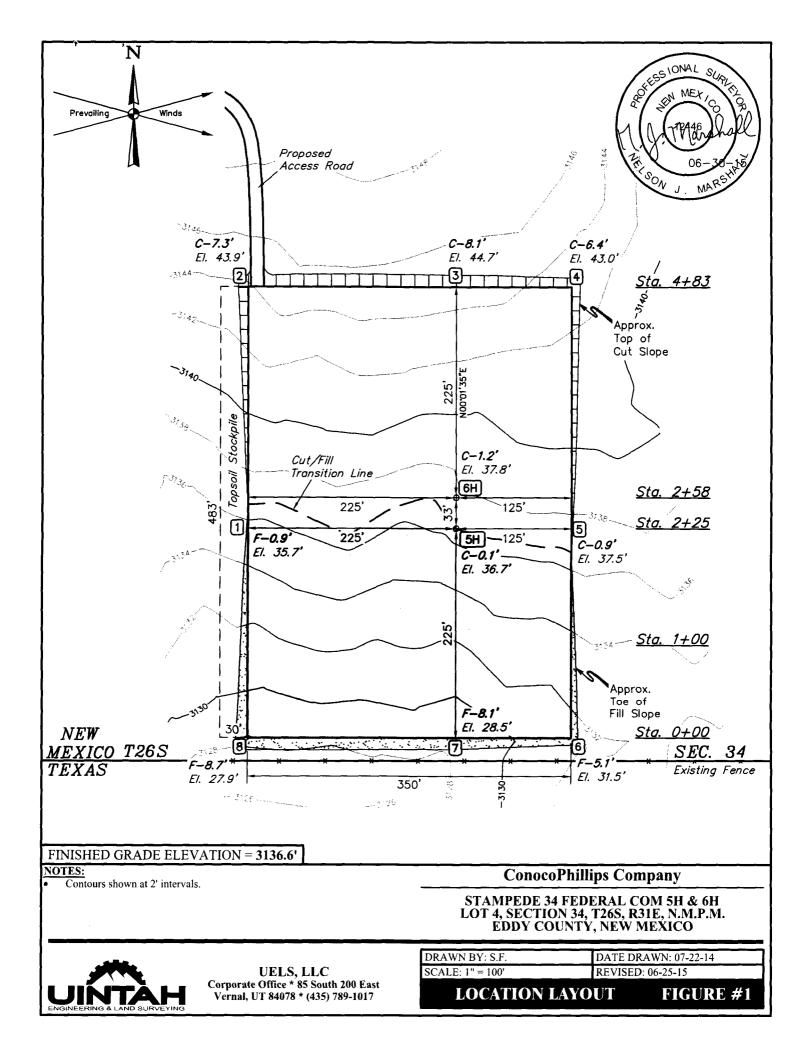


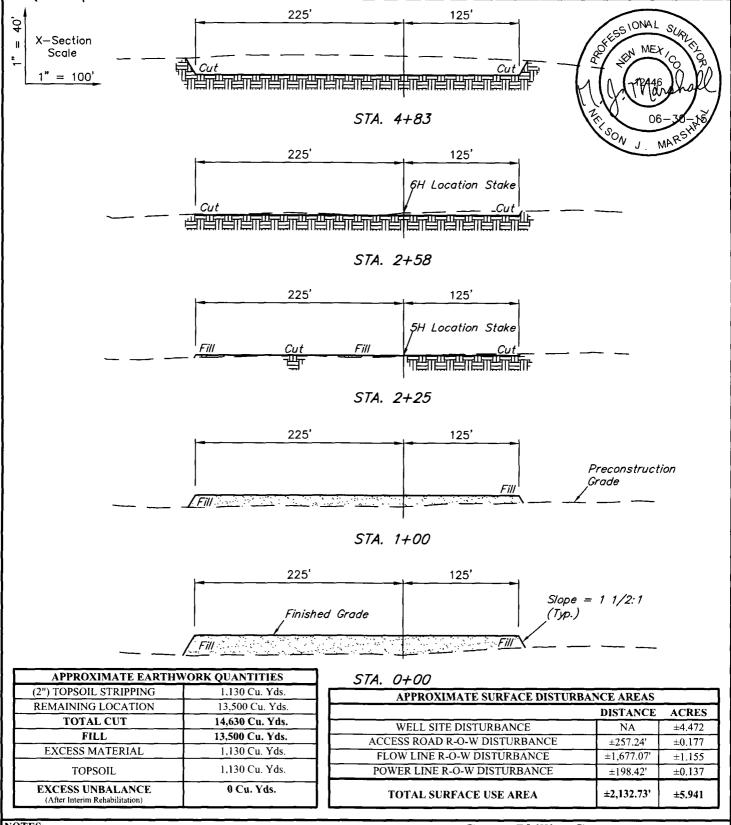
**UELS, LLC** Corporate Office \* 85 South 200 East Vernal, UT 84078 \* (435) 789-1017

DATE DRAWN: 06-26-14 DRAWN BY: M.L. TAKEN BY: J.A.V. REVISED: 06-25-15 Z.H.F. **LOCATION PHOTOS** 

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#### NOTES:

Fill quantity includes 5% for compaction.

Topsoil should not be stripped below finished grade on substructure area.

### **ConocoPhillips Company**

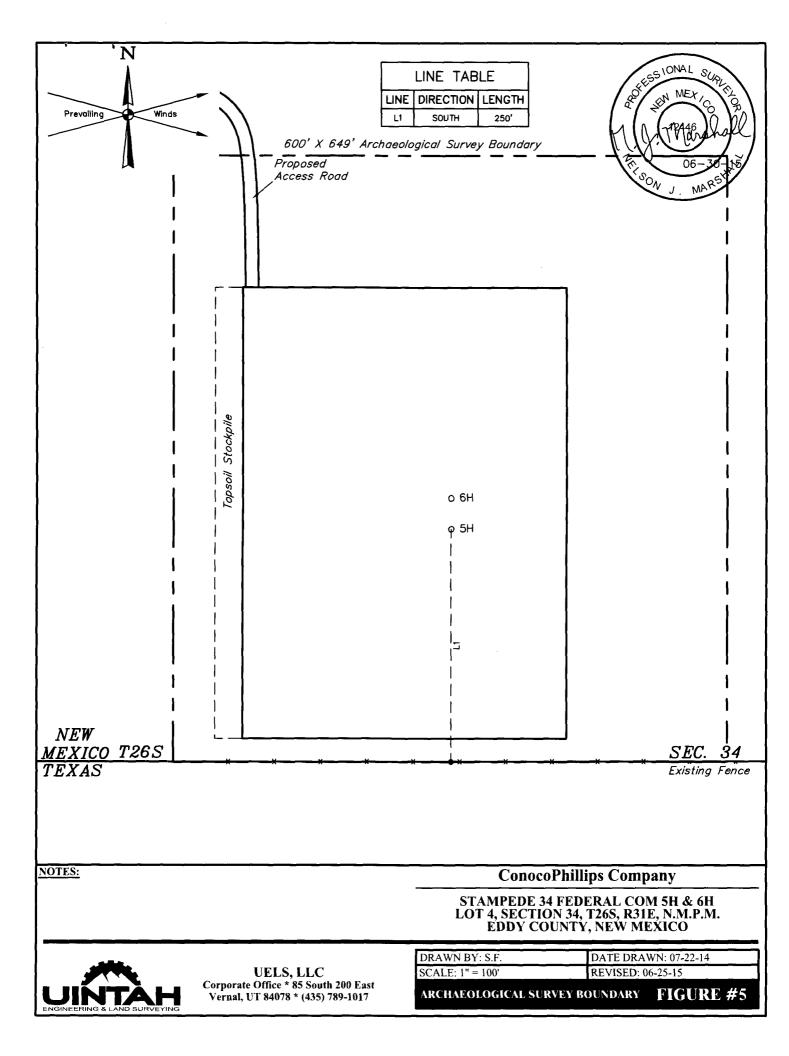
STAMPEDE 34 FEDERAL COM 5H & 6H LOT 4, SECTION 34, T26S, R31E, N.M.P.M. EDDY COUNTY, NEW MEXICO

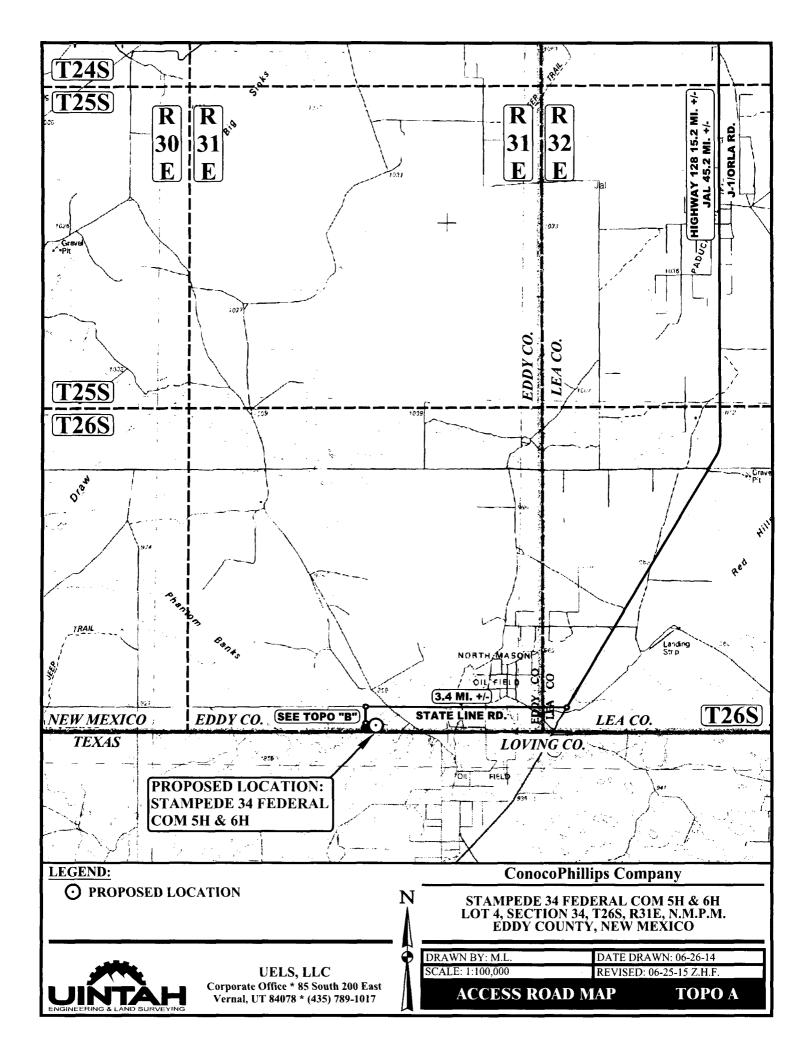
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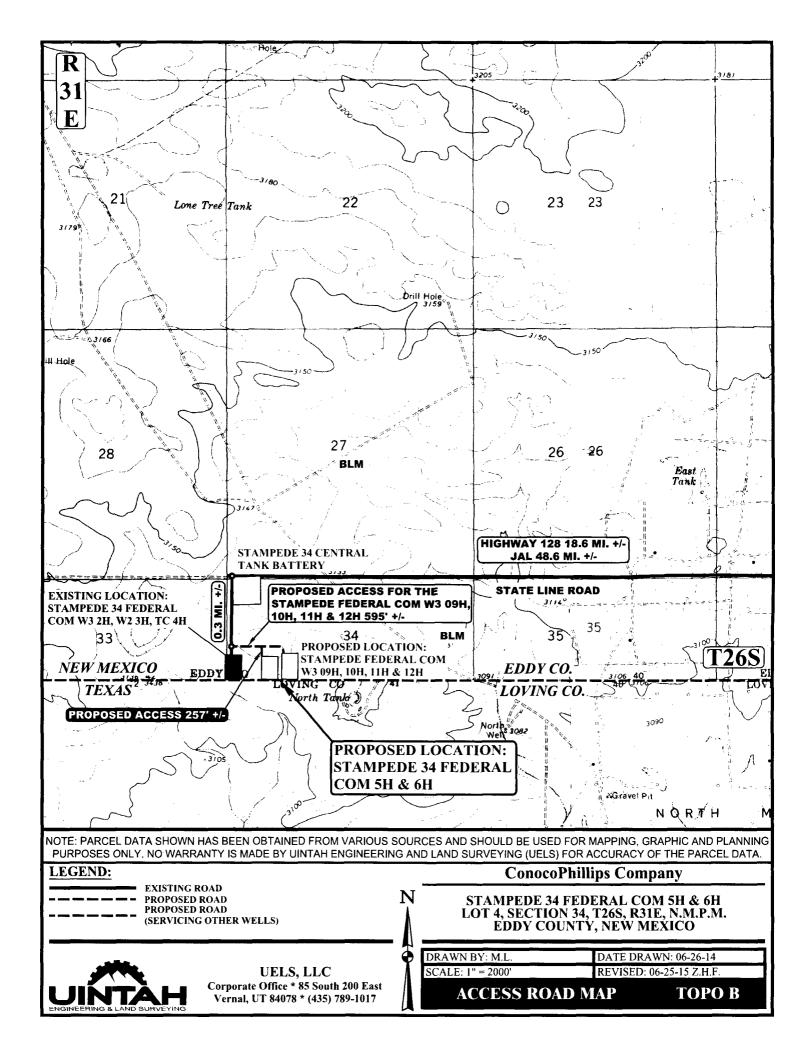


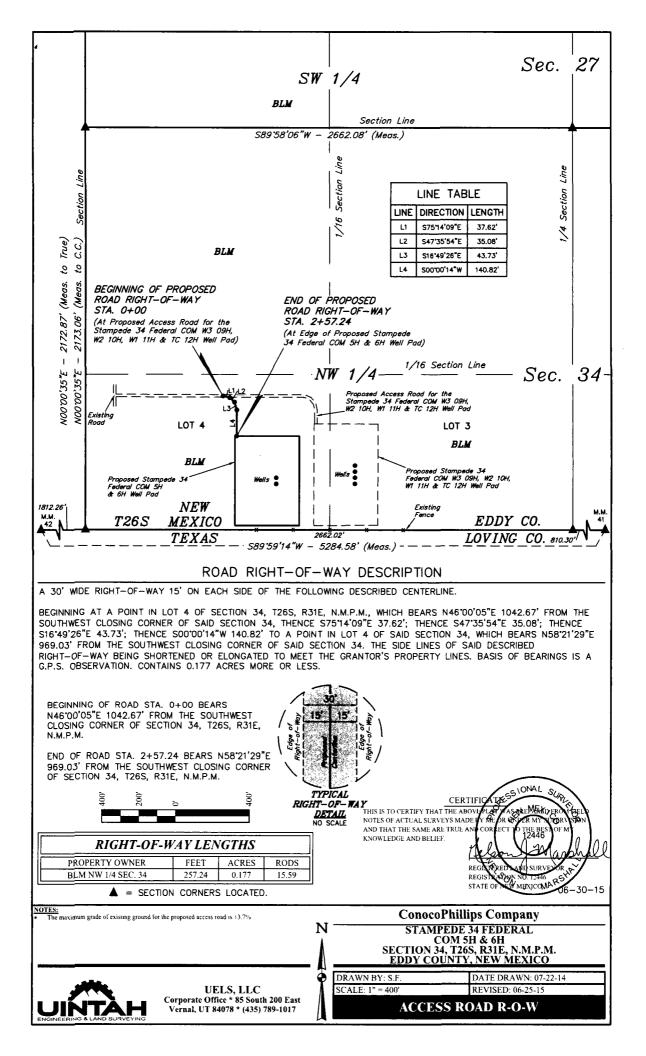
UELS, LLC Corporate Office \* 85 South 200 East Vernal, UT 84078 \* (435) 789-1017 SCALE: AS SHOWN REVISED: 06-25-15 TYPICAL CROSS SECTIONS FIGURE #2

DATE DRAWN: 07-22-14









BEGINNING AT THE INTERSECTION OF HIGHWAY 18 AND HIGHWAY 128 PROCEED IN A WESTERLY DIRECTION FROM JAL, NEW MEXICO ALONG HIGHWAY 128 APPROXIMATELY 30.0 MILES TO THE JUNCTION OF THIS ROAD AND J-1/ORLA ROAD TO THE SOUTH; TURN LEFT AND PROCEED IN A SOUTHERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 15.2 MILES TO THE JUNCTION OF THIS ROAD AND STATE LINE ROAD TO THE WEST: TURN RIGHT AND PROCEED IN A WESTERLY DIRECTION APPROXIMATELY 3.4 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 0.3 MILES TO THE BEGINNING OF THE PROPOSED ACCESS FOR THE STAMPEDE FEDERAL COM W3 09H, 10H, 11H & 12H TO THE EAST: FOLLOW ROAD FLAGS IN AN EASTERLY DIRECTION APPROXIMATELY 595' TO THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTH; FOLLOW ROAD FLAGS IN A SOUTHERLY DIRECTION APPROXIMATELY 257' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM JAL, NEW MEXICO TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 49.1 MILES.

**ConocoPhillips** Company

**STAMPEDE 34 FEDERAL COM 5H & 6H** LOT 4, SECTION 34, T26S, R31E, N.M.P.M. EDDY COUNTY, NEW MEXICO



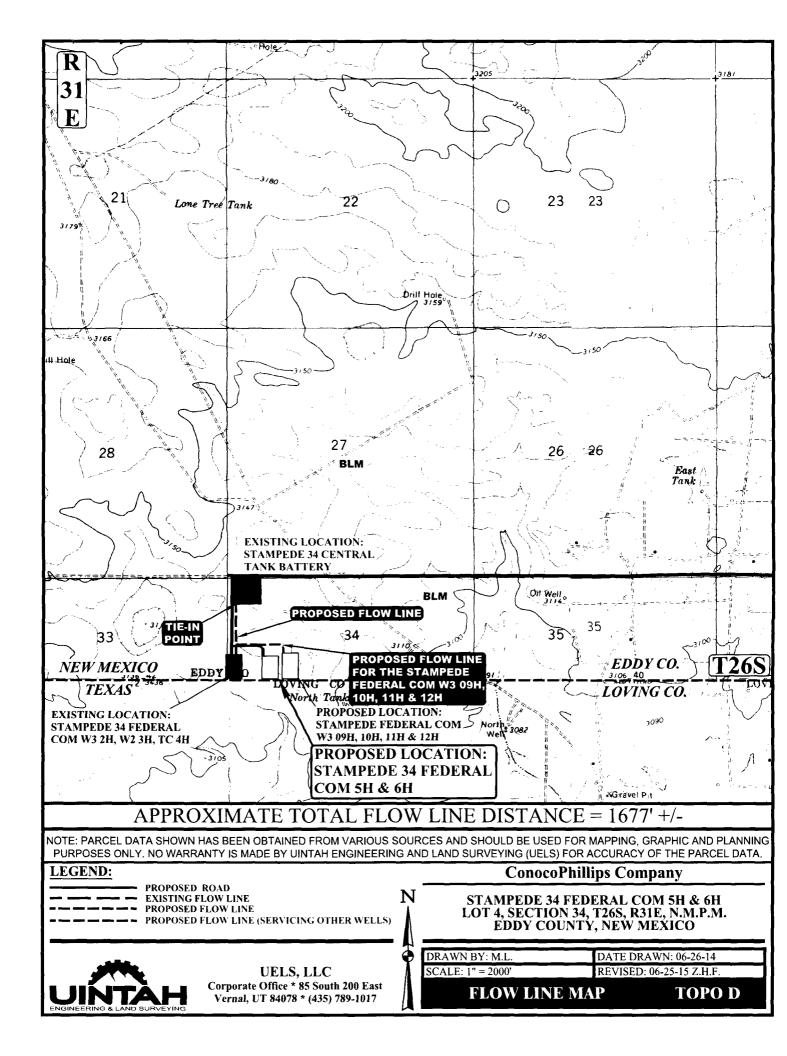
**UELS, LLC** Corporate Office \* 85 South 200 East Vernal, UT 84078 \* (435) 789-1017

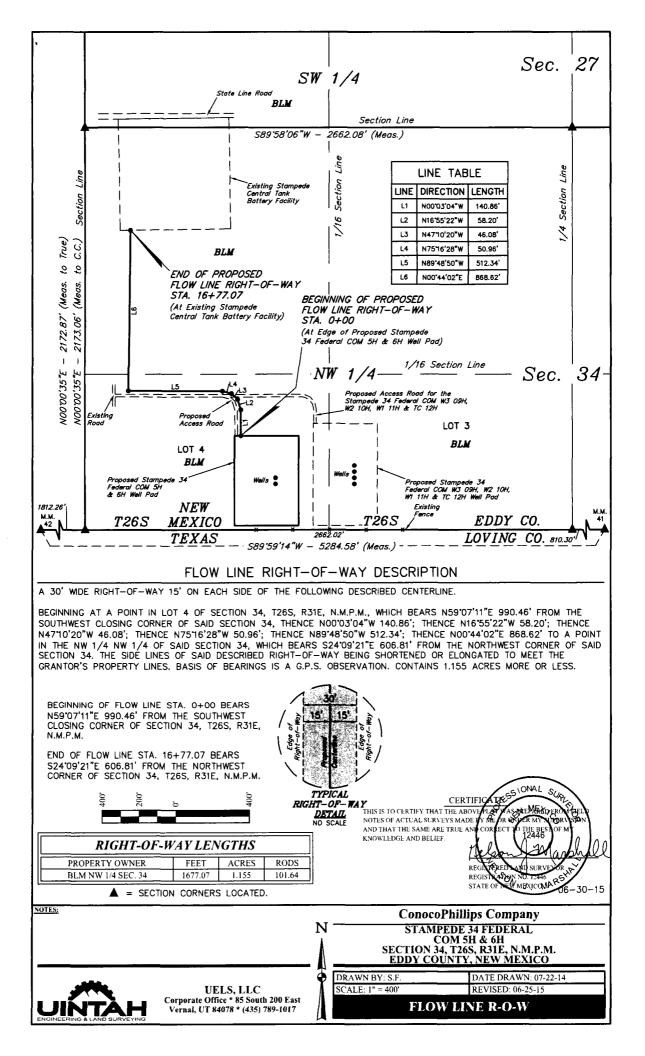
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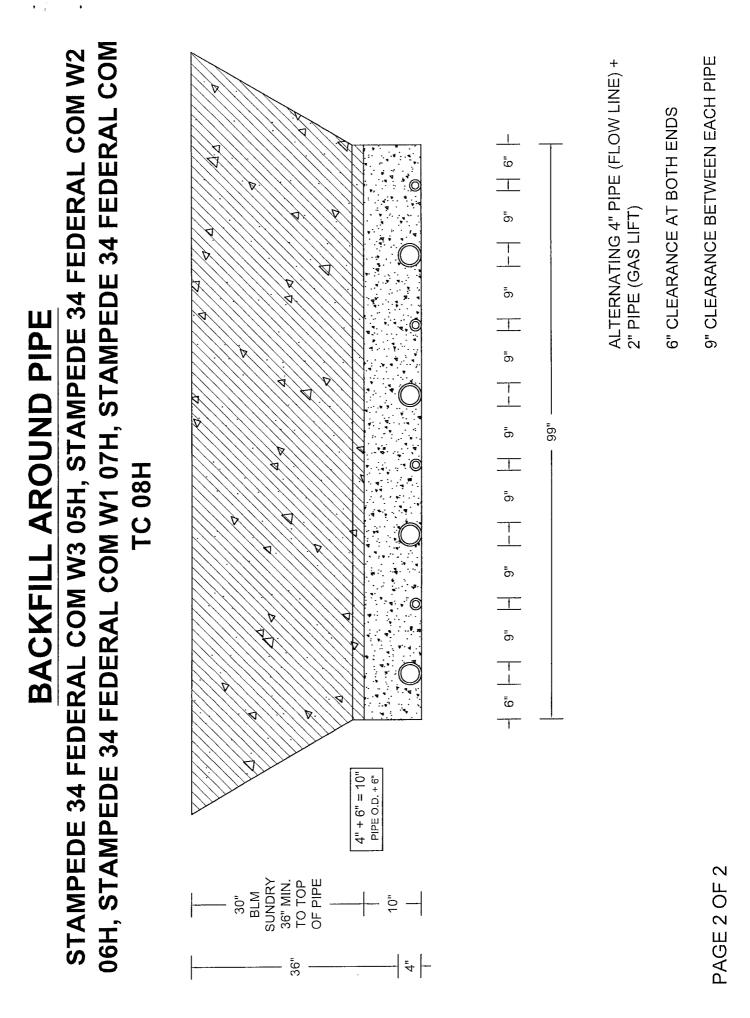
REVISED: 06-25-15 Z.H.F.

DATE DRAWN: 06-26-14

**ROAD DESCRIPTION** 

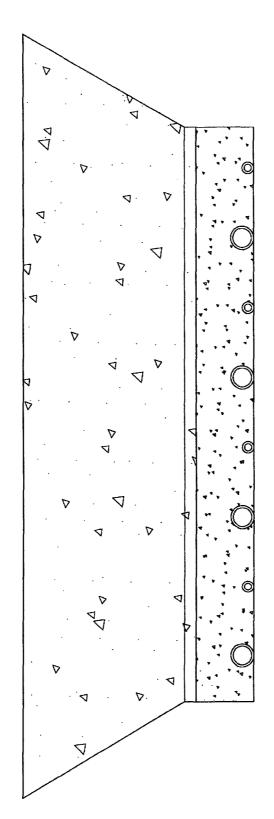




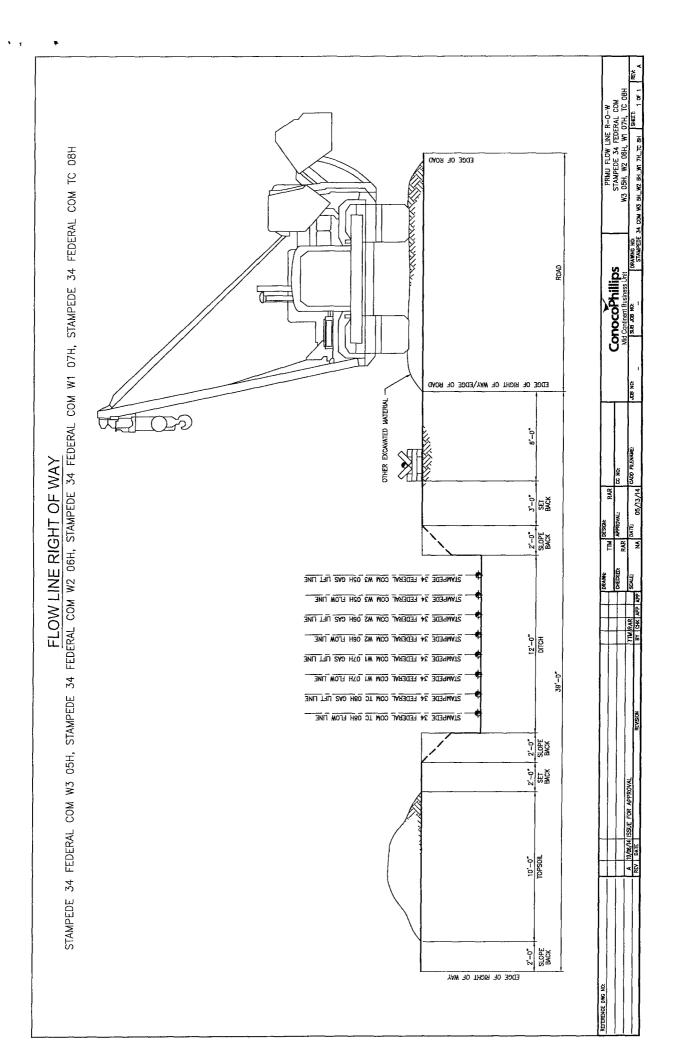


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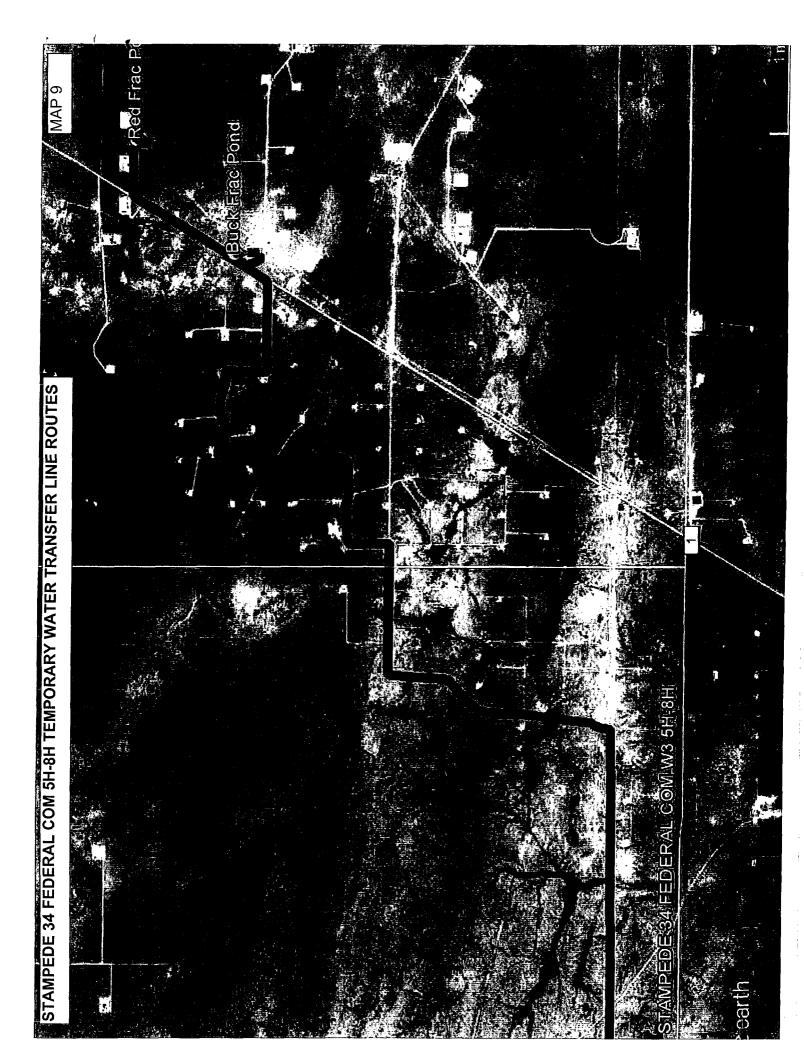
06H, STAMPEDE 34 FEDERAL COM W1 07H, STAMPEDE 34 FEDERAL COM STAMPEDE 34 FEDERAL COM W3 05H, STAMPEDE 34 FEDERAL COM W2 **TC 08H** 

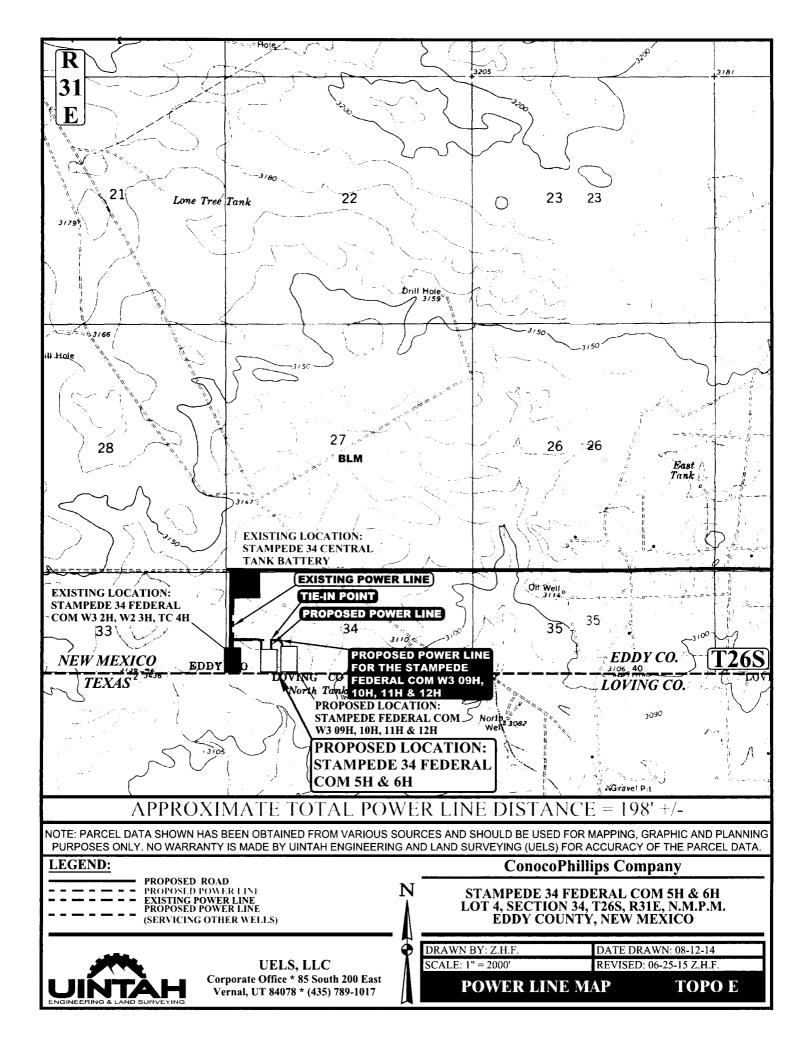


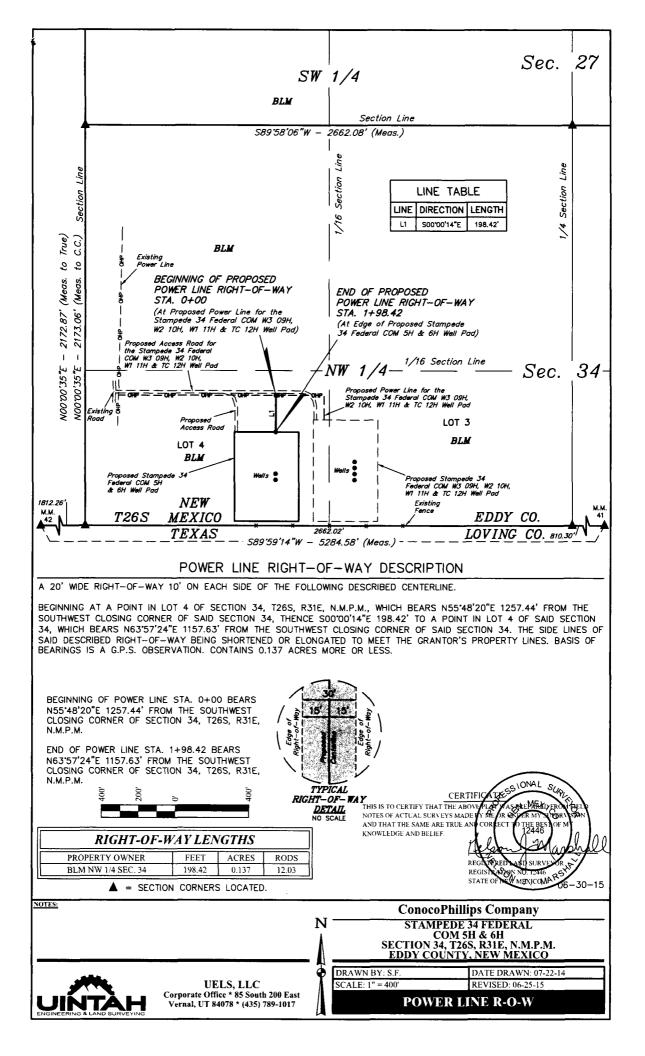
SOFT FILL DIRT OR SAND WITH NO ROCKS OR SOLID PARTICLES GREATER THAN 1" IN CIRCUMFERENCE FLOW LINE WILL BE 4" COATED STEEL PIPE w/ AN OPERATING PRESSURE UP TO 1480# PSI. GAS SUPPLY LINE WILL BE 2" STEEL PIPE w/ AN OPERATING PRESSURE UP TO 1100# PSI. BACKFILL DIRT TO BE AS FREE OF ROCKS AND LARGE PARTICLES AS POSSIBLE

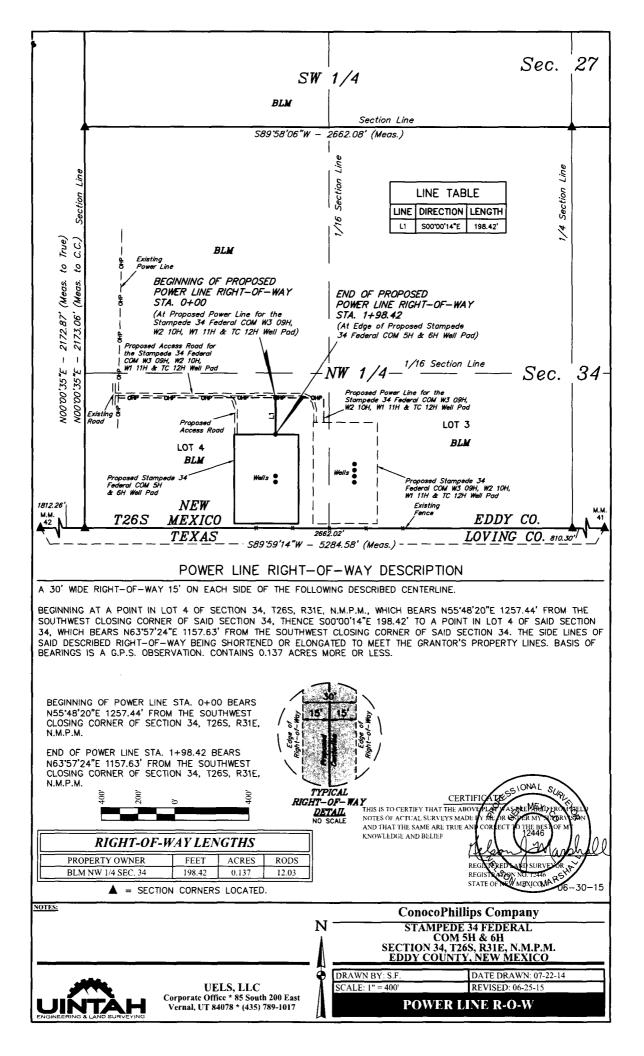


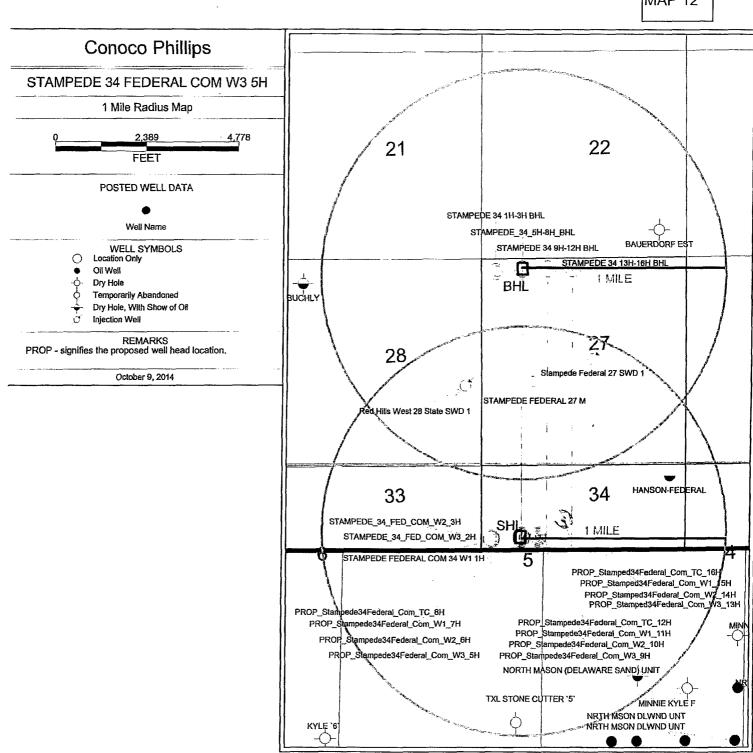
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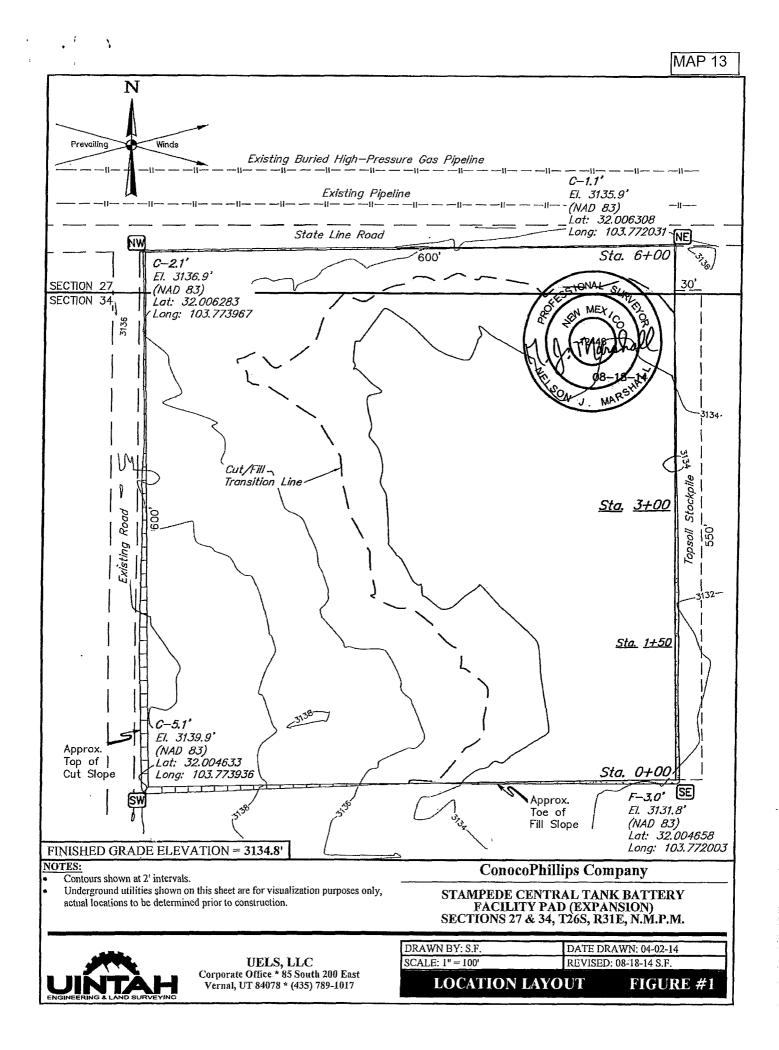






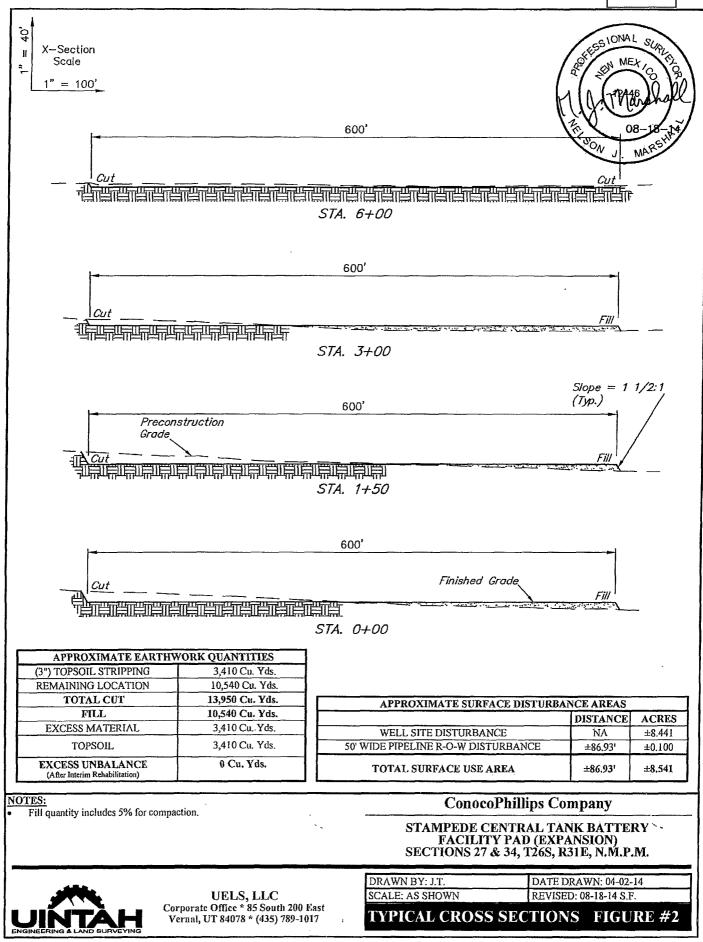
PETRA 10/9/2014 9:47:00 AM

MAP 12







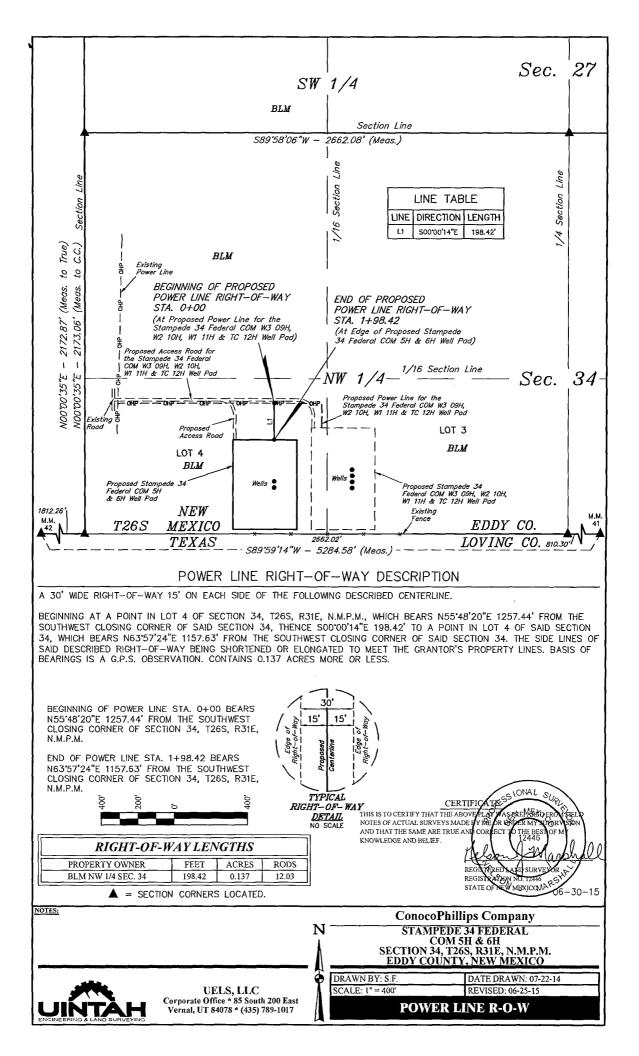


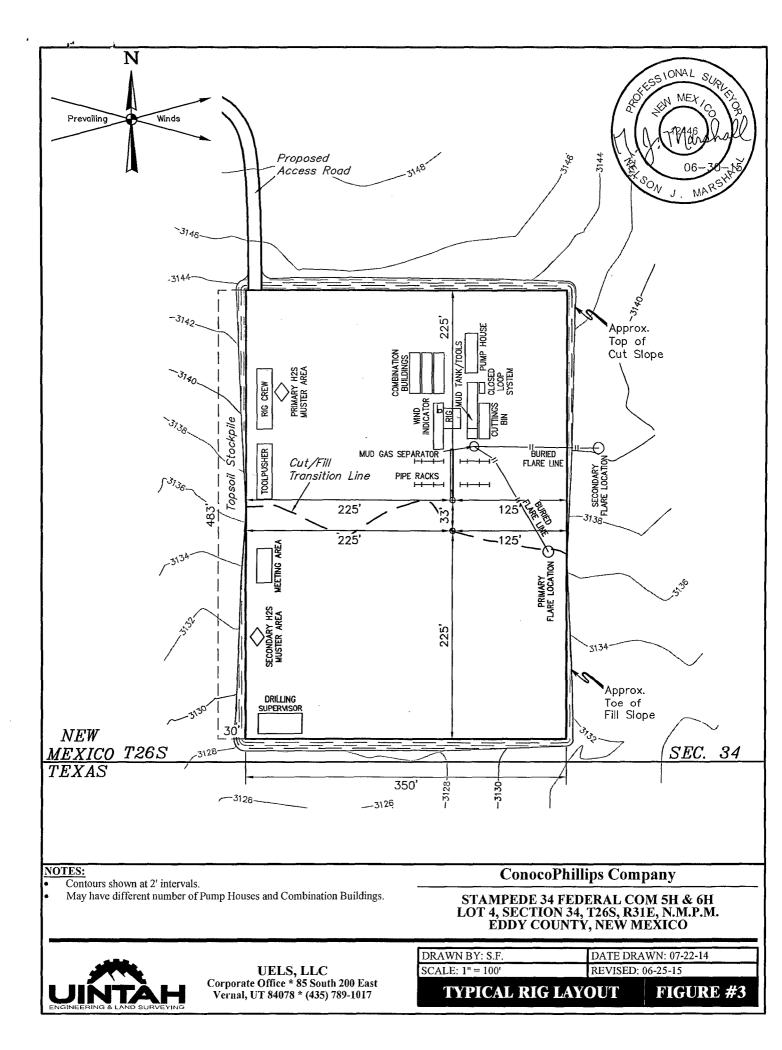
PROCEED NEW MEX JUNCTION AND PRO APPROXIN STATE LIN	D IN A WESTERLY, THI XICO ALONG HIGHWA N OF THIS ROAD AND CEED IN A SOUTHERI MATELY 15.2 MILES T NE ROAD TO THE WES LY DIRECTION APPRO	CTION OF HIGHWAY 18 AND HIGHWAY 128 HEN NORTHWESTERLY DIRECTION FROM JAL, AY 128 APPROXIMATELY 30.0 MILES TO THE D J-1/ ORLA ROAD TO THE SOUTH; TURN LEFT RLY, THEN SOUTHWESTERLY DIRECTION TO THE JUNCTION OF THIS ROAD AND AN EST; TURN RIGHT AND PROCEED IN A OXIMATELY 3.4 MILES TO THE PROPOSED
	ISTANCE FROM JAL, N MATELY 48.6 MILES.	NEW MEXICO TO THE PROPOSED LOCATION IS
		·
	nne en antier	ConocoPhillips Company
		ConocoPhillips Company STAMPEDE 34 CENTRAL TANK BATTERY FACILITY PAD (EXPANSION) SECTIONS 27 & 34, T26S, R31E, N.M.P.M.

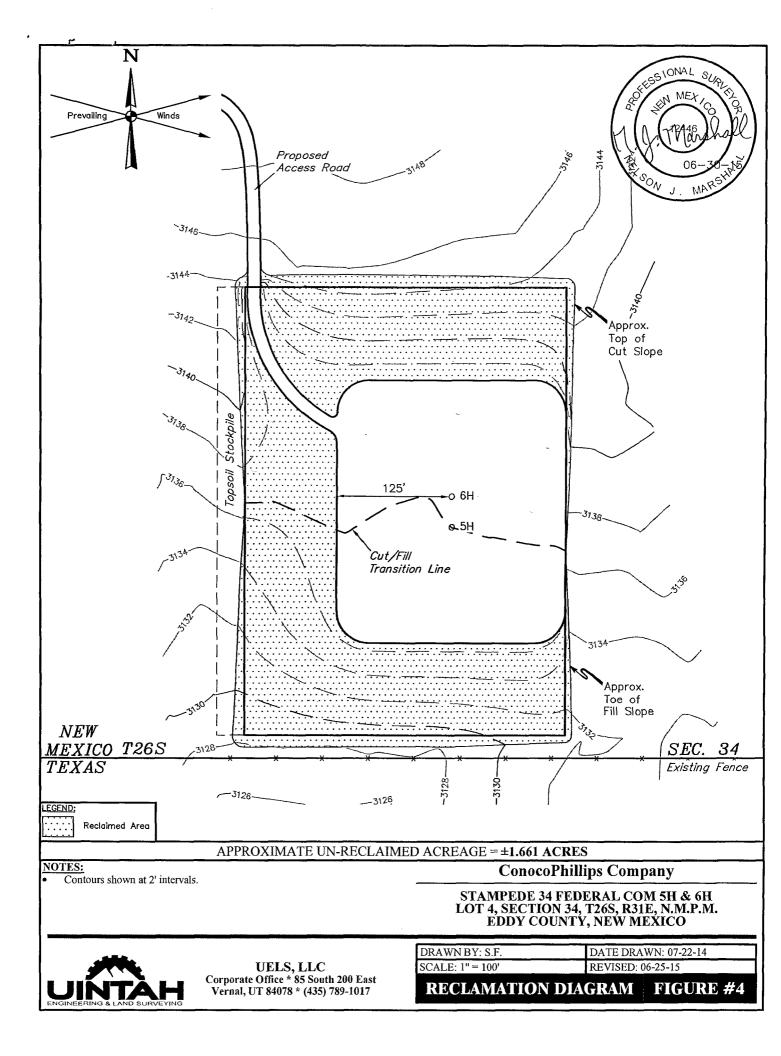
Corporate Office \* 85 South 200 East Vernal, UT 84078 \* (435) 789-1017 UINTAH ENGINEERING & LAND SURVEYING

**ROAD DESCRIPTION** 

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### Sundry Notice Request ConocoPhillips Company <u>Red Hills West; Wolfcamp</u> Stampede 34 Federal COM 5H

#### Lea County, New Mexico

ConocoPhillips Company respectfully requests to amend the approved sundry with the revised casing and cementing program.

#### 2. Proposed Casing and Cementing Program – Option to Not Run 9-5/8" Casing set at Ford Shale/Delaware Sands

ConocoPhillips Company respectfully requests the option to not run 9-5/8" 40# L-80 BTC Casing and spare it as a contingency if the next hole section failed to support the hydrostatic column of the previous mud weight. The intent for the casing and cementing program – Not Run 9-5/8" Casing Option is to:

- Drill the 12-1/4" and 8-3/4" hole sections with the same density mud (OBM or Saturated Brine).
- Case and cement the well with 13-3/8" surface, 7-5/8" intermediate and 5" production casing (3-strings).
- Isolate the Salt & Delaware utilizing Annulus Casing Packer and Stage Tool if necessary.
- Bring cement from 7-5/8" casing shoe to surface.
- Provided that if the hole can no longer support the hydrostatic column of the previous mud weight, a contingency plan to run the 9-5/8" casing will be the preferred if severe losses occurs during drilling the well.

DEPTH (FT)	TYPE	Density (ppg)	FV (sec/qt)	API Fluid Loss (cc/30 min)	pН	Vol (bbl)
0 – 1,010	Fresh Water or Fresh Water Native Mud in Steel Pits	8.5 - 9.0	28 – 40	N.C.	N.C.	700
1010 – 4,075	Oil Base Mud or Brine (Saturated NaCl <sub>2</sub> ) in Steel Pits	8.9 – 10.5	28 – 40	N.C.	10 – 11	700 – 1500
4,075 – 11,400	Oil Base Mud or Brine (Saturated NaCl2) in Steel Pits with Wellbore Strengthening Material (25 – 30 ppb SureSeal)	8.9 – 10.5	28 – 40	5 – 10	10 11	1500 – 2300
11,400 – TD	Oil Base Mud (O:W 80/20) in Steel Pits	13.5 – 15.0	18 – 30	1-3	N.C.	1500 – 2000

The mud systems that are proposed for use are as follows:

The changes proposed will be the use of 5 ppb - 20 ppb Wellbore Strengthening material (Walnut Fine), Cellulosic Polymers and Organic Solid blends in 8.9 ppg to 10.5 ppg OBM or Saturated Brine to increase the fracture initiation pressure above what would have been with clear saturated 10 ppg brine.

* *	لا
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Hole Size (in)	Casing (in)	Wt/Ft	Grade		Thread & Cplg OD	Dep	oth (ft)	Depth (ftTVD)	Depth (ftMD)	BOPE Systen
17 1/2	13 3/8	54.5	J-55	BTC	14.375	0-	1010	1010	1010	N/A
12 1/4	9 5/8	40	L-80	BTC	10.625	0-	4075	4075	4075	5M
9-7/8 or 8-3/4	7 5/8	29.7	P-110	BTC or Tenaris W523	7.752	0-1	1400	11322	11400	5M
6 3/4	5	18	P-110	Tenaris Blue/TXP	5.720	0-1	8650	11322	18650	10M
Minimum casi	ng design fa	actors: Burs	t 1.0, Collaps	e 1.125, Tensi	le Strength	n 1.6 I	Dry / 1.0 E	Buoyant		
Hole Size (in)	Casing (in)	Burst	Collapse	Tension	Minin Cleara		]			
17 1/2	13 3/8	5.59	2.31	18.1	1.56	25	7			
12 1/4	9 5/8	2.58	1.39	6.69	0.81		7			
9-7/8 or 8 3/4	7-5/8	1.53	**1.7	3.40				**COP Collapse Design 1/3 Partial Evacuation to Next Csg		
6 3/4	5	1.67	1.61	3.57						
,		Volume (sx)	Туре	Weight (ppg)	Yield (ft3/s)		Water (Gal/sx)	Excess	Cement Top	
	Lead	530	Class C	13.6	1.73		10.88	>100%	Surface	1
Surface	Tail	310	Class C	14.8	1.35		6.39	>100%	710 ft	
Additives (BWOB	): 4% Extende	er, 2% CaCl2, 0	.125 lb/sx LCM,	0.2% Anti-Foam						
	Lead	1430	Tuned Light	11.9	1.91		11.85	>100%	Surface	
Intermediate 1	Tail	380	Class C	14.8	1.33		8.23	>100%	3475ft	
Additives (BWOB	): 4% Extende	e <mark>r, 2% CaCl2</mark> , 0	.125 lb/sx LCM,	0.2% Anti-Foam						
	Lead	900	Tuned Light	9.7	2.44		9.116	>30%	Surface	
Intermediate 2	Tail	140	TXI	13.2	1.53		7.474	>30%	10800ft	
Additives (BWOB	): 0.4% Disper	rsant, 1 lb/sx S	alt, 0.1% Retard	er, 0.5% Fluid Los	s, 3 lb/sx LCI	M				
_	Lead			·····					· · · · · · · · · · · · · · · · · · ·	1
		750	Class H	15	1		3.216	>35%	1	1

9-5/8" Casing will be set aside as contingency string for cementing with severe losses if necessary.

#### **Attachments:**

- ✤ Attachment # 1 ...... Revised Directional Plan
- Attachment # 2 ...... Wellbore Schematic
- ↓ Attachment # 3 ...... Wellhead Schematic
- ↓ Attachment # 4 ...... Premium Connection Spec Sheets

Sundry request proposed 14 July 2015 by: Salvatore Amico. Drilling Engineer | ConocoPhillips Permian Shale Office Phone: 281.206.5413 Cell Phone: 432.250.0149

### 1. Geologic Formations

TVD of target	12,224	Pilot hole depth	N/A
MD at TD:	19,160	Deepest expected fresh water:	300

#### Basin

• • \* •

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Base of Fresh Water	300	Water	
Rustler	985	Water	
Top of Salt / Salado	1,455	Salt	
Castile	1,650	Salt	
Delaware Top / Base Salt	3,930	Oil/Gas	Loss of Circulation
Ford Shale	4,075	Oil/Gas	
Cherry Canyon	4,875	Oil/Gas	Loss of Circulation
Brushy Canyon	6,255	Oil/Gas	Loss of Circulation
Bone Springs	7,650	Oil/Gas	
Bone Springs 3 <sup>rd</sup> Carb	9,915	Oil/Gas	
WolfCamp	11,120	Oil/Gas	
WolfCamp 1	11,280	Oil/Gas	
WolfCamp 2	11,680	Oil/Gas	
WolfCamp 3	12,145	Target Zone	

\*H2S, water flows, loss of circulation, abnormal pressures, etc.

## ConocoPhillips, STAMPEDE 34 FEDERAL COM W3 05H

Hole	Casing	g Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF
Size	From	To	Size	(lbs)	ĺ		Collapse	Burst	Tension
17.50"	0	1,010 960	13.375"	54.5	J55	BTC	2.36	5.71	18.0
12.25"	0	4,098 3925	9.625"	40.0	L80	BTC	1.44	2.68	6.62
8.75"	0	11,348	7.625"	33.7	P110	TenW523	1.44	1.98	3.26
6.625"	0	11,348	5.0"	21.4	P110	TenBLUE	2.05	1.97	3.65
	11,348	19,160	4.5"	15.1	P110	TXPBTC	1.54	1.55	3.35
				BLM Mi	nimum Sa	fety Factor	1.125	1	1.6 Dry
						-			1.8 Wet

2. Casing Program

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All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Must have table for contingency casing

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

/

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H20 gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	590	13.7	1.68	8.684	7	Lead: Class C + 4.0% Bentonite + 0.2% Anti-Foam + 2.0% CaCl2 +0.125lb/sk LCM + 0.1% Dispersant.
	310	14.8	1.35	6.349	7	Tail: Class C + 0.2% Anti-Foam + 0.1% Lost Circ Control + 2 lbs/bbl CemNET (losses Control)
Inter. 1	1,010	11.9	2.58	15.392	10	Lead: Class C + 8.0% Bentonite + 0.2% Anti-Foam + 0.125lb/sk LCM + 0.2% Dispersant + 0.2% Retarder + 2 lbs/bbl CemNET (losses Control).
	420	14.8	1.35	6.199	5	Tail: Class C + 0.2% Anti-Foam + 0.3% Retarder + 0.5% Extender + 2 lbs/bbl CemNET (losses Control).
	l			1 <u></u>	DV/EC	CP Tool: NO
Inter. 2	670	9.7	2.44	9.116	17	Lead: LiteCRETE + 22.0 lb/sk Extender + 0.2% Anti-Foam + 0.3% Retarder + 0.3% Fluid Loss + 0.3% Dispersant + 2 lbs/bbl CemNET (losses Control).
	140	13.2	1.53	7.474	8	Tail: TXI + 0.9% Gas Control + 9.0% Extender + 0.5% Dispersant + 0.5% Retarder + 0.2% Anti- Foam 0.25 lb/sk Lost Circ Control + 3.0% Expanding Agent + 2 lbs/bbl CemNET (losses Control).
ď	See CO	17		DV	/ECP Tool 8	3,000' (OPTIONAL)
	420	9.7	2.44	9.116	17	Lead: LiteCRETE + 22.0 lb/sk Extender + 0.2% Anti-Foam + 0.3% Retarder + 0.3% Fluid Loss + 0.3% Dispersant + 2 lbs/bbl CemNET (losses Control).
Prod.	1,530	16.4	1.07	4.464	5	Tail: Class H + 1.800 gal/sk Gas Control Agent + 0.025 gal/sk Dispersant + 0.080 gal/sk Retarder + 0.030 gal/sk Anti-Foam.
ŀ					DV/FC	P Tool NO'
ľ	·····					1 1001110
-						

3. Cementing Program

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DV tool depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

### ConocoPhillips, STAMPEDE 34 FEDERAL COM W3 05H

Casing String	TOC	% Excess	
Surface	0'	100%	
Intermediate 1	0'	120%	
Intermediate 2	3,498' See CUA'S	100%	
Production	10,348'	35%	

Include Pilot Hole Cementing specs: NO PILOT HOLE. **Pilot hole depth** <u>N/A</u> **KOP** 

Plug	Plug	%	No.	Wt.	Yld	Water	Slurry Description and
top	Bottom	Excess	Sacks	lb/gal	ft3/sack	gal/sk	Cement Type

### 4. Pressure Control Equipment

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

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Туре		~	Tested to:
			An	nular	x	50% of working pressure
			Blin	d Ram	X	
12-1/4"	13-5/8"	5M	Pipe	e Ram	X	5M
			Doub	le Ram	x	5171
			Other*			i
	13-5/8"	5M	An	nular	X	50% testing pressure
alla			Blind Ram		x	
6 0 8-3/A"			Pipe Ram		x	
			Double Ram		x	5M
			Other *			
			An	nular	x	50% testing pressure
	13-5/8"	10M	Blin	d Ram	X	
6-5/8"			Pipe	Ram	X	
0-3/0			Double Ram		x	10M
			Other *			

\*Specify if additional ram is utilized.

### ConocoPhillips, STAMPEDE 34 FEDERAL COM W3 05H

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

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

	X	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.						
See COA	x	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart. Y /N Are anchors required by manufacturer?						
6	X	A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested.						
799 00 A		• Provide description here See attached schematic.						

~ ~	5. Mud Program							
Seel	OH D	epth	Туре	Weight (ppg)	Viscosity	Water Loss		
000 -	From	То						
	0	1,010 960'	Spud Mud	8.6-9.3	32-36	N/C		
	1,010	4.098 39 25	Brine	9.3-10.2	28-30	≤5		
	4,098	11,348	Cut Brine	8.6-9.2	30-40	≤5		
	11,348	19,160	Oil Base Mud	12.0-15.0	30-40	≤5		

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

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

### 6. Logging and Testing Procedures

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Log	ging, Coring and Testing.
X	GR from 200' above KOP to TD (GR as part of the BHA while drilling). Not log in the
	lateral.
	No Logs are planned based on well control or offset log information.
	Drill stem test? If yes, explain
	Coring? If yes, explain
X	Dry samples taken 30' from intermediate 1 casing point to TD. GC Tracers KOP to TD.

Additional logs planned	Interval
Resistivity	
Density	
CBL	
Mud log	
PEX	

### 7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	6,845 psi
Abnormal Temperature	No

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers.

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

H2S is present
H2S Plan attached

### 8. Other facets of operation

Is this a walking operation? If yes, describe. Yes, please see below.

Will be pre-setting casing? If yes, describe. Yes, please see below.

**Spudder Rig and Skid Operations:** Depending on rig availability, ConocoPhillips may preset the surface casing. The reasons for using the spudder rig to drill and pre-set surface casing are: Time & Cost Saving.

The "Pinnergy #1" Rig will be used to drill the surface hole and pre-set surface casing on all of the wells in the same pad. Once each surface hole section has been drilled, it will be cased and cemented according to all applicable rules and regulations (Onshore Orders). The wellhead will be nippled up and tested as soon as 13-3/8" surface casing is cut off after the applicable WOC time has been reached. A blind flange of the same pressure rating as the wellhead will be utilized to seal the wellbore on all casing strings. Pressure will be monitored via wing valves on each wellhead section and a means for intervention will be maintained while the drilling rig is not over the well. Spudder rig operation is expected to take 7-10 days for a quad pad and 4-6 days for a dual pad. The BLM will be contacted / notified 24 hours prior to commencing spudder rig operations.

Drilling operation will start with a big Drilling Rig (H&P Flex 3 rig type) and an approved BOP stack will be nippled up and tested on the wellhead before drilling operations resumes on each well. The rig will skid between the wells until each well's section has been drilled as planned (see Attachment #10). The BLM will be contacted / notified 24 hours before the big rig moves back on the location.

Once "Spudder Rig" has left the location, The "big Drilling Rig" will be on location within 90 days to drill each well in the Pad as batch drilling operations.

### Attachments:

Attachment#1:	Directional Plan.
Attachment#2:	Wellbore Casing & Cementing Schematic.
Attachment#3:	WellHead Schematic.
Attachment #4:	BOP Schematic.
Attachment #5:	Choke Schematic.
Attachment #6:	Special (Premium) Connections.
Attachment #7:	Flex Hose Documentation.
Attachment #8:	Spudder Rig Specifications.
Attachment #9:	WellHead Schematic for Pre-set Surface.
Attachment #10:	Skid-Batch Drilling Operations.

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IL       Formation Top         Drf       Formation Top         Drf       Formation Top         Drf       Surface Shoe         1,000 ft       Anhydrite/Salts         3930 ft       Delaware         3930 ft       Delaware         3930 ft       Delaware         4,075 ft       Interm1Shoe         4,075 ft       Interm1Shoe         4,075 ft       Interm1Shoe         5,000 ft       Avalon A Top         8,500 ft       Avalon T Top         9,000 ft       1st Bone Spring Sand         2,nd BS Carbonate       2nd BS Sand         10,000 ft       3rd BS Sand         11,000 ft       WolfGamp T Top         11,000 ft       WolfCamp 1 Top         11,000 ft <t< th=""><th>Coption no Formation Top Anhydrite/Salts Burface Shoe Anhydrite/Salts Delaware Ford Shale Interm 1 Shoe Interm 1 Shoe Bone Spring Top Bone Spring Top Avalon 5 To</th><th>ot to run 9-5/8" Csg</th><th><ul> <li>Surface Section:</li> <li>Objective: Protect fresh water horizons.</li> <li>Drill 17-1/2" hole to +/- 1010 ft. "Rustler"</li> <li>Mud weight: 8.6 - 9.1 ppg FW-Native Mud</li> </ul></th><th><ul> <li>Set 13-3/8 24.5# J-25 BIC casing.</li> <li>Cement to surface.</li> <li>Intermediate1 Section (Only for Contingency):</li> </ul></th><th><ul> <li>Objective: Isolate the Salado Salt and Delaware Sand interval.</li> <li>Drill 12-1/4" hole to +/- 4,075 ft. "Ford Shale"</li> <li>Mud weight: 10.0 ppg Brine.</li> <li>Set 9-5/8" 40# L-80 BTC casing.</li> </ul></th><th><ul> <li>Cement to surface.</li> <li>Intermediate2 Section:</li> <li>Objective: Isolate depleted/weak formations above WC1.</li> </ul></th><th><ul> <li>Drill 8-3/4" hole to +/- 11,400 ft. 50'-120' inside WC1 Top.</li> <li>Mud weight: 8.9 - 10.5 ppg Brine or OBM w/ 25 ppb WBS</li> <li>Set 7-5/8" 29.7# P-110 Tenaris W523 casing.</li> <li>Cement to surface.</li> </ul></th><th><ul> <li>2 or 3-Stage Contingency with 2ea. Packer/Stage Collars</li> <li>Bond Coat ~ 3000' of Csg covering the Delaware Sands</li> <li>Droduction Section:</li> </ul></th><th><ul> <li>Objective: Provide zonal isolation of production interval and provide medium for stimulation.</li> <li>Drill 6-3/4" hole to +/-18,000ft - 19,000ft. "Production TD"</li> <li>Drill 6-3/4" hole to +/-15.2 ppg OBM.</li> <li>Mud Weight: 12.5 - 15.2 ppg OBM.</li> <li>Set 5" 18# P-110 TenBlue/TXP casing.</li> <li>Cement lap 500 ft above previous shoe (near KOP).</li> </ul></th><th>18,650 ft TD ~6,500 ft Lateral</th></t<>	Coption no Formation Top Anhydrite/Salts Burface Shoe Anhydrite/Salts Delaware Ford Shale Interm 1 Shoe Interm 1 Shoe Bone Spring Top Bone Spring Top Avalon 5 To	ot to run 9-5/8" Csg	<ul> <li>Surface Section:</li> <li>Objective: Protect fresh water horizons.</li> <li>Drill 17-1/2" hole to +/- 1010 ft. "Rustler"</li> <li>Mud weight: 8.6 - 9.1 ppg FW-Native Mud</li> </ul>	<ul> <li>Set 13-3/8 24.5# J-25 BIC casing.</li> <li>Cement to surface.</li> <li>Intermediate1 Section (Only for Contingency):</li> </ul>	<ul> <li>Objective: Isolate the Salado Salt and Delaware Sand interval.</li> <li>Drill 12-1/4" hole to +/- 4,075 ft. "Ford Shale"</li> <li>Mud weight: 10.0 ppg Brine.</li> <li>Set 9-5/8" 40# L-80 BTC casing.</li> </ul>	<ul> <li>Cement to surface.</li> <li>Intermediate2 Section:</li> <li>Objective: Isolate depleted/weak formations above WC1.</li> </ul>	<ul> <li>Drill 8-3/4" hole to +/- 11,400 ft. 50'-120' inside WC1 Top.</li> <li>Mud weight: 8.9 - 10.5 ppg Brine or OBM w/ 25 ppb WBS</li> <li>Set 7-5/8" 29.7# P-110 Tenaris W523 casing.</li> <li>Cement to surface.</li> </ul>	<ul> <li>2 or 3-Stage Contingency with 2ea. Packer/Stage Collars</li> <li>Bond Coat ~ 3000' of Csg covering the Delaware Sands</li> <li>Droduction Section:</li> </ul>	<ul> <li>Objective: Provide zonal isolation of production interval and provide medium for stimulation.</li> <li>Drill 6-3/4" hole to +/-18,000ft - 19,000ft. "Production TD"</li> <li>Drill 6-3/4" hole to +/-15.2 ppg OBM.</li> <li>Mud Weight: 12.5 - 15.2 ppg OBM.</li> <li>Set 5" 18# P-110 TenBlue/TXP casing.</li> <li>Cement lap 500 ft above previous shoe (near KOP).</li> </ul>	18,650 ft TD ~6,500 ft Lateral
TVD 0ft 0ft 1,100ft 1,100ft 1,100ft 1,100ft 1,100ft 8,250 ft 8,250 ft 8,250 ft 8,250 ft 1,1,280 ft 1,1,280 ft 1,1,280 ft 1,1,000 ft 1,	Chment #2 –	Option no	Formation Top Rustler	surtace shoe Anhydrite/Salts Delaware	Ford Shale	Interm1 Shoe Bone Spring Top BS 1st Carb Top	Avalon A Top Avalon B Top Avalon C Top 1st Bone Spring Sand	2nd BS Carbonate 2nd BS Sand 3rd BS Carbonate	ard BS Sand WolfCamp Top WolfCamp 1Top Intern2 Shoe WolfCamp2 Top WolfCamp3 Top	l Shale
	chmen	t #2 –	170 0ft 985 ft	1010 ft 1,100 ft 3930 ft	4,075 ft		8,250 ft 8,500 ft 8,800 ft 9,000 ft	10 000 01	11,280 ft 11,400 ft 11,600 ft 12,000 ft	WolfCamp (

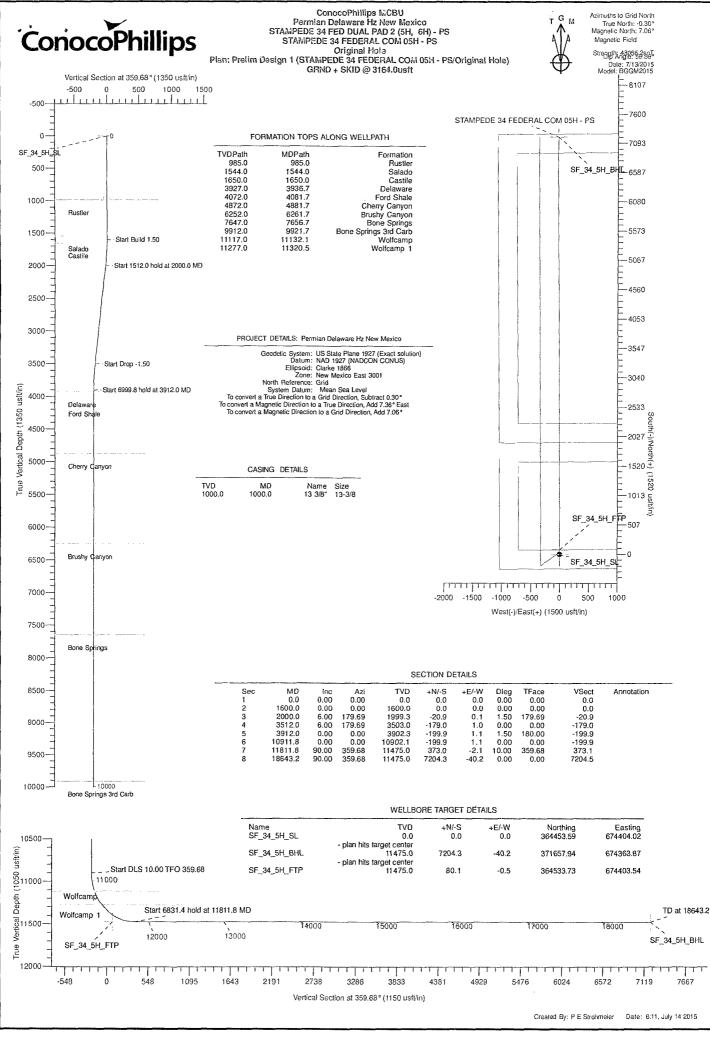
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ConocoPhillips



ARTESIA DISTRICT DEC 2 2 2016

RECEIVED

# **ConocoPhillips MCBU**

Permian Delaware Hz New Mexico STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS STAMPEDE 34 FEDERAL COM 05H - PS

**Original Hole** 

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Plan: Prelim Design 1

# **Standard Planning Report**

14 July, 2015

### Planning Report

Database: Company: Project: Site: Well: Well: Wellbore: Design:	ConocoPhillips MCBUTVD Reference:GRND + SKPermian Delaware Hz New MexicoMD Reference:GRND + SKSTAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PSNorth Reference:Grid						G G G	ite STAMPEDE 3 RND + SKID @ 3 RND + SKID @ 3 rid inimum Curvatur	3164.0usft 3164.0usft	AD 2 (5H, 6H)
Project Map System: Geo Datum: Map Zone:	US State NAD 192		Exact solution) CONUS)	Vlexico	System Da	tum:	М	ean Sea Level		
Site	STAMF	PEDE 34 FED	DUAL PAD 2 (5	H, 6H)-PS	, Section 34 and	27				
Site Position: From: Position Uncert	Maş ainty:	0.0 u	Northi Eastin Isft Slot R	-	674	,453.59 <sub>usft</sub> ,404.02usft 13-3/16"	Latitude: Longitude: Grid Converg	gence:		32° 0' 2.696 N 103° 46' 14.626 W 0.30 °
Well	STAMP	EDE 34 FEDE	RAL COM 05H	- PS, Explor	ation - Horizonta	al		<u></u>		
Well Position	+N/-S +E/-W			orthing: sting:		364,453.58 674,404.02		itude: 1gitude:		32° 0' 2.696 N 103° 46' 14.626 W
Position Uncert	ainty	C	).0 usft We	ellhead Eleva	ation:		usft Gro	ound Level:		3,137.0 usft
Wellbore	Origina	al Hole								
Magnetics	Мо	del Name	Sample	e Date	Declina (°)		-	Angle °)	Field Str (nT	-
		BGGM2015		7/13/2015		7.36		59.89		48,056
Design	Prelim	Design 1								
Audit Notes:						_				
Version: Vertical Section	1	]	Phase Depth From (T\ (usft) 0.0		PROTOTYPE +N/-S (usft) 0.0	+E (u	• On Depth: :/-W sft) ).0	Dire (	0.0 ection (°) 9.68	
Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	≁N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,600.0	0.00	0.00	1,600.0	0.0		0.00	0.00	0.00	0.00	
2,000.0	6.00	179.69	1,999.3	-20.9		1.50	1.50	0.00	179.69	
3,512.0 3,912.0	6.00 0.00	179.69 0.00	3,503.0 3,902.3	-179.0 -199.9		0.00 1.50	0.00 -1.50	0.00 0.00	0.00 180.00	
10,911.8	0.00	0.00	10,902.1	-199.9 -199.9		0.00	0.00	0.00	0.00	
11,811.8	90.00	359.68	11,475.0	373.0		10.00	10.00	-0.04	359.68	
.,			11,475.0	7,204.3		0.00				_34_5H_BHL

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### Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H)
Company:	ConocoPhillips MCBU	TVD Reference:	GRND + SKID @ 3164.0usft
Project:	Permian Delaware Hz New Mexico	MD Reference:	GRND + SKID @ 3164.0usft
Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	North Reference:	Grid
Well:	STAMPEDE 34 FEDERAL COM 05H - PS	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Prelim Design 1		

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)
0.0		0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0		0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0		0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0		0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0		0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0		0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0		0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0		0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0,0	0.0	0.0	0.00	0.00	0.00
1,100.0		0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0		0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0		0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0		0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0		0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0		179.69	1,700.0	-1.3	0.0	-1.3	1.50	1.50	0.00
1,800.0		179.69	1,799.9	-5.2	0.0	-5.2	1.50	1.50	0.00
1,900.0	4.50	179.69	1,899.7	-11.8	0.1	-11.8	1.50	1.50	0.00
2,000.0	6.00	179.69	1,999.3	-20.9	0.1	-20.9	1.50	1.50	0.00
2,100.0	6.00	179.69	2,098.7	-31.4	0.2	-31.4	0.00	0.00	0.00
2,200.0	6.00	179.69	2,198.2	-41.8	0.2	-41.8	0.00	0.00	0.00
2,300.0	6.00	179.69	2,297.6	-52.3	0.3	-52.3	0.00	0.00	0.00
2,400.0	6.00	179.69	2,397.1	-62.8	0.3	-62.7	0.00	0.00	0.00
2,500.0	6.00	179.69	2,496.5	-73.2	0.4	-73.2	0.00	0.00	0.00
2,600.0	6.00	179.69	2,596.0	-83.7	0.5	-83.6	0.00	0.00	0.00
2,700.0	6.00	179.69	2,695.4	-94.1	0.5	-94.1	0.00	0.00	0.00
2,800.0		179.69	2,794.9	-104.6	0.6	-104.5	0.00	0.00	0.00
2,900.0	6.00	179.69	2,894.3	-115.0	0.6	-115.0	0.00	0.00	0.00
3,000.0	6.00	179.69	2,993.8	-125.5	0.7	-125.5	0.00	0.00	0.00
3,100.0	6.00	179.69	3,093.2	-135.9	0.7	-135.9	0.00	0.00	0.00
3,200.0	6.00	179.69	3,192.7	-146.4	0.8	-146.4	0.00	0.00	0.00
3,300.0	6.00	179.69	3,292.1	-156.8	0.8	-156.8	0.00	0.00	0.00
3,400.0	6.00	179.69	3,391.6	-167.3	0.9	-167.3	0.00	0.00	0.00
3,500.0	6.00	179.69	3,491.1	-177.7	1.0	-177.7	0.00	0.00	0.00
3,512.0	6.00	179.69	3,503.0	-179.0	1.0	-179.0	0.00	0.00	0.00
3,600.0	4.68	179.69	3,590.6	-187.2	1.0	-187.2	1.50	-1.50	0.00
3,700.0	3.18	179.69	3,690.4	-194.0	1.0	-194.0	1.50	-1.50	0.00
3,800.0	1.68	179.69	3,790.3	-198.3	1.1	-198.3	1.50	-1.50	0.00
3,900.0	0.18	179.69	3,890.3	-199.9	1.1	-199.9	1.50	-1.50	0.00
3,912.0	0.00	0.00	3,902.3	-199.9	1.1	-199.9	1.50	-1.50	0.00
4,000.0	0.00	0.00	3,990.3	-199.9	1.1	-199.9	0.00	0.00	0.00
4,100.0		0.00	4,090.3	-199.9	1.1	-199.9	0.00	0.00	0.00
4,200.0	0.00	0.00	4,190.3	-199.9	1.1	-199.9	0.00	0.00	0.00
4,300.0	0.00	0.00	4,290.3	-199.9	1.1	-199.9	0.00	0.00	0.00
4,400.0		0.00	4,390.3	-199.9	1.1	-199.9	0.00	0.00	0.00
4,500.0	0.00	0.00	4,490.3	-199.9	1.1	-199.9	0.00	0.00	0.00
4,600.0		0.00	4,590.3	-199.9	1.1	-199.9	0.00	0.00	0.00
4,700.0		0.00	4,690.3	-199.9	1.1	-199.9	0.00	0.00	0.00
4,800.0	0.00	0.00	4,790.3	-199.9	1,1	~199.9	0.00	0.00	0.00
4,900.0		0.00	4,890.3	-199.9	1.1	-199.9	0,00	0.00	0.00
5,000.0		0.00	4,990.3	-199.9	1.1	-199.9	0.00	0.00	0.00
5,100.0		0.00	5,090.3	-199.9	1.1	-199.9	0.00	0.00	0.00

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Planned Survey

### Planning Report

Database:	EDM Central Planning	Local Co-ordinate Referer
Company:	ConocoPhillips MCBU	TVD Reference:
Project:	Permian Delaware Hz New Mexico	MD Reference:
Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	North Reference:
Well:	STAMPEDE 34 FEDERAL COM 05H - PS	Survey Calculation Metho
Wellbore:	Original Hote	
Design:	Prelim Design 1	

ence: od:

Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) GRND + SKID @ 3164.0usft GRND + SKID @ 3164.0usft Grid Minimum Curvature

### Planned Survey

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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)
5,200.0	0.00	0.00	5,190.3	-199.9	1.1	-199.9	0.00	0.00	0.00
5,300.0	0.00	0.00	5,290.3	-199.9	1.1	-199.9	0.00	0.00	0.00
5,400.0	0.00	0.00	5,390.3	-199.9	1.1	-199.9	0.00	0.00	0.00
5,500.0	0.00	0.00	5,490.3	-199.9	1.1	-199.9	0.00	0.00	0.00
5,600.0	0.00	0.00	5,590.3	-199.9	1.1	-199.9	0.00	0.00	0.00
5,700.0	0.00	0.00	5,690.3	-199.9	1.1	-199.9	0.00	0.00	0.00
5,800.0	0.00	0.00	5,790.3	-199.9	1.1	-199.9	0.00	0.00	0.00
5,900.0	0.00	0.00	5,890.3	-199.9	1.1	-199.9	0.00	0.00	0.00
6,000.0	0.00	0.00	5,990.3	-199.9	1.1	-199.9	0.00	0.00	0.00
6,100.0	0.00	0.00	6,090.3	-199.9	1.1	-199.9	0.00	0.00	0.00
6,200.0	0.00	0.00	6,190.3	-199.9	1.1	-199.9	0.00	0.00	0.00
6,300.0	0.00	0.00	6,290.3	-199.9	1.1	-199.9	0.00	0.00	0.00
6,400.0	0.00	0.00	6,390.3	-199.9	1.1	-199.9	0.00	0.00	0.00
6,500.0	0.00	0.00	6,490.3	-199.9	1.1	-199.9	0.00	0.00	0.00
6,600.0	0.00	0.00	6,590.3	-199.9	1.1	-199.9	0.00	0.00	0.00
6,700.0	0.00	0.00	6,690.3	-199.9	1.1	-199.9	0.00	0.00	0.00
6,800.0	0.00	0.00	6,790.3	-199.9	1.1	-199.9	0.00	0.00	0.00
6,900.0	0.00	0.00	6,890.3	-199.9	1.1	-199.9	0.00	0.00	0.00
7,000.0	0.00	0.00	6,990.3	-199.9	1.1	-199.9	0.00	0.00	0.00
7,100.0	0.00	0.00	7,090.3	-199.9	1.1	-199.9		0.00	0.00
7,100.0	0.00	0.00	7,090.3	-199.9	1.1	-199.9	0.00 0.00	0.00	0.00
7,300.0	0.00	0.00	7,290.3	-199.9	1.1	-199.9	0.00	0.00	0.00
7,400.0	0.00	0.00	7,390.3	-199.9	1.1	-199.9	0.00	0.00	0.00
7,500.0	0.00	0.00	7,490.3	-199.9	1.1	-199.9	0.00	0.00	0.00
7,600.0	0.00	0.00	7,590.3	-199.9	1.1	-199.9	0.00	0.00	0.00
7,700.0	0.00	0.00	7,690.3	-199.9	1.1	-199.9	0.00	0.00	0.00
7,800.0	0.00	0.00	7,790.3	-199.9	1.1	-199.9	0.00	0.00	0.00
7,900.0	0.00	0.00	7,890.3	-199.9	1.1	-199.9	0.00	0.00	0.00
8,000.0	0.00	0.00	7,990.3	-199.9	1.1	-199.9	0.00	0.00	0.00
8,100.0	0.00	0.00	8,090.3	-199.9	1.1	-199.9	0.00	0,00	0.00
8,200.0	0.00	0.00	8,190.3	-199.9	1.1	-199.9	0.00	0.00	0.00
8,300.0	0.00	0.00	8,290,3	-199.9	1.1	-199.9	0.00	0.00	0.00
8,400.0	0.00	0.00	8,390.3	-199.9	1.1	-199.9		0.00	0.00
							0.00		
8,500.0 8,600.0	0.00	0.00 0.00	8,490.3 8,590.3	-199.9 -199.9	1.1	-199.9	0.00	0.00	0.00
8,800.0	0.00	0.00	8,690.3	-199.9 -199.9	1.1 1.1	-199.9 -199.9	0.00 0.00	0.00 0.00	0.00 0.00
8,800.0	0.00	0.00	8,790.3	-199,9	1.1	-199.9	0.00	0.00	0.00
8,900.0	0.00	0.00	8,890.3	-199.9	1.1	-199.9	0.00	0.00	0.00
9,000.0	0.00	0.00	8,990.3	-199.9	1.1	-199.9	0.00	0.00	0.00
9,100.0	0.00	0.00	9,090.3	-199.9	1.1	-199.9	0.00	0.00	0.00
9,200.0	0.00	0.00	9,190.3	-199.9	1.1	-199.9	0.00	0.00	0.00
9,300.0	0.00	0.00	9,290.3	-199.9	1.1	-199.9	0.00	0.00	0.00
9,400.0	0.00	0.00	9,390.3	-199.9	1.1	-199.9	0.00	0.00	0.00
9,500.0	0.00	0.00	9,490.3	-199.9	1.1	-199.9	0.00	0.00	0.00
9,600.0	0.00	0.00	9,590.3	-199.9	1.1	-199.9	0.00	0.00	0.00
9,700.0	0.00	0.00	9,690.3	-199.9	1.1	-199.9	0.00	0.00	0.00
9,800.0	0.00	0.00	9,790.3	-199.9		-199.9	0.00	0.00	0.00
9,800.0 9,900.0					1.1				
	0.00	0.00	9,890.3	-199.9	1.1	-199.9	0.00	0.00	0.00
10,000.0	0.00	0.00	9,990.3	-199.9	1.1	-199.9	0.00	0.00	0.00
10,100.0	0.00	0.00	10,090.3	-199.9	1.1	-199.9	0.00	0.00	0.00
10,200.0	0.00	0.00	10,190.3	-199.9	1.1	-199.9	0.00	0.00	0.00
10,300.0	0.00	0.00	10,290.3	-199.9	1.1	-199.9	0.00	0,00	0.00
10,400.0	0.00	0.00	10,390.3	-199.9	1.1	-199.9	0.00	0.00	0.00

### Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	;
Company:	ConocoPhillips MCBU	TVD Reference:	
Project:	Permian Delaware Hz New Mexico	MD Reference:	
Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	North Reference:	(
Well:	STAMPEDE 34 FEDERAL COM 05H - PS	Survey Calculation Method:	ſ
Wellbore:	Original Hole	-	
Design:	Prelim Design 1		
-			

Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) GRND + SKID @ 3164.0usft GRND + SKID @ 3164.0usft Grid Minimum Curvature

### Planned Survey

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(usft) 10,500.0 10,600.0 10,700.0 10,800.0 10,900.0 10,911.8 11,000.0 11,100.0 11,200.0 11,200.0 11,400.0 11,500.0 11,600.0 11,600.0 11,811.8 11,900.0 12,000.0 12,200.0 12,300.0 12,300.0 12,400.0	(°) 0.00 0.00 0.00 0.00 0.00 8.82 18.82 28.82 38.82 48.82 58.82 68.82 78.82 68.82 78.82 88.82 90.00 90.00	(*) 0.00 0.00 0.00 0.00 0.00 359.68 359.68 359.68 359.68 359.68 359.68 359.68 359.68 359.68 359.68 359.68	(usft) 10,490.3 10,590.3 10,690.3 10,890.3 10,902.1 10,989.9 11,086.9 11,178.3 11,261.2 11,333.3 11,392.2 11,436.3	(usft) -199.9 -199.9 -199.9 -199.9 -199.9 -199.9 -199.9 -193.1 -169.3 -128.9 -73.4 -4.2 76.4	(usft) 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.	(usft) -199.9 -199.9 -199.9 -199.9 -199.9 -199.9 -193.1 -169.3 -128.9	(*/100usft) 0.00 0.00 0.00 0.00 0.00 10.00 10.00 10.00	(°/100usft) 0.00 0.00 0.00 0.00 0.00 10.00 10.00 10.00	(*/100usft) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.
10,600.0 10,700.0 10,800.0 10,901.8 11,000.0 11,100.0 11,200.0 11,300.0 11,400.0 11,600.0 11,600.0 11,600.0 11,811.8 11,900.0 12,000.0 12,100.0 12,200.0	0.00 0.00 0.00 8.82 18.82 28.82 38.82 48.82 58.82 68.82 78.82 88.82 90.00 90.00	0.00 0.00 0.00 359.68 359.68 359.68 359.68 359.68 359.68 359.68 359.68 359.68 359.68	10,590.3 10,690.3 10,790.3 10,880.3 10,902.1 10,989.9 11,086.9 11,178.3 11,261.2 11,333.3 11,392.2	-199.9 -199.9 -199.9 -199.9 -199.9 -193.1 -169.3 -128.9 -73.4 -4.2	1.1 1.1 1.1 1.1 1.1 1.0 0.9 0.7 0.4	-199.9 -199.9 -199.9 -199.9 -199.9 -193.1 -169.3 -128.9	0.00 0.00 0.00 0.00 0.00 10.00 10.00	0.00 0.00 0.00 0.00 0.00 10.00 10.00	0.00 0.00 0.00 0.00 0.00 0.00
10,700.0 10,800.0 10,911.8 11,000.0 11,100.0 11,200.0 11,300.0 11,300.0 11,400.0 11,500.0 11,600.0 11,600.0 11,811.8 11,900.0 12,000.0 12,100.0 12,300.0	0.00 0.00 0.00 8.82 18.82 28.82 38.82 48.82 58.82 68.82 68.82 78.82 88.82 90.00 90.00	0.00 0.00 0.00 359.68 359.68 359.68 359.68 359.68 359.68 359.68 359.68 359.68	10,690.3 10,790.3 10,890.3 10,902.1 10,989.9 11,086.9 11,178.3 11,261.2 11,333.3 11,392.2	-199.9 -199.9 -199.9 -199.9 -193.1 -169.3 -128.9 -73.4 -4.2	1.1 1.1 1.1 1.0 0.9 0.7 0.4	-199.9 -199.9 -199.9 -199.9 -193.1 -169.3 -128.9	0.00 0.00 0.00 10.00 10.00	0.00 0.00 0.00 10.00 10.00	0.00 0.00 0.00 0.00 0.00
10,800.0 10,911.8 11,000.0 11,100.0 11,200.0 11,300.0 11,300.0 11,500.0 11,500.0 11,600.0 11,700.0 11,811.8 11,900.0 12,000.0 12,100.0 12,200.0	0.00 0.00 8.82 18.82 28.82 38.82 48.82 58.82 68.82 78.82 88.82 90.00 90.00	0.00 0.00 359.68 359.68 359.68 359.68 359.68 359.68 359.68 359.68 359.68	10,790.3 10,890.3 10,902.1 10,989.9 11,086.9 11,178.3 11,261.2 11,333.3 11,392.2	-199.9 -199.9 -199.9 -193.1 -169.3 -128.9 -73.4 -4.2	1.1 1.1 1.0 0.9 0.7 0.4	-199.9 -199.9 -199.9 -193.1 -169.3 -128.9	0.00 0.00 0.00 10.00 10.00	0.00 0.00 0.00 10.00 10.00	0.00 0.00 0.00 0.00
10,900.0 10,911.8 11,000.0 11,100.0 11,200.0 11,300.0 11,400.0 11,500.0 11,600.0 11,600.0 11,700.0 11,810.0 11,811.8 11,900.0 12,000.0 12,100.0 12,200.0	0.00 0.00 8.82 18.82 28.82 38.82 48.82 68.82 68.82 78.82 88.82 90.00 90.00	0.00 0.00 359.68 359.68 359.68 359.68 359.68 359.68 359.68 359.68	10,890.3 10,902.1 10,989.9 11,086.9 11,178.3 11,261.2 11,333.3 11,392.2	-199,9 -199,9 -193,1 -169,3 -128,9 -73,4 -4,2	1.1 1.1 1.0 0.9 0.7 0.4	-199.9 -199.9 -193.1 -169.3 -128.9	0.00 0.00 10.00 10.00	0.00 0.00 10.00 10.00	0.00 0.00 0.00
10,911.8 11,000.0 11,100.0 11,200.0 11,300.0 11,400.0 11,500.0 11,500.0 11,600.0 11,700.0 11,811.8 11,900.0 12,000.0 12,100.0 12,200.0 12,300.0	0.00 8.82 18.82 28.82 38.82 48.82 68.82 68.82 78.82 88.82 90.00 90.00	0.00 359.68 359.68 359.68 359.68 359.68 359.68 359.68 359.68 359.68	10,902.1 10,989.9 11,086.9 11,178.3 11,261.2 11,333.3 11,392.2	-199.9 -193.1 -169.3 -128.9 -73.4 -4.2	1.1 1.0 0.9 0.7 0.4	-199.9 -193.1 -169.3 -128.9	0.00 10.00 10.00	0.00 10.00 10.00	0.00 0.00
11,000.0 11,100.0 11,200.0 11,300.0 11,400.0 11,500.0 11,600.0 11,700.0 11,801.0 11,811.8 11,900.0 12,000.0 12,100.0 12,200.0 12,300.0	8.82 18.82 28.82 38.82 48.82 58.82 68.82 78.82 88.82 90.00 90.00	359.68 359.68 359.68 359.68 359.68 359.68 359.68 359.68 359.68	10,989.9 11,086.9 11,178.3 11,261.2 11,333.3 11,392.2	-193.1 -169.3 -128.9 -73.4 -4.2	1.0 0.9 0.7 0.4	-193.1 -169.3 -128.9	10.00 10.00	10.00 10.00	0.00
11,000.0 11,100.0 11,200.0 11,300.0 11,400.0 11,500.0 11,600.0 11,700.0 11,801.0 11,811.8 11,900.0 12,000.0 12,100.0 12,200.0 12,300.0	18.82 28.82 38.82 48.82 58.82 68.82 78.82 88.82 90.00 90.00	359.68 359.68 359.68 359.68 359.68 359.68 359.68 359.68 359.68	10,989.9 11,086.9 11,178.3 11,261.2 11,333.3 11,392.2	-193.1 -169.3 -128.9 -73.4 -4.2	1.0 0.9 0.7 0.4	-193.1 -169.3 -128.9	10.00 10.00	10.00	
11,100.0 11,200.0 11,300.0 11,500.0 11,500.0 11,600.0 11,700.0 11,800.0 11,811.8 11,900.0 12,000.0 12,100.0 12,200.0 12,300.0	18.82 28.82 38.82 48.82 58.82 68.82 78.82 88.82 90.00 90.00	359.68 359.68 359.68 359.68 359.68 359.68 359.68	11,086.9 11,178.3 11,261.2 11,333.3 11,392.2	-169.3 -128.9 -73.4 -4.2	0.9 0.7 0.4	-169.3 -128.9	10.00	10.00	
11,300.0 11,400.0 11,500.0 11,600.0 11,700.0 11,800.0 11,811.8 11,900.0 12,000.0 12,100.0 12,200.0 12,300.0	38.82 48.82 58.82 68.82 78.82 88.82 90.00 90.00	359.68 359.68 359.68 359.68 359.68	11,261.2 11,333.3 11,392.2	-73.4 -4.2	0.4		10.00	10.00	
11,300.0 11,400.0 11,500.0 11,600.0 11,700.0 11,800.0 11,811.8 11,900.0 12,000.0 12,100.0 12,200.0 12,300.0	38.82 48.82 58.82 68.82 78.82 88.82 90.00 90.00	359.68 359.68 359.68 359.68 359.68	11,261.2 11,333.3 11,392.2	-73.4 -4.2	0.4			10.00	0.00
11,400.0 11,500.0 11,600.0 11,800.0 11,800.0 11,811.8 11,900.0 12,000.0 12,100.0 12,200.0 12,300.0	48.82 58.82 68.82 78.82 88.82 90.00 90.00	359.68 359.68 359.68 359.68	11,333.3 11,392.2	-4.2		-73.3	10.00	10.00	0.00
11,500.0 11,600.0 11,700.0 11,800.0 11,811.8 11,900.0 12,000.0 12,100.0 12,200.0 12,300.0	58.82 68.82 78.82 88.82 90.00 90.00	359.68 359.68 359.68	11,392.2		0.0	-4.2	10.00	10.00	0.00
11,600.0 11,700.0 11,800.0 11,811.8 11,900.0 12,000.0 12,100.0 12,200.0 12,300.0	68.82 78.82 88.82 90.00 90.00	359.68 359.68			-0.5	76.4	10.00	10.00	0.00
11,700.0 11,800.0 11,811.8 11,900.0 12,000.0 12,100.0 12,200.0 12,300.0	78.82 88.82 90.00 90.00	359.68	11,430.5				10.00	10.00	0.00
11,800.0 11,811.8 11,900.0 12,000.0 12,100.0 12,200.0 12,300.0	88.82 90.00 90.00			166.0	-1.0	166.1			
11,811.8 11,900.0 12,000.0 12,100.0 12,200.0 12,300.0	90.00 90.00	359.68	11,464.1	262.0	-1.5	262.0	10.00	10.00	0.00
11,900.0 12,000.0 12,100.0 12,200.0 12,300.0	90.00		11,474.9	361.2	-2.0	361.3	10.00	10.00	0.00
12,000.0 12,100.0 12,200.0 12,300.0		359.68	11,475.0	373.0	-2.1	373.1	10.00	10.00	0.00
12,100.0 12,200.0 12,300.0	90.00	359.68	11,475.0	461.2	-2.6	461.3	0.00	0.00	0.00
12,200.0 12,300.0		359.68	11,475.0	561.2	-3.2	561.3	0.00	0.00	0.00
12,300.0	90.00	359.68	11,475.0	661.2	-3.7	661.3	0.00	0.00	0.00
	90.00	359.68	11,475.0	761.2	-4.3	761.3	0.00	0.00	0.00
12,400.0	90.00	359.68	11,475.0	861.2	-4.8	861.3	0.00	0.00	0.00
	90.00	359.68	11,475.0	961.2	-5.4	961.3	0.00	0.00	0.00
12,500.0	90.00	359.68	11,475.0	1,061.2	-5.9	1,061.3	0.00	0.00	0.00
12,600.0	90.00	359.68	11,475.0	1,161.2	-6.5	1,161.3	0.00	0.00	0.00
12,700.0	90.00	359.68	11,475.0	1,261.2	-7.1	1,261.3	0.00	0.00	0.00
12,800.0	90.00	359.68	11,475.0	1,361.2	-7.6	1,361.3	0.00	0.00	0.00
12,900.0	90.00	359.68	11,475.0	1,461.2	-8.2	1,461.3	0.00	0.00	0.00
13,000.0	90.00	359.68	11,475.0	1,561.2	-8.7	1,561.3	0.00	0.00	0.00
13,100.0	90.00	359.68	11,475.0	1,661.2	-9.3	1,661.3	0.00	0.00	0.00
13,200.0	90.00	359.68	11,475.0	1,761.2	-9.8	1,761.3	0.00	0.00	0.00
13,300.0	90.00	359.68	11,475.0	1,861.2	-10.4	1,861.3	0.00	0.00	0.00
13,400.0	90.00	359.68	11,475.0	1,961.2	-10.4	1,961.3	0.00	0.00	0.00
13,500.0	90.00	359.68	11,475.0	2,061.2	-11.5	2,061.3	0.00	0.00	0.00
13,600.0 13,700.0	90.00 90.00	359.68 359.68	11,475.0 11,475.0	2,161.2	-12.1 -12.6	2,161.3 2,261.3	0.00 0.00	0.00 0.00	0.00 0.00
13,700.0				2,261.2					0.00
13,800.0	90.00	359.68	11,475.0	2,361.2 2,461.2	-13.2	2,361.3	0.00	0.00 0.00	0.00
13,900.0 14,000.0	90.00 90.00	359.68 359.68	11,475.0 11,475.0	2,461.2 2,561.2	-13.7 -14.3	2,461.3 2,561.3	0.00 0.00	0.00	0.00
14,100.0	90.00	359.68	11,475.0	2,661.2	-14.9	2,661.3	0.00	0.00	0.00
14,200.0	90.00	359.68	11,475.0	2,761.2	-15.4	2,761.3	0.00	0.00	0.00
14,300.0	90.00	359.68	11,475.0	2,861.2	-16.0	2,861.3	0.00	0.00	0.00
14,400.0	90.00	359.68	11,475.0	2,961.2	-16.5	2,961.3	0.00	0.00	0.00
14,500.0	90.00	359.68	11,475.0	3,061.2	-17.1	3,061.3	0.00	0.00	0.00
14,600.0	90.00	359.68	11,475.0	3,161.2	-17.6	3,161.3	0.00	0.00	0.00
14,700.0	90.00	359.68	11,475.0	3,261.2	-18.2	3,261.3	0.00	0.00	0.00
14,800.0	90.00	359.68	11,475.0	3,361.2	-18.7	3,361.3	0.00	0.00	0.00
14,900.0	90.00	359.68	11,475.0	3,461.2	-19.3	3,461.3	0.00	0.00	0.00
15,000.0	90.00	359.68	11,475.0	3,561.2	-19.9	3,561.3	0.00	0.00	0.00
15,100.0	90.00	359.68	11,475.0	3,661,2	-20.4	3,661.3	0.00	0.00	0.00
15,200.0	90.00	359.68	11,475.0	3,761.2	-21.0	3,761.3	0.00	0.00	0.00
15,300.0	90.00	359.68	11,475.0	3,861.2	-21.5	3,861.3	0,00	0.00	0.00
15,400.0		359.68	•			0,001.0	0.00		
15,500.0	90.00		11,475.0	3,961.2	-22.1	3,961.3	0.00	0.00	0.00

### Planning Report

EDM Central Planning	Local Co-ordinate Reference:	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H)
ConocoPhillips MCBU	TVD Reference:	GRND + SKID @ 3164.0usft
Permian Delaware Hz New Mexico	MD Reference:	GRND + SKID @ 3164.0usft
STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	North Reference:	Grid
STAMPEDE 34 FEDERAL COM 05H - PS	Survey Calculation Method:	Minimum Curvature
Original Hole	-	
Prelim Design 1		
	ConocoPhillips MCBU Permian Delaware Hz New Mexico STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS STAMPEDE 34 FEDERAL COM 05H - PS Original Hole	ConocoPhillips MCBU     TVD Reference:       Permian Delaware Hz New Mexico     MD Reference:       STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS     North Reference:       STAMPEDE 34 FEDERAL COM 05H - PS     Survey Calculation Method:       Original Hole     Original Hole

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)
15,600.0	90.00	359.68	11,475.0	4,161.2		4 404 0	0.00	0.00	0.00
15,800.0	90.00	359.68	11,475.0	4,101.2	-23.2 -23.8	4,161.3 4,261.3	0.00 0.00	0.00	0.00
15,800.0	90.00	359.68	11,475.0	4,201.2	-23.0	4,261.3	0.00	0.00	0.00
15,900.0	90.00	359.68	11,475.0	4,301.2	-24.3	4,361.3	0.00	0.00	0.00
16,000.0	90.00	359.68	11,475.0	4,461.2	-24.9 -25,4	4,461.3	0.00	0.00	0.00
16,000.0	90.00	359.00	11,475.0	4,561.2	-20,4	4,561.3	0,00	0.00	0.00
16,100.0	90.00	359.68	11,475.0	4,661.2	-26.0	4,661.3	0.00	0.00	0.00
16,200.0	90.00	359.68	11,475.0	4,761.2	-26.5	4,761.3	0.00	0.00	0.00
16,300.0	90.00	359.68	11,475.0	4,861.2	-27.1	4,861.3	0.00	0.00	0.00
16,400.0	90.00	359.68	11,475.0	4,961.2	-27.7	4,961.3	0.00	0.00	0.00
16,500.0	90.00	359.68	11,475.0	5,061.2	-28.2	5,061.3	0.00	0.00	0.00
16,600.0	90,00	359.68	11,475.0	5,161.2	-28.8	5,161.3	0.00	0.00	0.00
16,700.0	90.00	359.68	11,475.0	5,261.2	-29.3	5,261.3	0.00	0.00	0.00
16,800.0	90.00	359.68	11,475.0	5,361.2	-29.9	5,361.3	0.00	0.00	0.00
16,900.0	90.00	359.68	11,475.0	5,461.2	-30.4	5,461.3	0.00	0.00	0.00
17,000.0	90.00	359.68	11,475.0	5,561.2	-31.0	5,561.3	0.00	0.00	0.00
17,100.0	90.00	359.68	11,475.0	5,661.2	-31.6	5,661,3	0.00	0.00	0.00
17,200.0	90.00	359.68	11,475.0	5,761.2	-32.1	5,761.3	0.00	0.00	0.00
17,300.0	90,00	359.68	11,475.0	5,861.2	-32.7	5,861.3	0.00	0.00	0.00
17,400.0	90.00	359.68	11,475.0	5,961.2	-33.2	5,961.3	0.00	0.00	0.00
17,500.0	90.00	359.68	11,475.0	6,061.2	-33.8	6,061.3	0.00	0.00	0.00
17,600.0	90.00	359.68	11,475.0	6,161.2	-34.3	6,161.3	0.00	0.00	0.00
17,700.0	90.00	359.68	11,475.0	6,261.1	-34.9	6,261.3	0.00	0.00	0.00
17,800.0	90.00	359.68	11,475.0	6,361.1	-35.5	6,361.3	0.00	0.00	0.00
17,900.0	90.00	359.68	11,475.0	6,461.1	-36.0	6,461.3	0.00	0.00	0.00
18,000.0	90.00	359.68	11,475.0	6,561.1	-36.6	6,561.3	0.00	0.00	0.00
18,100,0	90.00	359,68	11,475.0	6,661.1	-37.1	6,661.3	0.00	0.00	0.00
18,200.0	90,00	359,68	11,475.0	6,761.1	-37.7	6,761.3	0.00	0.00	0.00
18,300.0	90.00	359,68	11,475.0	6,861.1	-38.2	6,861.3	0.00	0.00	0,00
18,400.0	90.00	359.68	11,475.0	6,961.1	-38.8	6,961.3	0.00	0.00	0.00
18,500.0	90.00	359,68	11,475.0	7,061.1	-39.4	7,061.3	0.00	0.00	0.00
18,600.0	90.00	359,68	11,475.0	7,161.1	-39.9	7,161.3	0.00	0.00	0.00
18,643.2	90,00	359.68	11,475.0	7,204.3	-40.2	7,204.5	0.00	0.00	0.00

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
SF_34_5H_FTP - plan misses target - Point	0.00 center by 70.5	0.00 Susft at 1153	11,475.0 9.9usft MD (	80.1 11411.7 TVD,	-0.5 111.2 N, -0.7 E	364,533.73 E)	674,403.54	32° 0' 3.489 N	103° 46' 14.627 W
SF_34_5H_BHL - plan hits target cen - Point	0.00 ter	0.00	11,475.0	7,204.3	-40.2	371,657.94	674,363.87	32° 1' 13.994 N	103° 46' 14.657 W
SF_34_5H_SL - plan hits target cen - Point	0.00 ter	0.00	0.0	0.0	0.0	364,453.59	674,404.02	32° 0' 2.696 N	103° 46' 14.626 W

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### Planning Report

Database:	EDM Central Planning	Local Co-ordinate Reference:	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H)
Company:	ConocoPhillips MCBU	TVD Reference:	GRND + SKID @ 3164.0usft
Project:	Permian Delaware Hz New Mexico	MD Reference:	GRND + SKID @ 3164.0usft
Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	North Reference:	Grid
Well:	STAMPEDE 34 FEDERAL COM 05H - PS	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Prelim Design 1		

## **Casing Points**

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	Measured Depth (usft)	Vertical Depth (usft)		Name		Casing Diameter ('')	Hole Diameter ('')
	1,000.0	1,000	0.0 13 3/8"			13-3/8	17-1/2
Formations							
	Measured Depth (usft)	Vertical Depth (usft)	Name		Lithology	Dip (°)	Dip Direction (°)
	4,881.7	4,872.0	Cherry Canyon			0.00	
	11,132.1	11,117.0	Wolfcamp			0.00	
	4,081.7	4,072.0	Ford Shale			0.00	
	9,921.7	9,912.0	Bone Springs 3rd Carb			0.00	
	6,261.7	6,252.0	Brushy Canyon			0.00	
	3,936.7	3,927.0	Delaware			0.00	
	985.0	985.0	Rustler			0.00	
	1,544.0	1,544.0	Salado			0.00	
	7,656.7	7,647.0	Bone Springs			0.00	
	1,650.0	1,650.0	Castile			0.00	
	11,320.5	11,277.0	Wolfcamp 1			0.00	

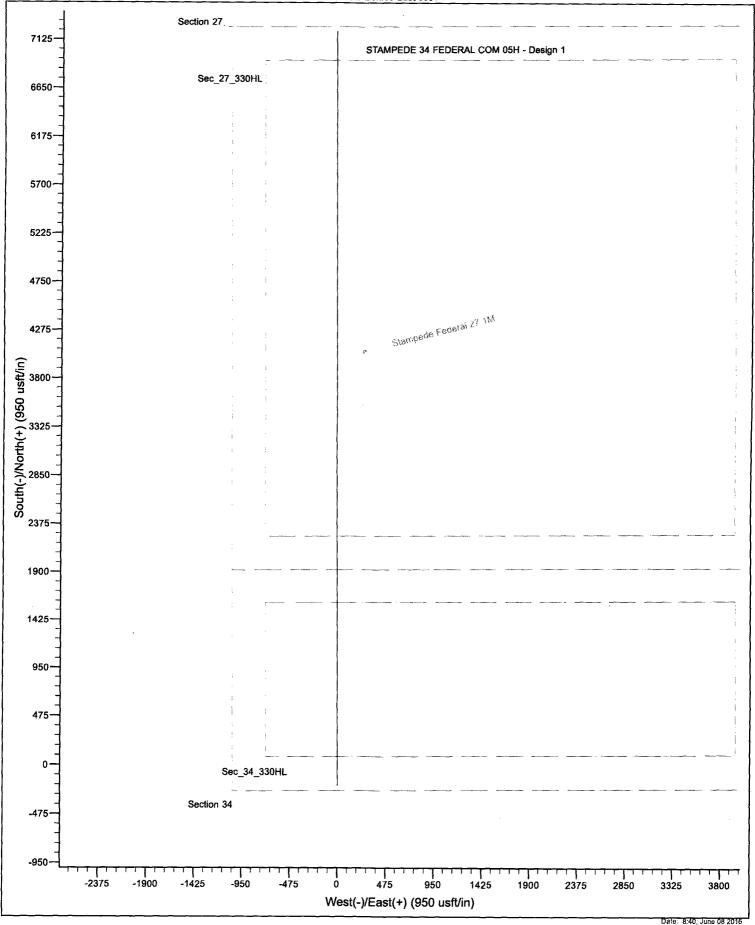


#### ConocoPhillips MCBU Permian Delaware Hz New Mexico STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS STAMPEDE 34 FEDERAL COM 05H - PS Original Hole Plan: Design 1 (STAMPEDE 34 FEDERAL COM 05H - PS/Original Hole) GRND + SKID @ 3164.0usft US State Plane 1927 (Exact solution) NAD 1927 (NADCON CONUS) Clarke 1866 New Mexico East 3001



Azimuths to Grid North True North. -0.30° Magnetic North: 6.91°

Magnetic Field Strength: 47950.0snT Dip Angle: 59.83° Date: 6/8/2016 Model: BGGM2016





### Conocornillips MCBU Permian Delaware Hz New Mexico STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS STAMPEDE 34 FEDERAL COM 05H - PS **Original Hole** Plan: Design 1 (STAMPEDE 34 FEDERAL COM 05H - PS/Original Hole) GRND + SKID @ 3164.0usft US State Plane 1927 (Exact solution) NAD 1927 (NADCON CONUS) Clarke 1866 New Mexico East 3001



Azimuths to Grid North True North: -0.30 Magnetic North: 6.91

Magnetic Field trength: 47950,0snT Dip Angle: 59,83° Date: 6/8/2016 Model: BGGM2016

VSect

0.0

0.0

-20.9

-179.0

-199.9

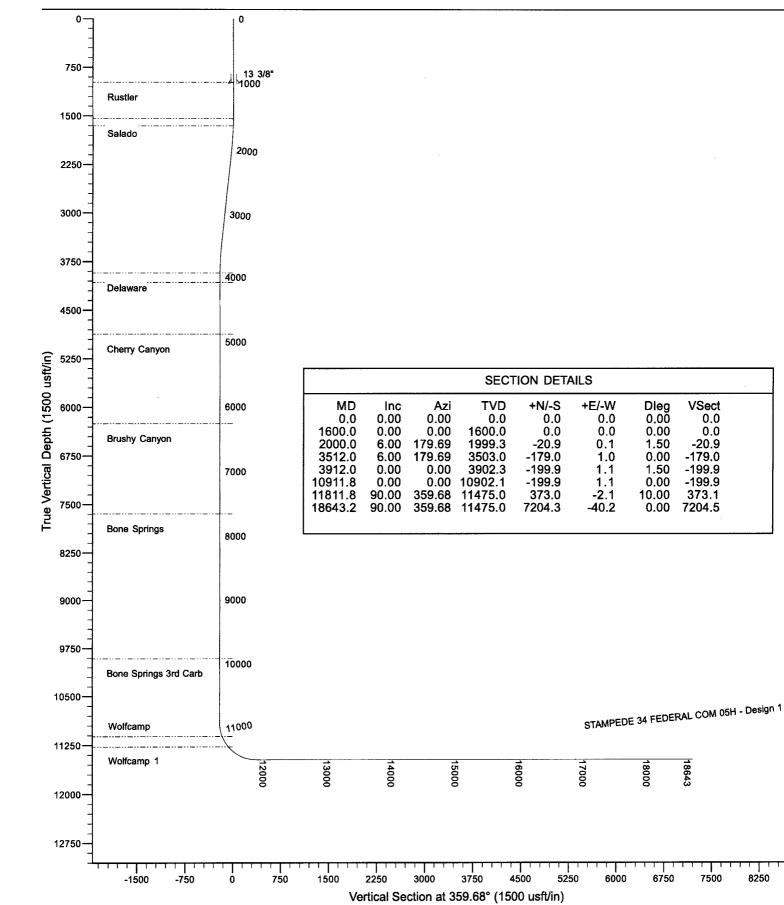
-199.9

373.1

7204.5

18643

7500



8250

9000

# NM OIL CONSERVATION

ARTESIA DISTRICT

DEC 2 2 2016

RECEIVED

# **ConocoPhillips MCBU**

Permian Delaware Hz New Mexico STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS STAMPEDE 34 FEDERAL COM 05H - PS

Original Hole Design 1

# **Anticollision Report**

09 June, 2016

Anticollision Report

Company:	ConocoPhillips MCBU	Local Co-ordinate Reference:	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS
Project:	Permian Delaware Hz New Mexico	TVD Reference:	GRND + SKID @ 3164.0usft
Reference Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	MD Reference:	GRND + SKID @ 3164.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	STAMPEDE 34 FEDERAL COM 05H - PS	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	EDM Central Planning
Reference Design:	Design 1	Offset TVD Reference:	Offset Datum
Reference	Design 1		
Filter type:	NO GLOBAL FILTER: Using user defined selection	on & filtering criteria	
Interpolation Method:	MD Interval 100.0usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,137.5 usft	Error Surface:	Combined Covariances
Warning Levels Evalua	ited at: 2.79 Sigma	Casing Method:	Added to Error Values

Survey Tool Program		Date 6/9/2016		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	4,000.0	Design 1 (Original Hole)	MWD+IFR1	MWD + IFR1
4,000.0	11,000.0	Design 1 (Original Hole)	MWD+IFR1	MWD + IFR1
11,000.0	18,643.2	Design 1 (Original Hole)	MWD+IFR1	MWD + IFR1

Summary						
	Reference	Offset	Dista	nce		
Site Name	Measured	Measured	Between	Between	Separation	Warning
Offset Weil - Wellbore - Design	Depth (usft)	Depth (usft)	Centres (usft)	Ellipses (usft)	Factor	
STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS						
STAMPEDE 34 FEDERAL COM 06H - PS - Original Hole	1,600.0	1,600.0	33.0	20.8	2.713	CC, ES
STAMPEDE 34 FEDERAL COM 06H - PS - Original Hole	18,643.2	18,664.3	329.9	175.2	2.132	Caution - Monitor Closely, SI
Stampede Federal 27 1M						
Stampede Federal 27 1M - Original Borehole - Original B	15,487.9	11,480.6	269.9	193.5	3.534	CC, ES
Stampede Federal 27 1M - Original Borehole - Original B	15,500.0	11,480.4	270.2	193.7	3.533	SF

Offset De	sign	STAMP	EDE 34 F	ED DUAL P	AD 2 (5H	, 6H) - PS -	STAMPEDE	34 FEDER	AL COM 06	6H - PS - (	Original		Offset Site Error:	0.0 us
urvey Prog	ram: 0-M			1, 11000-MWD-							-		Offeet Well Error:	0.0 U
Refer	ence	Office	nt 🛛	Semi Major	Axis				Dist	INCO				
Depth (usft)	Vertical Depth (usfl)	Monsured Depth (Usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highaide Toolface (°)	Officet Wellbor +N/-S (usft)	e Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Ninimum Separation (uaft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-0.37	33.0	-0.2	33.0					
100.0	100.0	100.0	100.0	0.1	0.1	-0.37	33.0	-0.2	33.0	31.4	1.54	21.349		
200.0	200.0	200.0	200.0	0.5	0.5	-0.37	33.0	-0.2	33.0	30.7	2.25	14.644		
300.0	300.0	300.0	300.0	0.8	0.8	-0.37	33.0	-0.2	33.0	30.0	2.96	11,144		
400.0	400.0	400.0	400.0	1.2	1.2	-0.37	33,0	-0.2	33.0	29.3	3.67	8.994		
500.0	500.0	500.0	500.0	1.6	1.6	-0.37	33.0	-0.2	33.0	28.6	4.37	7.540		
600.0	600.0	600.0	600.0	1.9	1.9	-0.37	33.0	-0.2	33.0	27.9	5.08	6.490		
700.0	700,0	700,0	700.0	2.3	2.3	-0.37	33.0	-0.2	33,0	27.2	5,79	5.697		
800.0	800,0	800,0	800.0	2.6	2.6	-0.37	33.0	-0.2	33.0	26.5	6.50	5.077		
900.0	900.0	900.0	900.0	3.0	3.0	-0.37	33.0	-0.2	33.0	25.8	7.20	4.579		
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	-0,37	33.0	-0.2	33.0	25.1	7.91	4.169		
1,100.0	1,100.0	1,100.0	1,100.0	3.7	3.7	-0.37	33.0	-0.2	33.0	24.4	8.62	3.827		
1,200.0	1,200.0	1,200.0	1,200.0	4.1	4.1	-0.37	33.0	-0.2	33.0	23.7	9.32	3.537		
1,300.0	1,300.0	1,300.0	1,300.0	4,4	4.4	-0.37	33.0	-0.2	33.0	22.9	10.03	3.287		
1,400.0	1,400.0	1,400.0	1,400.0	4.8	4.8	-0.37	33.0	-0.2	33.0	22.2	10.74	3.071		
1,500.0	1,500.0	1,500.0	1,500.0	5.1	5.1	-0.37	33.0	-0.2	33.0	21.5	11.45	2.881		
1,600.0	1,600.0	1,600.0	1,600.0	5.5	5.5	-0.37	33.0	-0.2	33.0	20.8	12.15	2.713 CC,	ES	
1,700.0	1,700.0	1,700.0	1,700.0	5.8	5.9	179.95	33,0	-0.2	34.3	21.4	12.84	2.670		

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Anticollision Report

Company:	ConocoPhillips MCBU	Local Co-ordinate Reference:	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS
Project:	Permian Delaware Hz New Mexico	TVD Reference:	GRND + SKID @ 3164.0usft
Reference Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	MD Reference:	GRND + SKID @ 3164.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	STAMPEDE 34 FEDERAL COM 05H - PS	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
<b>Reference Wellbore</b>	Original Hole	Database:	EDM Central Planning
Reference Design:	Design 1	Offset TVD Reference:	Offset Datum

epth usff)         Des (usff)           1,800.0         1           1,900.0         1           2,000.0         1           2,100.0         2           2,200.0         2           2,300.0         2           2,500.0         2           2,600.0         2           2,600.0         2           2,600.0         2           2,900.0         2           3,000.0         2           3,000.0         3           3,400.0         3           3,600.0         3           3,800.0         3           3,900.0         3	epth seft) 1,799.9 1,899.7 1,999.3 2,098.7 2,198.2 2,297.6 2,297.6 2,397.1 2,496.5 2,598.0 2,695.4 2,794.9 2,894.3 3,093.2 3,993.8 3,093.2 3,393.2 3,391.6 3,341.1 3,590.6	Kessured Depth (ust) 1,799,9 1,899,7 1,999,3 2,098,7 2,198,2 2,297,6 2,397,1 2,496,5 2,597,7 2,699,1 2,800,5 2,901,8 3,001,3 3,100,8 3,200,4 3,299,9	Vertical Depth (ueft) 1,799.9 1,899.7 1,999.3 2,098.7 2,198.2 2,297.6 2,397.1 2,496.5 2,597.7 2,699.0 2,800.2 2,901.0 3,000.0 3,009.0	Serri Major Raference (usft) 6.2 6.5 6.8 7.2 7.5 7.8 8.2 8.5 8.9 9.2 9.6 9.9 10.3	0775et (ust) 6.2 6.6 6.9 7.3 7.7 8.0 8.4 8.4 8.7 9.1 9.4 9.7 10.1	Highside Toolfsce (*) 179.96 179.96 179.97 179.98 179.98 179.98 179.98 179.98 179.48 179.48 179.48	Offset Welloc +W-S (ueft) 33.0 33.0 33.0 33.0 33.0 33.0 33.0 33.	+E/-W (ueft) -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2	Dista Between Centree (usft) 38.2 44.8 53.9 64.4 74.8 85.3 95.7 106.2	Between Ellipses (usft) 24.7 30.6 39.0 48.8 58.6 68.3 78.1 87.9	Minknum Separation (ustt) 13.52 14.19 14.87 15.56 16.24 16.92 17.61 18.30	Separation Factor 2,827 3,153 3,624 4,137 4,607 5,038 5,434 5,801	Warning	
1,900.0       1         2,000.0       1         2,100.0       2         2,200.0       2         2,300.0       2         2,300.0       2         2,400.0       2         2,500.0       2         2,600.0       2         2,600.0       2         2,600.0       2         2,600.0       2         2,600.0       2         3,000.0       2         3,100.0       3         3,200.0       3         3,300.0       3         3,500.0       3         3,600.0       3         3,700.0       3         3,800.6       3         3,900.0       3	1,899,7 1,999,3 2,098,7 2,198,2 2,297,6 2,397,1 2,496,5 2,596,0 2,695,4 2,794,9 2,894,3 2,993,8 3,093,2 3,192,7 3,292,1 3,391,6 3,491,1 3,590,6	1,899,7 1,999,3 2,098,7 2,198,2 2,297,6 2,397,1 2,496,5 2,597,7 2,699,1 2,800,5 2,901,8 3,001,3 3,100,8 3,200,4	1,899.7 1,999.3 2,098.7 2,198.2 2,297.6 2,397.1 2,496.5 2,597.7 2,699.0 2,800.2 2,901.0 3,000.0 3,099.0	6.5 6.8 7.2 7.5 7.8 8.2 8.5 8.9 9.2 9.6 9.9	6.6 6.9 7.3 7.7 8.0 8.4 8.7 9.1 9.4 9.7	179.96 179.97 179.97 179.98 179.98 179.98 179.98 179.48 179.48 179.48	33.0 33.0 33.0 33.0 33.0 33.0 33.0 33.0	-0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2	44.8 53.9 64.4 74.8 85.3 95.7 106.2	30,6 39,0 48,8 58,6 68,3 78,1	14.19 14.87 15.56 16.24 16.92 17.61	3,153 3,624 4,137 4,607 5,038 5,434		
1,900.0       1         2,000.0       1         2,100.0       2         2,200.0       2         2,300.0       2         2,300.0       2         2,400.0       2         2,500.0       2         2,600.0       2         2,600.0       2         2,600.0       2         2,600.0       2         2,600.0       2         3,000.0       2         3,100.0       3         3,200.0       3         3,300.0       3         3,500.0       3         3,600.0       3         3,700.0       3         3,800.6       3         3,900.0       3	1,899,7 1,999,3 2,098,7 2,198,2 2,297,6 2,397,1 2,496,5 2,596,0 2,695,4 2,794,9 2,894,3 2,993,8 3,093,2 3,192,7 3,292,1 3,391,6 3,491,1 3,590,6	1,899,7 1,999,3 2,098,7 2,198,2 2,297,6 2,397,1 2,496,5 2,597,7 2,699,1 2,800,5 2,901,8 3,001,3 3,100,8 3,200,4	1,899.7 1,999.3 2,098.7 2,198.2 2,297.6 2,397.1 2,496.5 2,597.7 2,699.0 2,800.2 2,901.0 3,000.0 3,099.0	6.5 6.8 7.2 7.5 7.8 8.2 8.5 8.9 9.2 9.6 9.9	6.6 6.9 7.3 7.7 8.0 8.4 8.7 9.1 9.4 9.7	179.96 179.97 179.97 179.98 179.98 179.98 179.98 179.48 179.48 179.48	33.0 33.0 33.0 33.0 33.0 33.0 33.0 33.0	-0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2 -0.2	44.8 53.9 64.4 74.8 85.3 95.7 106.2	30,6 39,0 48,8 58,6 68,3 78,1	14.19 14.87 15.56 16.24 16.92 17.61	3,153 3,624 4,137 4,607 5,038 5,434		
2,100.0 2 2,200.0 2 2,300.0 2 2,500.0 2 2,500.0 2 2,600.0 2 2,600.0 2 2,600.0 2 2,600.0 2 2,600.0 2 3,000.0 2 3,000.0 3 3,200.0 3 3,500.0 3 3,600.0 3 3,700.0 3 3,600.0 3	2,098.7 2,198.2 2,297.6 2,397.1 2,496.5 2,596.0 2,695.4 2,794.9 2,894.3 3,093.2 3,192.7 3,292.1 3,391.6 3,491.1 3,590.6	2,098.7 2,198.2 2,297.6 2,397.1 2,498.5 2,597.7 2,699.1 2,800.5 2,901.8 3,001.3 3,100.8 3,200.4	2,098.7 2,198.2 2,297.6 2,397.1 2,496.5 2,597.7 2,699.0 2,800.2 2,901.0 3,000.0 3,099.0	7.2 7.5 7.8 8.2 8.5 8.9 9.2 9.6 9.9	7.3 7.7 8.0 8.4 8.7 9.1 9.4 9.7	179.97 179.98 179.98 179.98 179.98 179.98 179.48 178.02	33.0 33.0 33.0 33.0 33.0 32.2 30.0	-0.2 -0.2 -0.2 -0.2 -0.2 -1.2	64.4 74.8 85.3 95.7 106.2	48.8 58.6 68.3 78.1	15.56 16.24 16.92 17.61	4.137 4.607 5.038 5.434		
2,200.0 2 2,300.0 2 2,500.0 2 2,500.0 2 2,600.0 2 2,600.0 2 2,600.0 2 2,600.0 2 2,800.0 2 3,000.0 2 3,000.0 3 3,200.0 3 3,300.0 3 3,600.0 3 3,700.0 3 3,800.0 3 3,800.0 3	2,198.2 2,297.6 2,397.1 2,496.5 2,596.0 2,695.4 2,794.9 2,894.3 3,093.2 3,993.8 3,093.2 3,192.7 3,292.1 3,391.6 3,491.1 3,590.6	2,198.2 2,297.6 2,397.1 2,496.5 2,597.7 2,699.1 2,800.5 2,901.8 3,001.3 3,100.8 3,200.4	2,198.2 2,297.6 2,397.1 2,496.5 2,597.7 2,699.0 2,800.2 2,901.0 3,000.0 3,099.0	7.5 7.8 8.2 8.5 8.9 9.2 9.6 9.9	7.7 8.0 8.4 8.7 9.1 9.4 9.7	179.98 179.98 179.98 179.98 179.98 179.48 178.02	33.0 33.0 33.0 33.0 32.2 30.0	-0.2 -0.2 -0.2 -0.2 -1.2	74.8 85.3 95.7 106.2	58.6 68.3 78.1	16.24 16.92 17.61	4.607 5.038 5.434		
2,300,0         2           2,400,0         2           2,500,0         2           2,600,0         2           2,600,0         2           2,600,0         2           2,600,0         2           2,600,0         2           2,600,0         2           2,600,0         2           3,000,0         2           3,100,0         3           3,200,0         3           3,400,0         3           3,600,0         3           3,700,0         3           3,800,0         3           3,900,0         3	2,297.6 2,397.1 2,496.5 2,596.0 2,695.4 2,794.9 2,894.3 3,093.2 3,192.7 3,292.1 3,391.6 3,491.1 3,590.6	2,297,6 2,397,1 2,496,5 2,597,7 2,699,1 2,800,5 2,901,8 3,001,3 3,100,8 3,200,4	2,297.6 2,397.1 2,496.5 2,597.7 2,699.0 2,800.2 2,901.0 3,000.0 3,099.0	7.8 8.2 8.5 8.9 9.2 9.6 9.9	8.0 8.4 8.7 9.1 9.4 9.7	179.98 179.98 179.98 179.48 178.02	33,0 33.0 33.0 32.2 30.0	-0.2 -0.2 -0.2 -1.2	85,3 95.7 106.2	68.3 78.1	16.92 17.61	5.038 5.434		
2,400.0 2 2,500.0 2 2,600.0 2 2,700.0 2 2,800.0 2 2,800.0 2 3,000.0 2 3,100.0 3 3,200.0 3 3,200.0 3 3,500.0 3 3,600.0 3 3,700.0 3 3,800.0 3	2,397.1 2,496.5 2,596.0 2,695.4 2,794.9 2,894.3 2,993.8 3,093.2 3,192.7 3,292.1 3,391.6 3,491.1 3,590.6	2,397.1 2,496.5 2,597.7 2,699.1 2,800.5 2,901.8 3,001.3 3,100.8 3,200.4	2,397.1 2,496.5 2,597.7 2,699.0 2,800.2 2,901.0 3,000.0 3,099.0	8.2 8.5 9.9 9.2 9.6 9.9	8.4 8.7 9.1 9.4 9.7	179.98 179.98 179.48 178.02	33.0 33.0 32.2 30.0	-0.2 -0.2 -1.2	95.7 106.2	78.1	17.61	5.434		
2,500.0 2 2,600.0 2 2,700.0 2 2,800.0 2 2,800.0 2 3,000.0 2 3,100.0 3 3,200.0 3 3,200.0 3 3,500.0 3 3,500.0 3 3,600.0 3 3,700.0 3 3,800.0 3	2,496.5 2,596.0 2,695.4 2,794.9 2,894.3 2,993.8 3,093.2 3,192.7 3,292.1 3,391.6 3,491.1 3,590.6	2,496.5 2,597.7 2,699.1 2,800.5 2,901.8 3,001.3 3,100.8 3,200.4	2,496.5 2,597.7 2,699.0 2,800.2 2,901.0 3,000.0 3,099.0	8.5 8.9 9.2 9.6 9.9	8.7 9.1 9.4 9.7	179.98 179.48 178.02	33.0 32.2 30.0	-0.2 -1.2	106.2					
2,600.0 2 2,700.0 2 2,800.0 2 2,800.0 2 3,000.0 2 3,100.0 3 3,200.0 3 3,200.0 3 3,300.0 3 3,500.0 3 3,600.0 3 3,700.0 3 3,600.0 3 3,800.0 3	2,596.0 2,695.4 2,794.9 2,894.3 2,993.8 3,093.2 3,192.7 3,292.1 3,391.6 3,491.1 3,590.6	2,597.7 2,699.1 2,800.5 2,901.8 3,001.3 3,100.8 3,200.4	2,597.7 2,699.0 2,800.2 2,901.0 3,000.0 3,099.0	8.9 9.2 9.6 9.9	9.1 9.4 9.7	179.48 178.02	32.2 30.0	-1.2		87.9	18.30	5.801		
2,700.0         2           2,600.0         2           3,000,0         2           3,100.0         3           3,200.0         3           3,300.0         3           3,400.0         3           3,500.0         3           3,600.0         3           3,600.0         3           3,700.0         3           3,600.0         3           3,600.0         3           3,600.0         3	2,695.4 2,794.9 2,894.3 2,993.8 3,093.2 3,192.7 3,292.1 3,391.6 3,491.1 3,590.6	2,699.1 2,800.5 2,901.8 3,001.3 3,100.8 3,200.4	2,699.0 2,800.2 2,901.0 3,000.0 3,099.0	9.2 9.6 9.9	9.4 9.7	178.02	30.0				10,00			
2,800.0 2 2,900.0 2 3,000.0 2 3,100.0 3 3,200.0 3 3,200.0 3 3,300.0 3 3,500.0 3 3,600.0 3 3,700.0 3 3,800.0 3 3,800.0 3	2,794.9 2,894.3 2,993.8 3,093.2 3,192.7 3,292.1 3,391.6 3,491.1 3,590.6	2,800.5 2,901.8 3,001.3 3,100.8 3,200.4	2,800.2 2,901.0 3,000.0 3,099.0	9.6 9.9	9.7				115.9	96.9	18,99	6.105		
2,900.0 2 3,000.0 2 3,100.0 3 3,200.0 3 3,200.0 3 3,300.0 3 3,500.0 3 3,600.0 3 3,700.0 3 3,600.0 3 3,600.0 3	2,894.3 2,993.8 3,093.2 3,192.7 3,292.1 3,391.6 3,491.1 3,590.6	2,901.8 3,001.3 3,100.8 3,200.4	2,901.0 3,000.0 3,099.0	9,9		175.75		-4.4	124.2	104.6	19.66	6.319		
3,000,0         2           3,100,0         3           3,200,0         3           3,200,0         3           3,400,0         3           3,500,0         3           3,500,0         3           3,600,0         3           3,600,0         3           3,700,0         3           3,800,0         3           3,900,0         3	2,993.8 3,093.2 3,192.7 3,292.1 3,391.6 3,491.1 3,590.6	3,001,3 3,100.8 3,200.4	3,000.0 3,099.0		10.1		26.1	-9.8	131.2	110.9	20.33	6.453		
3,100.0 3 3,200.0 3 3,300.0 3 3,400.0 3 3,500.0 3 3,600.0 3 3,700.0 3 3,800.0 3 3,800.0 3	3,093.2 3,192.7 3,292.1 3,391.6 3,491.1 3,590.6	3,100.8 3,200.4	3,099.0	10.3		172.73	20.8	-17.4	137.1	116.1	21.01	6.527		
3,200.0 3 3,300.0 3 3,400.0 3 3,500.0 3 3,500.0 3 3,600.0 3 3,700.0 3 3,800.0 3 3,800.0 3	3,192.7 3,292.1 3,391.6 3,491.1 3,590.6	3,200.4			10.4	169.56	14.7	-25.9	142.8	121.2	21.69	6,585		
3,300.0 3 3,400.0 3 3,500.0 3 3,600.0 3 3,600.0 3 3,700.0 3 3,800.0 3 3,800.0 3	3,292.1 3,391.6 3,491.1 3,590.6			10,6	10.8	166.63	8.7	-34.4	149.0	126.6	22,37	6.658		
3,400.0 3 3,500.0 3 3,600.0 3 3,700.0 3 3,800.0 3 3,800.0 3	3,391.6 3,491.1 3,590.6	0,200,0	3,198.0 3,297.0	11.0 11.4	11.1 11.4	163.95 161.48	2.7 -3.3	-42.9 -51.4	155.4 162.2	132.4 138.5	23.06 23.75	6.741 6.831		
3,500.0 3 3,600.0 3 3,700.0 3 3,800.0 3 3,800.0 3	3,491.1 3,590.6													
3,600.0 3 3,700.0 3 3,800.0 3 3,900.0 3	3,590.6	3,399.5	3,396.0	11.7	11.8	159.21	-9.3	-59.9	169.3	144.9	24,44	6.928		
3,700.0 3 3,800.0 3 3,900.0 3		3,499.0	3,495.0	12.1	12.1	157,13	-15.3	-68.4	176.6	151.5	25.13	7.028		
3,800.0 3 3,900.0 3		3,598.6	3,594.0	12.4	12.5	155.12	-21.4	-76.9	183.2	157.4	25.83	7.095		
3,900.0 3	3,690.4 3,790.3	3,698.2 3,797.8	3,693.1 3,792.1	12.8 13.2	12.8 13.2	152.89 150.38	-27.4 -33.4	-85.4 -93.9	187.7 190.3	161.2 163.0	26.52 27.21	7.079 6.991		
30881 3	3,890.3	3,897.3	3,891.1	13.5	13.5	147.51	-39,4	-102.3	190.9	163.0	27.91	6.842		
	3,978.4	3,985.0	3,978.3	13.8	13.8	144.79	-44.7	-109.8	190.9	162.4	28.51	6.695		
	3,990.3	3,996.8	3,990.0	13.8	13.9	-35.92	-45.4	-110.8	190.8	162.2	28.59	6.672		
	4,090.3 4,190.3	4,096.2 4,195.7	4,089.0 4,187.9	14.0 14.0	14.1 14.1	-39.04 -42.13	-51.4 -57.4	-119.3 -127.8	191.2 192.1	162.2 163.2	28.94 28.97	6.605 6.632		
	4,290.3	4,295.1	4,286.8	14.0	14.1	-45.19	-63.4	-136.3	193.6	164.6	29.01	6.676		
	4,390.3 4,490.3	4,394.6 4,494.0	4,385.7 4,484.6	14.1 14.1	14.1	-48.19	-69.5 -75.5	-144.8 -153.2	195.7 198.3	166.7 169.2	29.06 29,14	6.734 6.806		
	4,590.3	4,593.5	4,583.5	14.1	14.2 14.2	-51.12 -53.97	-75.5	-161,7	201.4	172.2	29,14	6.891		
	4,690.3	4,693.0	4,682.4	14,2	14.3	-56,72	-87.5	-170.2	205.0	175.7	29.34	6.988		
1,800.0 4	4,790.3	4,792.4	4,781.3	14.3	14.4	-59.38	-93.5	-178.7	209.1	179.6	29.47	7.096		
	4,890.3	4,891.9	4,880.2	14.3	14.4	-61.93	-99.5	-187.2	213.6	184.0	29.61	7.213		
	4,990.3	4,991.3	4,979.1	14.4	14.5	-64.37	-105.5	-195.6	218.5	188.7	29.77	7.339		
	5,090.3	5,090.8	5,078.0	14.5	14.6	-66.70	-111.5	-204.1	223.8	193.8	29,95	7.472		
	5,190.3	5,190.2	5,176.9	14.6	14.7	-68.92	-117.5	-212.6	229.4	199.3	30.14	7.611		
5,300.0 5,	5,290.3	5,289.7	5,275.8	14.7	14.8	-71.03	-123.6	-221.1	235.4	205.0	30.35	7.755		
	5,390.3	5,389.1	5,374.7	14.8	15.0	-73.04	-129.6	-229.6	241.6	211.1	30.58	7.903		
	5,490.3	5,488.6	5,473.7	15.0	15.1	-74.94	-135.6	-238,1	248.2	217.4	30.82	8.054		
5,600.0 5,	5,590.3	5,588.0	5,572.6	15,1	15.2	-76.75	-141.6	-246.5	255.0	223.9	31.07	8.207		
5,700.0 5,	5,690.3	5,687,5	5,671,5	15,2	15,4	-78,45	-147.6	-255.0	262.1	230.7	31.34	8,361		
5,800.0 5,	5,790.3	5,786.9	5,770.4	15.4	15.5	-80.07	-153.8	~263.5	269.3	237,7	31.63	8.515		
5,900.0 5,	5,890.3	5,886.4	5,869.3	15.5	15.7	-81.61	-159.6	-272.0	278.8	244.9	31.93	8.670		
6,000.0 5,	5,990,3	5,985.8	5,968.2	15.7	15.9	-83.06	-165.6	-280.5	284.5	252.2	32.24	8.824		
5,100.0 6,	6,090,3	6,085.3	6,067.1	15.B	16.0	-84.43	-171.6	-289.0	292.3	259.8	32.57	8.976		
6,200.0 6,	6,190.3	6,184.7	6,166.0	16.0	16.2	-85.73	-177.6	-297.4	300.3	267.4	32.90	9.127		
5,300.0 6,	6,290.3	6,284.2	6,264.9	16.2	16.4	-86.97	-183.7	-305.9	308.5	275.2	33,25	9.276		
6,400.0 6,	6,390.3	8,385.8	6,366.0	16.4	16.6	-88.15	-189.7	-314.5	316.6	283.0	33.63	9.415		
6,500.0 6,	6,490.3	6,492.7	6,472.5	18.5	16.8	-89.09	-194.8	-321.6	323.2	289.2	34.05	9.493		
	6,590.3	6,599.9	6,579.6	16.7	17.0	-89.69	-198.1	-326.4	327 <i>.</i> 6	293.2	34.46	9.506		
3,700.0 6,	6,690.3	6,707.4	6,687.0	16.9	17.2	-89,97	-199.8	-328.6	329.7	294.9	34.87	9.456		_

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Anticollision Report

Company:	ConocoPhillips MCBU	Local Co-ordinate Reference:	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS
Project:	Permian Delaware Hz New Mexico	TVD Reference:	GRND + SKID @ 3164.0usft
Reference Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	MD Reference:	GRND + SKID @ 3164.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	STAMPEDE 34 FEDERAL COM 05H - PS	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
<b>Reference Wellbore</b>	Original Hole	Database:	EDM Central Planning
Reference Design:	Design 1	Offset TVD Reference:	Offset Datum

Offset De	sign	STAMP	PEDE 34 F	ED DUAL P	AD 2 (5H	6H) - PS -	STAMPEDE	34 FEDER	AL COM O	6H - PS - 0	Original		Offset Site Error:	0.0 usft
Survey Prog	irum: 0-M	WD+IFR1, 400	00-MWD+IFR	1, 11000-MWD	HFR1	,							Offset Well Error:	0.0 usft
Refer		Offs		Semi Major Reference		Ulabelda	<b>Cille</b> 147-114	- Castr-	Dist		tila barrow	Ramorettee	·	
Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Weilbor +N/-S	+E/JW	Between Centres	Between Ellipses	Mintmum Separation	Separation Factor	Warning	
(usft)	(usfi)	(ueft)	(usfi)	(uaft)	(usit)	ሮን	(ueft)	(uett)	(usfi)	(ueit)	(usft)			
6,800.0	6,790,3	6,810.6	6,790,3	17,1	17.4	-90.00	-199.9	-328,9	329.9	294.7	35.26	9.358		
6,900.0	6,890.3	6,910.6	6,890.3	17.3	17.6	-90.00	-199.9	-328,9	329.9	294,3	35,65	9.255		
7,000.0	6,990.3	7,010.6	6,990.3	17.6	17.8	-90.00	-199.9	-328.9	329.9	293.9	36.05	9.152		
7,100.0	7,090.3 7,190.3	7,110.6 7,210.6	7,090,3 7,190,3	17.8 18.0	18.0 18.2	-90.00 -90.00	-199.9 -199.9	-328.9 -328.9	329.9 329.9	293.5 293.1	36.46 36.88	9.049 8.945		
1,200,0	7,190.0	7,210.0	7,180.5	10.0	10.2	-50.00	-109.9	-320.3	323.5	203.1	30.00	0.940		
7,300.0	7,290.3	7,310.6	7,290.3	18.2	18.4	-90.00	-199.9	-328.9	329.9	292.6	37.31	8.842		
7,400.0	7,390.3	7,410.6	7,390.3	18.5	18.6	-90.00	-199.9	-328.9	329.9	292.2	37.75	8.739		
7,500.0	7,490.3	7,510.6	7,490.3	18.7	18.9	-90.00	-199.9	-328.9	329.9	291.7	38.20	8.637		
7,600.0	7,590.3 7,690.3	7,610.6 7,710.6	7,590.3 7,690.3	18.9 19.2	19.1 19.3	-90.00 -90.00	-199.9 -199.9	-328.9 -328.9	329.9 329.9	291.3 290.8	38.66 39.12	8.535 8.434		
	1,000.0	1,1 10.0	7,000.0	10.4	10.0	-30.00	100.0	020.0	020.0	200.0	00.12	0.101	•	
7,800.0	7,790.3	7,810.6	7,790.3	19.4	19.5	-90.00	-199.9	-328.9	329.9	290.3	39.59	8.334		
7,900.0	7,890.3	7,910.6	7,890.3	19.7	19.8	-90.00	-199.9	-328,9	329.9	289.9	40.07	8.235		
8,000.0	7,990.3	8,010.6	7,990.3	19.9	20.0	-90.00	-199.9	-328,9	329,9	289.4	40.55	8,136		
8,100.0 8,200.0	8,090.3 8,190.3	8,110.6 8,210.6	8,090.3 8,190,3	20.2 20.4	20.3 20.5	-90.00 -90.00	-199.9 -199.9	-328.9 -328.9	329.9 329.9	288.9 288.4	41.04 41.54	8.039 7.943		
0,200.0	0,100.0	0,210.0	0,100,0	20.4	20.0	-00,00	-100.0	-020.0	01.0.0	200,4	-1.0-	1.040		
8,300,0	8,290,3	8,310,6	8,290,3	20,7	20,8	-90,00	-199,9	-328,9	329,9	287,9	42,04	7,847		
8,400.0	8,390.3	8,410.6	8,390.3	21,0	21.0	-90.00	-199.9	-328.9	329.9	287.4	42,55	7,753		
8,500.0	8,490.3	8,510.6	8,490.3	21.2	21.3	-90.00	~199.9	-328.9	329.9	286.9	43.07	7.660		
8,600.0 8,700.0	8,590.3 8,690.3	8,610.6 8,710.6	8,590.3 8,690.3	21.5 21.8	21,5 21,8	-90.00 -90.00	-19 <del>9</del> .9 -199.9	-328.9 -328.9	329.9 329.9	286.3 285.8	43.59 44.12	7.569		
0,700.0	0,050.5	0,710.0	0,050.5	21.5	21.0	-50.00	-185.5	-520.5	525.5	200.0	44.1Z	. 1.413		
8,800.0	8,790.3	8,810.6	8,790.3	22.1	22.0	-90.00	-199.9	-328.9	329.9	285.3	44.65	7.390		
8,900.0	8,890.3	8,910.6	8,890.3	22.3	22.3	-90.00	-199.9	-328.9	329.9	284.8	45.19	7.302		
9,000.0	8,990.3	9,010.6	8,990.3	22.6	22.6	-90.00	-199.9	-328.9	329.9	284.2	45.73	7.215		
9,100.0	9,090.3	9,110.6	9,090.3	22.9	22.8	-90.00	-199.9	-328.9	329.9	283.7	46.27	7.130		
9,200.0	9,190.3	9,210.6	9,190.3	23.2	23.1	-90.00	-199.9	-328.9	329.9	283.1	46.82	7.046		
9,300.0	9,290.3	9,310.6	9,290.3	23,5	23.4	-90.00	-199.9	-328.9	329,9	282,6	47.38	6.964		
9,400.0	9,390.3	9,410.6	9,390.3	23.8	23.7	-90.00	-199.9	-328.9	329,9	282.0	47.94	6.883		
9,500.0	9,490.3	9,510.6	9,490.3	24.0	23.9	-90.00	-199.9	-328.9	329,9	281.4	48.50	6.803		
9,600.0	9,590.3 9,690.3	9,610.6 9,710.6	9,590.3 9,690.3	24.3 24.6	24.2 24.5	-90.00 -90.00	-199.9 -199.9	-328.9	329.9	280.9	49.07	6.724		
3,100.0	9,090.3	9,110.0	9,090.5	24.0	24,0	-90.00	-199.9	-328.9	329,9	280.3	49,64	6.647		
9,800.0	9,790,3	9,810.6	9,790.3	24.9	24.8	-90.00	-199,9	-328.9	329.9	279.7	50,21	6.571		
9,900.0	9,890.3	9,910.6	9,890.3	25.2	25.1	-90.00	-199.9	-328.9	329.9	279.2	50.79	6.496		
10,000.0	9,990.3	10,010.6	9,990.3	25.5	25.4	-90.00	-199.9	-328.9	329.9	278.6	51.37	6.423		
10,100.0	10,090.3 10,190.3	10,110.6	10,090.3 10,190.3	25.8 26.1	25.7 26.0	-90.00 -90.00	-199.9 -199.9	-328.9 -328.9	329.9 329.9	278.0 277.4	51.95 52.54	6.351 6.280		
10,200.0	10,130.3	10,210.6	10,190.0	20.1	20.0	-90,00	-139.3	-320,3	323.3	277.4	02.04	0.200		
10,300.0	10,290.3	10,310.6	10,290.3	26.4	26.3	-90.00	-199.9	-328.9	329.9	276,8	53.13	6.210		
10,400.0	10,390.3	10,410.6	10,390.3	26.7	26.6	-90.00	-199.9	-328.9	329.9	276.2	53.72	6.142		
10,500.0	10,490.3	10,510.6	10,490.3	27.0	26.9	-90.00	-199.9	-328.9	329.9	275.6	54.32	6.074		
10,600.0	10,590.3 10,690.3	10,810.6 10,710.6	10,590.3 10,690.3	27.3 27.7	27.1 27.5	-90.00 -90.00	-199.9 -199.9	-328.9 -328.9	329.9 329.9	275.0 274.4	54.92 55.52	6.008 5.943		
10,700.0	10,030.3	10,710.0	10,000.0	21.1	21.3	-30.00	-199,0	-920,3	523.3	£17.4	40.02	4.540		
10,800.0	10,790.3	10,810.6	10,790.3	28.0	27.8	-90.00	-199,9	-328,9	329,9	273.8	56.12	5.879		
10,900.0	10,890.3	10,910.6	10,890.3	28.3	28.1	-90.00	-199.9	~328.9	329.9	273.2	56.73	5.816		
10,962.2	10,952.4	10,972.8	10,952.4	28.5	28.2	-90,13	-199.5	-328.9	329.9	272.8	57.10	5.778		
11,000.0	10,989.9	11,010,6	10,990,1	28.6	28,4	-90,31	-196.7	-328.9	329.9	272.6	57.31	5.757		
11,100.0	11,086.9	11,111.2	11,088.6	28.7	28.5	-91.01	-176.7	-329.0	330.0	272.6	57.43	5.745		
11,200.0	11,178.3	11,212.6	11,182.3	28.8	28.5	-91.51	-138.5	-329.2	330.0	272.6	57.43	5.747		
11,300.0	11,261.2	11,314.4	11,267.7	28.8	28,5	-91.81	-83.4	-329.5	330,1	272,7	57.44	5.747		
11,400.0	11,333.3	11,416.4	11,341.4	28.8	28.5	- <del>9</del> 1.88	-13.1	-329.9	330.1	272.6	57.47	5.744		
11,500.0	11,392.2	11,518.3	11,400.8	28.9	28.6	-91.72	69.6	-330.4	330.1	272.5	57.56	5.734		
11,600.0	11,436.3	11,620.0	11,443.6	28.9	28.6	-91.34	161.6	-330.9	330.0	272.3	57.71	5.718		

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

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Anticollision Report

Company:	ConocoPhillips MCBU	Local Co-ordinate Reference:	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS
Project:	Permian Delaware Hz New Mexico	TVD Reference:	GRND + SKID @ 3164.0usft
Reference Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	MD Reference:	GRND + SKID @ 3164.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	STAMPEDE 34 FEDERAL COM 05H - PS	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
<b>Reference Wellbore</b>	Original Hole	Database:	EDM Central Planning
Reference Design:	Design 1	Offset TVD Reference:	Offset Datum

rvey Prog	ram: 0-M	WD+IFR1, 400	0-MWD+IFR	1, 11000-MWD4	HFR1								Offset Well Error:	0.0
Refer		Offic		Semi Major	Axls				Dist	Ince				
Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellboi +N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(usft)	(usft)	(ueft)	(usft)	(usit)	(usft)	, <b>m</b>	(JSA)	(ueit)	(usit)	(ueft)	(usft)			
11,700,0	11,464.1	11,721.0	11,468.4	29.0	28.7	-90.75	259,4	-331.4	330.0	272.0	57.93	5,696		
11,800.0	11,474.9	11,821.4	11,475.0	29,1	28,7	-90.02	359.4	-332.0	329,9	271.7	58.22	5,667		
11,844.2	11,475.6	11,865,6	11,475.0	29,1	28.8	-89.90	403.6	-332.2	329,9	271.6	58.36	5,653		
11,900.0	11,475.0	11,921.4	11,475.0	29.2	28.8	-90.00	459.4	-332.5	329.9	271.4	58.55	5.635		
12,000.0	11,475.0	12,021.4	11,475.0	29.4	29.0	-90.00	559.4	-333.1	329.9	271.0	58.96	5.596		
12,100.0	11,475.0	12,121.4	11,475.0	29.7	29.3	-90.00	659.4	-333.6	329. <del>9</del>	270.5	59.42	5.552		
12,200.0	11,475.0	12,221.4	11,475.0	29.9	29.6	-90.00	759.4	-334.2	329.9	270.0	59.95	5.504		
12,300.0	11,475.0	12,321.4	11,475.0	30.2	29.9	-90.00	859.4	-334.8	329. <del>9</del>	269.4	60.53	5.450		
12,400.0	11,475.0	12,421.4	11,475.0	30.5	30.2	-90.00	959.4	-335,3	329.9	268.8	61.18	5.393		
12,500.0	11,475.0	12,521.4	11,475.0	30.9	30.5	-90.00	1,059.4	-335.9	329.9	268.1	61.88	5.332		
12,600.0	11,475.0	12,621.4	11,475.0	31.3	30.9	- <del>9</del> 0.00	1,159.4	-336.4	329.9	267.3	62.64	5.267		
12,700.0	11,475.0	12,721.4	11,475.0	31.7	31.3	-90.00	1,259.4	-337.0	329.9	266.5	63.45	5.200		
2,800.0	11,475.0	12,821.4	11,475.0	32,1	31,8	-90.00	1,359.4	-337.5	329,9	265.6	64,30	5.131		
2,900.0	11,475.0	12,921.4	11,475.0	32.6	32.2	-90.00	1,459.4	-338.1	329,9	264.7	65.21	5.059		
3,000.0	11,475.0	13,021.4	11,475.0	33,1	32.7	-90.00	1,559.4	-338.7	329.9	263.8	66.17	4.987		
3,100.0	11,475.0	13,121.4	11,475.0	33.6	33,2	-90.00	1,659.4	-339.2	329,9	262.8	67,16	4.912		
3,200.0	11,475.0	13,221.4	11,475,0	34.1	33.8	-90,00	1,759.4	-339.8	329.9	261,7	68.20	4.837		
3,300.0	11,475.0	13,321.4	11,475.0	34.6	34.3	~90.00	1,859.4	-340.3	329.9	260.6	69.28	4.762		
3,400.0	11,475.0	13,421.4	11,475.0	35.2	34.9	-90,00	1,959.4	-340,9	329.9	259,5	70.40	4.686		
3,500.0	11,475.0	13,521.4	11,475.0	35.8	35.5	-90.00	2,059.4	-341.4	329.9	258.4	71.56	4.611		
3,600.0	11,475.0	13,621.4	11,475.0	36.4	36.1	-90.00	2,159.4	-342.0	329.9	257.2	72.75	4.535		
3,700.0	11,475.0	13,721.4	11,475.0	37.0	36,7	-90.00	2,259.4	-342.6	329,9	256.0	73.97	4,460		
3,800.0	11,475.0	13,821.4	11,475.0	37.6	37.3	-90.00	2,359.4	-343.1	329.9	254.7	75.23	4.386		
3,900.0	11,475.0	13,921.4	11,475.0	38.3	38.0	-90.00	2,459.4	-343.7	329,9	253.4	76.51	4.312		
4,000.0	11,475.0	14,021.4	11,475.0	39.0	38.6	-90.00	2,559.4	-344.2	329.9	252.1	77.83	4.239		
4,100.0	11,475.0	14,121,4	11,475.0	39,6	39.3	-90.00	2,659.4	-344.8	329,9	250.8	79,17	4.167		
4,200.0	11,475.0	14,221.4	11,475.0	40.3	40.0	-90.00	2,759.4	-345.3	329.9	249.4	80,54	4.097		
4,300.0	11,475.0	14,321,4	11,475.0	41.0	40.7	-90.00	2,859.4	-345.9	329.9	248.0	81.93	4.027		
4,400.0	11,475.0	14,421.4	11,475.0	41.7	41.5	-90.00	2,959.4	-346.4	329.9	246.6	83,34	3.959		
4,500.0	11,475.0	14,521.4	11,475.0	42.5	42.2	-90.00	3,059.4	-347.0	329.9	245.2	84.78	3.892		
4,600.0	11,475.0	14,621.4	11,475.0	43.2	42.9	-90.00	3,159.4	-347.6	329.9	243,7	86.23	3.826		
4,700.0	11,475.0	14,721.4	11,475.0	44.0	43.7	-90.00	3,259.4	-348.1	329.9	242.2	87,71	3,762		
4,800.0	11,475.0	14,821.4	11,475.0	44.7	44.4	-90.00	3,359.4	-348.7	329.9	240,7	89,20	3,699		
4,900.0	11,475.0	14,921.4	11,475.0	45.5	45.2	-90.00	3,459.4	-349.2	329.9	239.2	90.72	3.637		
5,000.0	11,475.0	15,021.4	11,475.0	46.2	46.0	-90.00	3,559.4	-349.8	329.9	237.7	92.25	3.577		
5,100.0	11,475.0	15,121.4	11,475.0	47.0	46.8	-90.00	3,659.4	-350,3	329.9	236.1	93.79	3.518		
5,200.0	11,475.0	15,221.4	11,475.0	47.8	47.6	-90.00	3,759.4	-350.9	329.9	234.6	95.36	3.460		
5,300.0	11,475.0	15,321.4	11,475.0	48.6	48.4	-90.00	3,859.3	-351,5	329.9	233.0	96.93	3.404		
5,400.0	11,475.0	15,421.4	11,475.0	49.4	49.2	-90,00	3,959.3	-352.0	329.9	231,4	98.52	3.349		
5,500.0	11,475.0	15,521.4	11,475.0	50.2	50.0	-90.00	4,059.3	-352,6	329.9	229,8	100.12	3.295		
5,600.0	11,475.0	15,621.4	11,475.0	51,0	50.8	-90.00	4,159.3	-353.1	329.9	228.2	101.74	3.243		
5,700.0	11,475.0	15,721.4	11,475.0	51,9	51,6	-90.00	4,259.3	-353.7	329.9	226.6	103.37	3.192		
5,800.0	11,475.0	15,821.4	11,475.0	52.7	52.5	-90.00	4,359.3	-354.2	329.9	224.9	105.01	3,142		
5,900.0	11,475.0	15,921.4	11,475.0	53,5	53,3	-90,00	4,459,3	-354.8	329,9	223.3	106.65	3,093		
6,000.0	11,475.0	16,021,4	11,475.0	54,4	54.1	-90.00	4,559.3	-355.4	329,9	221.6	108.32	3,046		
6,100.0	11,475.0	16,121.4	11,475.0	55.2	55.0	-90.00	4,659.3	-355.9	329,9	219.9	109.98	3.000		
				E0 4	F# 0	00.00	1 750 9	_956 F	900 0	548 9	444 BP	2 055		
6,200.0 6,300.0	11,475.0 11,475.0	16,221.4 16,321.4	11,475.0 11,475.0	56.1 56.9	55.8 56.7	-90.00 -90.00	4,759.3 4,859.3	-356.5 -357.0	329.9 329.9	218.3 216.6	111.66 113.35	2.955 2.911		
6,300.0 6,400.0	11,475.0 11,475.0	16,321.4	11,475.0	57.8	56.7 57.6	-90.00	4,859.3	-357.6	329.9	210.0	115.05	2.868		
6,500.0	11,475.0	16,521.4	11,475.0	57.6	57.6 58.4	-90.00	4,959.3 5,059.3	-358.1	329.9	214.9	116.75	2.826		
6,600.0	11,475.0	16,621.4	11,475.0	59.5	59.3	-90.00	5,159.3	-358.7	329.9	211.5	118.47	2.785		

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Anticollision Report

Company:	ConocoPhillips MCBU	Local Co-ordinate Reference:	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS
Project:	Permian Delaware Hz New Mexico	TVD Reference:	GRND + SKID @ 3164.0usft
Reference Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	MD Reference:	GRND + SKID @ 3164.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	STAMPEDE 34 FEDERAL COM 05H - PS	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
<b>Reference Wellbore</b>	Original Hole	Database:	EDM Central Planning
Reference Design:	Design 1	Offset TVD Reference:	Offset Datum

Offset De	sign	STAMP	EDE 34 F	ED DUAL P	AD 2 (5H	, 6H) - PS -	STAMPEDE	34 FEDER	AL COM 06	3H - PS - (	Driginal		Offset Site Error:	0.0 usft
Survey Prog	ram: 0-M	WD+IFR1, 400	0-MWD+IFR	1, 11000-MWD+	IFR1								Offset Well Error:	0.0 usft
Rafer		Offer	-	Semi Major	Axia				Cieta	ince				
Measured Depth (usit)	Vertical Depth (usft)	Measured Depth (usit)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (")	Offset Wellbor +NV-S (usft)	e Centre +E/-₩ (usft)	Between Contres (usft)	Between Ellipses (ueft)	Minimum Separation (usft)	Separation Factor	Warning	
				• •			•••							
16,700.0	11,475,0	16,721,4	11,475,0	60,4	60,2	-90.00	5,259.3	-359.3	329,9	209,7	120,19	2,745		
16,800,0	11,475.0	16,821.4	11,475.0	61.3	61.0	-90.00	5,359.3	-359,8	329.9	208.0	121.92	2.706		
16,900.0	11,475.0	16,921.4	11,475.0	62.1	61.9	-90,00	5,459.3	-360.4	329.9	206.3	123.65	2.668		
17,000.0	11,475.0	17,021.4	11,475.0	63.0	62.8	-90.00	5,559.3	-360.9	329.9	204.5	125.39	2.631		
17,100.0	11,475.0	17,121.4	11,475.0	63.9	63.7	-90.00	5,659.3	-361.5	329.9	202,8	127.14	2.595		
17,200.0	11,475.0	17,221.4	11,475.0	64.8	64.6	-90.00	5,759.3	-362.0	329.9	201.0	128.89	2.560		
17,300.0	11,475.0	17,321.4	11,475.0	65.7	65.5	-90.00	5,859.3	-362.6	329.9	199.3	130.65	2.525		
17,400.0	11,475.0	17,421.4	11,475.0	66.6	66.4	-90.00	5,959.3	-363.2	329.9	197.5	132.42	2.492 (	Caution - Monitor Closely	
17,500.0	11,475.0	17,521.4	11,475.0	67.5	67.3	-90.00	6,059.3	-363.7	329,9	195.7	134.19	2.459 0	Caution - Monitor Closely	
17,600.0	11,475.0	17,621.4	11,475.0	68.4	68.2	-90.00	6,159.3	-364.3	329.9	194.0	135.96	2.427 (	Caution - Monitor Closely	
17,700.0	11,475.0	17,721.4	11,475.0	69.3	69.1	-90,00	6,259.3	-364,8	329.9	192.2	137.74	2,395 (	Caution - Monitor Closely	
17,800.0	11,475.0	17,821.4	11,475.0	70.2	70.0	-90,00	6,359.3	~365.4	329,9	190.4	139.53	2,365 (	Caution - Monitor Closely	
17,900.0	11,475.0	17,921.4	11,475,0	71.1	70,9	-90,00	6,459.3	-365,9	329,9	188.6	141.32	2.335 (	Caution - Monitor Closely	
18,000.0	11,475.0	18,021.4	11,475.0	72.0	71.8	-90,00	6,559.3	-366.5	329,9	186.8	143,11	2,305 (	Caution - Monitor Closely	
18,100.0	11,475.0	18,121.4	11,475.0	72.9	72.7	-90.00	6,659.3	-367.0	329.9	185.0	144.91	2.277 (	Caution - Monitor Closely	
18,200,0	11,475,0	18,221,4	11,475,0	73,8	73,6	-90,00	6,759,3	-367,6	329,9	183,2	146,72	2,249 (	Caution - Monitor Closely	
18,300.0	11,475,0	18,321.4	11,475.0	74.7	74,6	-90.00	6,859.3	-368.2	329.9	181.4	148.52		Caution - Monitor Closely	
18,400.0	11.475.0	18,421,4	11,475.0	75.6	75.5	-90.00	6,959.3	-368.7	329,9	179.6	150.33		Caution - Monitor Closely	
18,500.0	11,475.0	18,521,4	11,475.0	76,6	76.4	-90.00	7,059.3	-369.3	329,9	177.8	152.15		Caution - Monitor Closely	
18,600.0	11,475.0	18,621.4	11,475.0	77.5	77,3	-90.00	7,159.3	-369.8	329.9	176.0	153.96		Caution - Monitor Closely	
18.633.8	11,475.0	18,655,1	11,475.0	77.8	77.6	-90.00	7,193.1	-370.0	329.9	175.3	154.58	2.134 (	Caution - Monitor Closely	
18.643.2	11,475.0	18,664,3	11,475,0	77,9	71.7	-90.00	7,202.2	-370.1	329.9	175.2	154,75		Caution - Monitor Closely, Si	F

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Anticollision Report

Company:	ConocoPhillips MCBU	Local Co-ordinate Reference:	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS
Project:	Permian Delaware Hz New Mexico	TVD Reference:	GRND + SKID @ 3164.0usft
Reference Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	MD Reference:	GRND + SKID @ 3164.0usft
Site Error:	0.0 usft	North Reference:	Grid
<b>Reference Well:</b>	STAMPEDE 34 FEDERAL COM 05H - PS	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
<b>Reference Weilbore</b>	Original Hole	Database:	EDM Central Planning
Reference Design:	Design 1	Offset TVD Reference:	Offset Datum

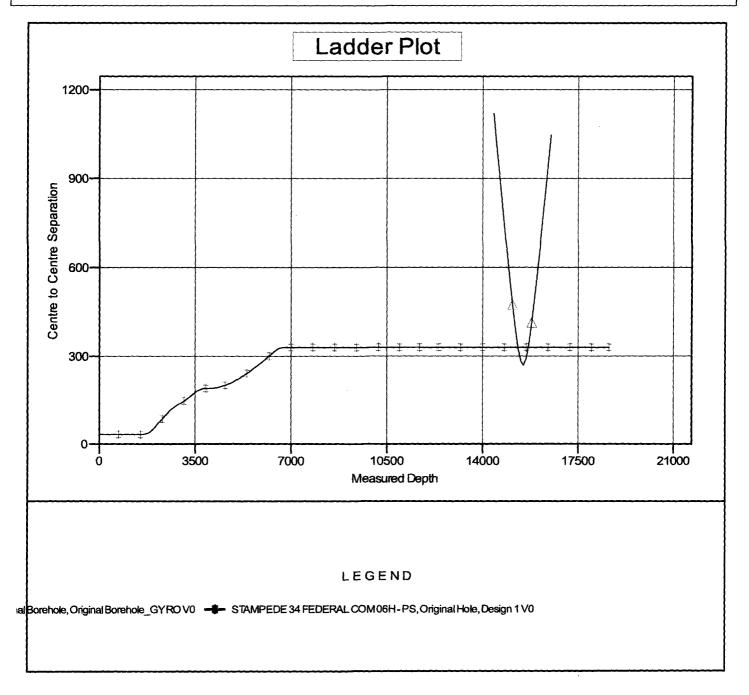
Offset De	sign	Stampe	de Federa	aí 27 1M - S	Stampede	Federal 27	1M - Original I	Borehole - (	Original Bo	rehole_G`	(RO	1	Offset Site Error:	0.0 us
lurvey Prog	ram: 60-0	BYD-CT-CMS											Meet Well Error:	0.0 us
Rafer		Offer	it i	Semi Major	Axia				Dist	ince				
Measured Depth (usft)	Verticai Depth (usfi)	Measured Depth (usft)	Verticai Depth (usft)	Reference (usit)	Offset (usft)	Highside Toolface (*)	Offset Wellbol +N/-S (ueft)	re Centre +E/-W {ueft}	Between Centres (usft)	Between Eijipses (usit)	Minimum Separation (usit)	Separation Factor	Warning	
14,400.0	11,475.0	11,497,3	11,495.6	41,7	20,2	93,09	4,050.3	247.4	1,120.8	1,068.5	52,27	21,442		
14,500.0	11,475.0	11,495.7	11,494.0	42.5	20.2	92.76	4,050.4	247,4	1,024.0	971.4	52.59	19,472		
14,600.0	11,475.0	11,494.2	11,492.5	43.2	20.2	92.44	4,050.4	247,4	927.9	874.9	53.00	17,508		
14,700.0	11,475.0	11,492.7	11,491.0	44.0	20.2	92.12	4,050.4	247,4	632.6	779.2	53.55	15.552		
14,800.0	11,475.0	11,491.1	11,489.4	44.7	20,2	91.79	4,050.4	247,4	738.9	684.6	54.30	13,608		
14,900.0	11,475.0	11,489.6	11,487.9	45.5	20,2	91.47	4,050.4	247.4	646,8	591.5	55.37	11.683		
15,000.0	11,475.0	11,488.1	11,486.4	46.2	20.2	91.14	4,050.5	247.4	557.5	500.6	56.93	9.793		
15,100.0	11,475.0	11,486.5	11,484.9	47.0	20.2	90.82	4,050.5	247.4	472.5	413.2	59.28	7.971		
15,200.0	11,475.0	11,485.0	11,483.3	47.8	20.2	90,49	4,050,5	247.3	394.6	331.8	62.83	6.281		
15,300.0	11,475.0	11,483.5	11,481.8	46.6	20.2	90.17	4,050.5	247.3	328.9	261.0	67.86	4.846		
15,400.0	11,475.0	11,481.9	11,480.3	49.4	20.2	89.84	4,050.6	247.3	283.9	210.4	73.50	3.862		
15,487.9	11,475.0	11,480.6	11,478.9	50.1	20.2	89.56	4,050.6	247.3	269.9	193.5	76.37	3.534 CC, E	s	
15,500.0	11,475.0	11,480,4	11,478.7	50.2	20.2	89.52	4,050.6	247.3	270.2	193.7	76.46	3,533 SF		
15,600.0	11,475,0	11,478.9	11,477,2	51.0	20.2	89.19	4,050.6	247.3	292.3	217.8	74.42	3.927		
15,700.0	11,475.0	11,477.3	11,475.7	51.9	20.2	88.86	4,050.6	247,3	343.3	273.4	69.84	4.915		
15,800.0	11,475.0	11,475.8	11,474.1	52,7	20.2	88,54	4,050.7	247,3	412.6	347.0	65.58	6.292		
15,900.0	11,475.0	11,474.3	11,472.6	53,5	20.2	88.21	4,050.7	247.3	492.6	430.2	62.43	7.890		
16,000.0	11,475.0	11,472.7	11,471.1	54.4	20.2	87.89	4,050.7	247.3	578.8	518.6	60,25	9.606		
16,100.0	11,475.0	11,471.2	11,469.5	55.2	20.2	87.56	4,050.7	247.2	668.9	610,2	58,75	11.385		
16,200.0	11,475.0	11,469.7	11,468.0	56.1	20.2	87.24	4,050.8	247.2	761.5	703.8	57.70	13.196		
16,300.0	11,475.0	11,468.1	11,466.4	56.9	20.2	86.91	4,050.8	247.2	855.7	798.7	56.96	15.023		
16,400.0	11,475.0	11,466.6	11,464.9	57.8	20.2	86.59	4,050.8	247.2	951.1	894.7	56.42	16.857		
16,500.0	11,475.0	11,465.1	11,463.4	58.6	20.1	86.26	4,050.8	247.2	1,047.4	991.3	56.03	18.692		

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Anticollision Report

Company:	ConocoPhillips MCBU	Local Co-ordinate Reference:	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS
Project:	Permian Delaware Hz New Mexico	TVD Reference:	GRND + SKID @ 3164.0usft
Reference Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	MD Reference:	GRND + SKID @ 3164.0usft
Site Error:	0.0 usfi	North Reference:	Grid
<b>Reference Well:</b>	STAMPEDE 34 FEDERAL COM 05H - PS	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
<b>Reference Wellbore</b>	Original Hole	Database:	EDM Central Planning
Reference Design:	Design 1	Offset TVD Reference:	Offset Datum

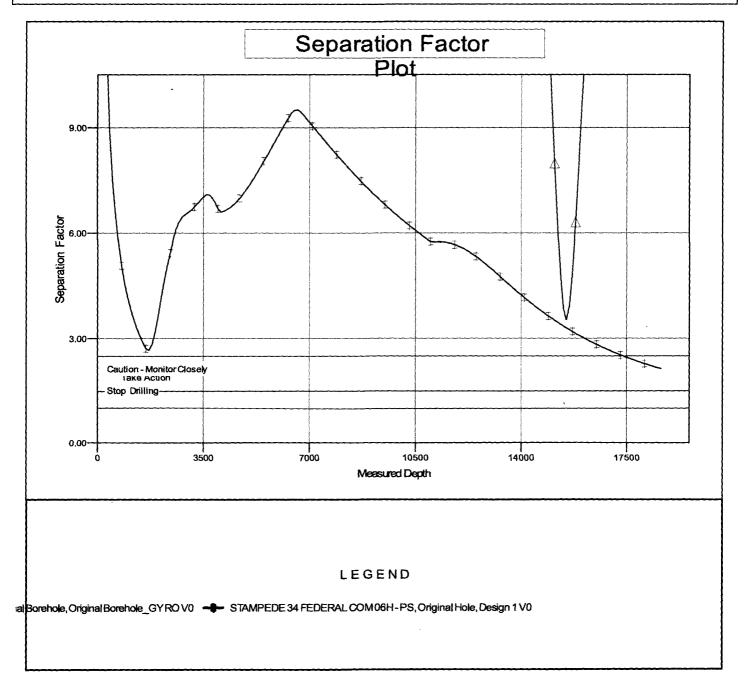
Reference Depths are relative to GRND + SKID @ 3164.0usft Offset Depths are relative to Offset Datum Central Meridian is 104° 20' 0.000 W Coordinates are relative to: STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30 Grid Convergence at Surface is: 0.30°



Anticollision Report

Company:	ConocoPhillips MCBU	Local Co-ordinate Reference:	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS
Project:	Permian Delaware Hz New Mexico	TVD Reference:	GRND + SKID @ 3164.0usft
Reference Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	MD Reference:	GRND + SKID @ 3164.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	STAMPEDE 34 FEDERAL COM 05H - PS	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	EDM Central Planning
Reference Design:	Design 1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to GRND + SKID @ 3164.0usft Offset Depths are relative to Offset Datum Central Meridian is 104° 20' 0.000 W Coordinates are relative to: STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30 Grid Convergence at Surface is: 0.30°



CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

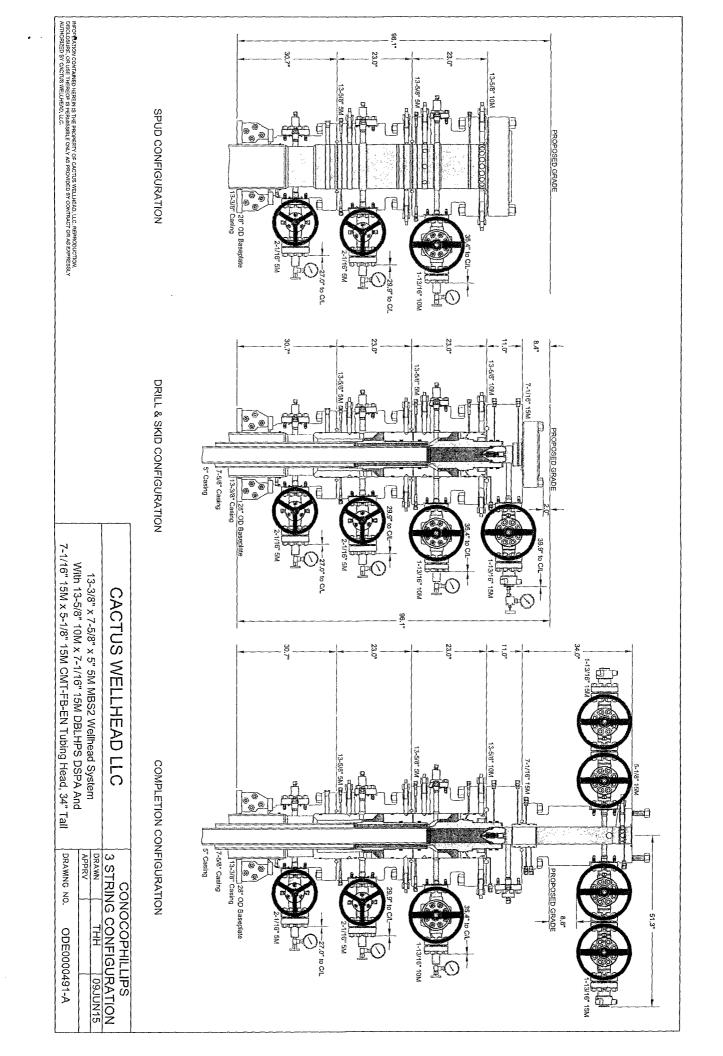
05H	
W3 (	
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STAM	

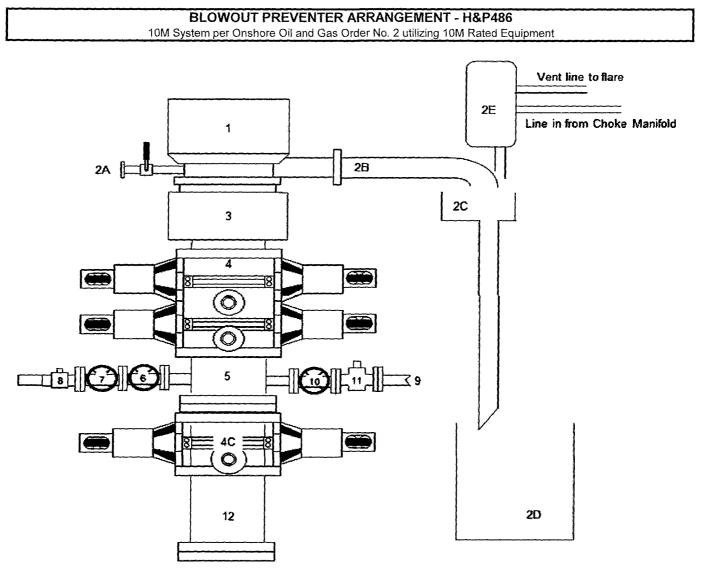
ttachment	#2		edium		
<ul> <li>Surface Section:</li> <li>Objective: Protect fresh water horizons.</li> <li>Drill 17-1/2" hole to +/- 1,010 ft, 25' inside "Rustler".</li> <li>Mud weight: 8.6 - 9.3 ppg FW-Native Mud.</li> <li>Set 13-3/8" 54.5# J-55 BTC casing.</li> <li>Cement to surface.</li> </ul>	<ul> <li>Intermediate1 Section:</li> <li>Objective: Isolate the Salado Salt and Delaware Sand interval.</li> <li>Drill 12-1/4" hole to +/- 4,098 ft, 15'-20'-TVD inside "Ford Shale".</li> <li>Mud weight: 9.3 - 10.2 ppg Brine.</li> <li>Set 9-5/8" 40# L-80 BTC casing.</li> </ul>	<ul> <li>Cement to surface.</li> <li>Intermediate2 Section:</li> <li>Objective: Isolate depleted/weak formations above WC1.</li> <li>Drill 8-3/4" hole to +/- 11,348 ft. 60'-80' inside WC1 Top.</li> <li>Mud weight: 8.9 - 9.2 ppg Cut Brine.</li> </ul>	<ul> <li>Set 7-5/8" 33# P-110 Tenaris W523 casing.</li> <li>Cement lap 600 ft above previous shoe.</li> <li>Production Section:</li> <li>Objective: Provide zonal isolation of production interval and provide medium for stimulation.</li> <li>Drill 6-5/8" hole to +/-19,160 ft. "Production TD".</li> </ul>	<ul> <li>Mud Weight: 12.0 – 15.0 ppg OBM.</li> <li>Set 5" 21.4# P-110 TenBlue X 4-1/2" 15.1# P-110 Ten XP BTC casing.</li> <li>Cement lap 1,000 ft above previous shoe.</li> </ul>	Completion       19,160 ft Prod Shoe       19,160 ft TD
Formation Top	Castile  Delaware Ford Shale	Interm1 Shoe	Bone Spring Top	3rd BS Carbonate WolfCamp Top WolfCamp 1 Top Interm2 Shoe KOP	
MD 0ft 985 ft 1,455 ft	1,650 ft 3,935 ft 4,080 ft	<b>4,098 ft</b> 4,880 ft	7,655 ft	9,920ft 11,125ft 11,285ft 11,348ft 11,659ft	

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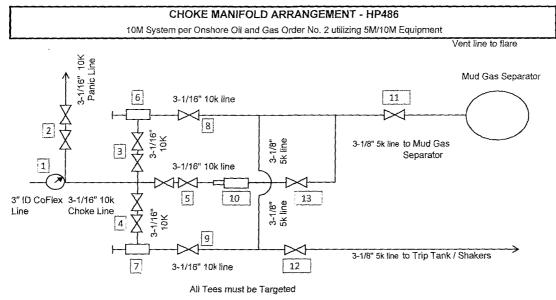


- Item Description
  - 1 Rotating Head
  - 2A Fill up Line and Valve
  - 2B Flow Line (8")
  - 2C Shale Shakers and Centrifuges
  - 2D Cuttings Bins for Zero Discharge
  - 2E Mud Gas Separator with vent line to flare and return line to mud system
  - 3 Annular Preventer (13-5/8", 10M)
  - 4 Double Ram (13-5/8", 10M, Bline Ram bottom x Pipe Ram top)
  - 5 Drilling Spool (13-5/8" 10M)
  - 4C Single Ram (13-5/8", 10M, Pipe Rams)
  - 6 Kill Line Gate Valve, Inner (4-1/16", 10k psi WP)
  - 7 Kill Line Gate Valve, Outer (4-1/16", 10k psi WP)
  - 8 Kill Line Check Valve (4-1/16, 10k psi WP)
  - 9 CoFlex hoke Line (4-1/16", 10k psi WP)
  - 10 Choke Line Gate Valve, Inner (4-1/16", 10k psi WP)
  - 11 Choke Line Hydraulically Operated Gate Valve, Outer, (4-1/6" 10k psi WP HCR)
  - 12 Drilling Spool Adapter (13-5/8", 10M)

Drawn by: James Chen, P.E. Drilling Engineer, ConocoPhillips Company Date: June 25th-2014

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Item Description

- 1 Pressure Gauge
- 2 2 Gate Valves, 3-1/16" 10M
- 3 2 Gate Valves, 3-1/16" 10M
- 4 2 Gate Valves, 3-1/16" 10M
- 5 2 Gate Valves, 3-1/16" 10M
- 6 Upper Manual Adjustable Choke, 4-1/16", 10M
- 7 Lower Manual Adjustable Choke, 4-1/16", 10M
- 8 Gate Valve, 3-1/16" 10M
- 9 Gate Valve, 3-1/16" 10M
- 10 Remote Controlled Hydraulic Adjustable Choke, 4-1/16", 10M
- 11 Gate Valve, 3-1/8" 5M
- 12 Gate Valve, 3-1/8" 5M
- 13 Gate Valve, 3-1/16" 10M

The 10M Choke Manifold & Valves will be tested to rated working pressure.

Drawn by: James Chen, P.E. Drilling Engineer, ConocoPhillips Company Date: June 25th-2014



Size: 7.625 in. Wall: 0.375 in. Weight: 29.70 lbs/ft Grade: P110 Min. Wall Thickness: 87.5 %

**Connection**: Wedge 523<sup>™</sup> **Casing/Tubing**: CAS

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PIPE BODY DATA

1		1		
7.625 in.	Nominal Weight	29.70 lbs/ft	Standard Drift Diameter	<b>6.750</b> in.
<b>6.875</b> in.	Wall Thickness	0.375 in.	Special Drift Diameter	N/A
29.06 lbs/ft				
	PERFORM	ANCE		
<b>940</b> x 1000 lbs	Internal Yield	9470 psi	SMYS	<b>110000</b> psi
5350 psi				
И	/EDGE 523™ CONI	ECTION DAT	A	
	GEOMET	RY		
<b>7.752</b> in.	Connection ID	<b>6.800</b> in.	Make-Up Loss	4.420 in.
<b>6.021</b> sq. in.	Threads per in.	3.29		
	PERFORM	ANCE		
70.5 %	Joint Yield Strength	<b>663</b> x 1000 lbs	Internal Pressure Capacity	<b>9470</b> psi
<b>768</b> x 1000 lbs	Compression Efficiency	81.7 %	Bending	<b>47</b> °/100 ft
<b>5350</b> psi				
	MAKE-UP TC	RQUES		
9900 ft-lbs	Target	<b>11900</b> ft-lbs	Maximum ( <u>'</u> )	17300 ft-lbs
	OPERATIONAL LIN	AIT TORQUES		
<b>52000</b> ft-lbs	Yield Torque	<b>78000</b> ft-lbs		
		IENSIONS		
	29.06 lbs/ft 940 x 1000 lbs 5350 psi W 7.752 in. 6.021 sq. in. 70.5 % 768 x 1000 lbs 5350 psi 9900 ft-lbs	6.875 in. Wall Thickness 29.06 lbs/ft PERFORM. 940 x 1000 lbs Internal Yield 5350 psi CEDGE 523™ CONN GEOMET 7.752 in. Connection 1D 6.021 sq. in. Threads per in. 70.5 % Joint Yield Strength 70.8 x 1000 lbs Fficiency 5350 psi COMPRESSION Efficiency 5350 psi CMAKE-UP TO 9900 ft-lbs Target OPERATIONAL LIN	6.875 in.Wall Thickness0.375 in.29.06 lbs/ftPERFORMANCE940 x 1000 lbsInternal Yield9470 psi5350 psiInternal Yield9470 psiSafe CONNECTION DATGEOMETRY7.752 in.Connection ID6.800 in.6.021 sq. in.Threads per in.3.29PERFORMANCE70.5 %Joint Yield Strength Efficiency663 x 1000 lbs708 x 1000 lbsCompression Efficiency81.7 %S350 psiMAKE-UP TORQUES9900 ft-lbsTarget11900 ft-lbsOPERATIONAL LIMIT TORQUES	6.875 in.Wall Thickness0.375 in.Diameter Special Drift Diameter29.06 lbs/ftPERFORMANCE9470 psiSMYS940 x 1000 lbsInternal Yield9470 psiSMYS5350 psiInternal Yield9470 psiSMYSCONNECTION DATAGEOMETRY7.752 in.Connection ID6.800 in.6.021 sq. in.Threads per in.3.29Internal Yield Strength70.5 %Joint Yield Strength663 x 1000 Ibs768 x 1000 lbs Efficiency61.7 %BendingEfficiency9900 ft-lbsTarget11900 ft-lbsMAKE-UP TORQUES9900 ft-lbsTarget11900 ft-lbsMAXIMUM ( <sup>1</sup> )OPERATIONAL LIMIT TORQUES

\* If you need to use torque values that are higher than the maximum indicated, please contact a local Tenaris technical sales representative.

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October 21 2014



Connection: Blue® Casing/Tubing: CAS Coupling Option: REGULAR Size: 5.000 in. Wall: 0.362 in. Weight: 18.00 lbs/ft Grade: P110 Min. Wall Thickness: 87.5 %

		PIPE BOI	DY DATA					
		GEOM	ETRY					
Nominal OD 5.000 in. Nominal Weight 18.00 lbs/ft Standard Drift 4.151 in. Diameter								
Nominal ID	<b>4.276</b> in.	Wall Thickness	<b>0.362</b> in.	Special Drift Diameter	N/A			
Plain End Weight	17.95 lbs/ft							
		PERFOR	MANCE					
Body Yield Strength	<b>580</b> x 1000 lbs	Internal Yield	<b>13940</b> psi	SMYS	<b>110000</b> psi			
Collapse	<b>13470</b> psi							
		BLUE® CONNE GEOM						
Connection OD	<b>5.630</b> in.	Coupling Length	10.551 in.	Connection ID	4.264 in.			
Critical Section Area	<b>5.275</b> sq. in.	Make-Up Loss	<b>4.579</b> in.	Threads per in.	5.00			
	·····	PERFOR	MANCE					

		PERFORM	ANCE		
Tension Efficiency	100 %	Joint Yield Strength	<b>580</b> x 1000 lbs	Internal Pressure Capacity	<b>13940</b> psi
Compression Efficiency	100 %	Compression Strength	<b>580</b> x 1000 lbs	Bending	<b>101</b> °/100 ft
External Pressure Capacity	<b>13470</b> psi				
		MAKE-UP TO	RQUES		
Minimum	6400 ft-lbs	Target	7110 ft-lbs	Maximum	<b>7820</b> ft-lbs
		OPERATIONAL LIN	AIT TORQUES		
Operating Torque	ASK	Yield Torque	<b>17600</b> ft-lbs		
		SHOULDER T	ORQUES		
Minimum	1070 ft-lbs	Maximum	6040 ft-lbs		

http://premiumconnectiondata.tenaris.com/tsh\_print.php?hWall=0.362&hSize=5.000&hG... 10/21/2014

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### BLANKING DIMENSIONS

### Blanking Dimensions

Datasheet is also valid for Special Bevel option when applicable.

December 18 2014



**Connection**: TenarisXP<sup>™</sup> BTC **Casing/Tubing**: CAS **Coupling Option**: REGULAR Size: 5.000 in. Wall: 0.362 in. Weight: 18.00 lbs/ft Grade: P110 Min. Wall Thickness: 87.5 %

		PIPE BODY	DATA		
		GEOMET	RY		
Nominal OD	<b>5.000</b> in.	Nominal Weight	<b>18.00</b> lbs/ft	Standard Drift Diameter	<b>4.151</b> in.
Nominal ID	<b>4.276</b> in.	Wall Thickness	<b>0.362</b> in.	Special Drift Diameter	N/A
Plain End Weight	<b>17.95</b> lbs/ft				
		PERFORM	ANCE		
Body Yield Strength	<b>580</b> x 1000 lbs	Internal Yield	<b>13940</b> psi	SMYS	<b>110000</b> psi
Collapse	<b>13470</b> psi				
			n an de la	an-familie an indiration of the second s	
	TEN	ARISXP™ BTC CO	NNECTION D	ATA	
		GEOMET	RY	<u></u>	
Connection OD	5.720 in.	Coupling Length	9.325 in.	Connection ID	4.264 in.
Critical Section Area	<b>5.275</b> sg. in.	Threads per in.	5.00	Make-Up Loss	4 <b>.141</b> in.
MP1-40P1-4		PERFORM	ANCE		
Tension Efficiency	100 %	Joint Yield Strength	<b>580</b> x 1000 Ibs	Internal Pressure Capacity <sup>(1)</sup>	<b>13940</b> psi
Structural Compression Efficiency	<b>100</b> %	Structural Compression Strength	<b>580</b> x 1000 Ibs	Structural Bending <sup>(2)</sup>	<b>101</b> °/100 ft
External Pressure Capacity	<b>13470</b> psi		19-2 <sup>-1</sup> -19-2 <sup>-1</sup> -1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1		
	E	STIMATED MAKE-U	IP TORQUES	3)	
Minimum	N/A ft-lbs	Target	N/A ft-lbs	Maximum	N/A ft-lbs
		OPERATIONAL LIN	IIT TORQUES		
Operating Torque	ASK	Yield Torque	N/A ft-lbs		
	<u>una una la unita in unita da a</u>	BLANKING DIM	IENSIONS		

### **Blanking Dimensions**

(1) Internal Pressure Capacity related to structural resistance only. Internal pressure leak resistance as per section 10.3 API 5C3 / ISO 10400 - 2007.

(2) Structural rating, pure bending to yield (i.e no other loads applied)

(3) Torque values calculated for API Modified thread compounds with Friction Factor=1. For other thread compounds please contact us at <u>licensees@oilfield.tenaris.com</u>. Torque values may be further reviewed. For additional information, please contact us at <u>contact-tenarishydril@tenaris.com</u>

### **Request for Variance**

### **ConocoPhillips Company**

Rig: If drilled with H&P 486 Date: 7/24/2014

### **Request:**

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ConocoPhillips Company respectfully requests a variance to install a flexible choke line instead of a straight choke line prescribed in the Onshore Order No. 2, III.A.2.b Minimum standards and enforcement provisions for choke manifold equipment. This request is made under the provision of Onshore Order No. 2, IV Variances from Minimum Standard. The rig to be used to drill this well is equipped with a flexible choke line if the requested variance is approved and determined that the proposed alternative meets the objectives of the applicable minimum standards.

# **Justifications:**

The applicability of the flexible choke line will reduce the number of target tees required to make up from the choke valve to the choke manifold. This configuration will facilitate ease of rig up and BOPE Testing.

### Attachments:

- Attachment # 1 Specification from Manufacturer
- Attachment # 2 Mill & Test Certification from Manufacturer

# **Contact Information:**

Program prepared by: Jason A. Levinson Drilling Engineer, ConocoPhillips Company Phone (281) 206-5335 Cell (281) 682-2783 Date: 05 February 2014

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CONTITECH RUBBER	No: QC-DB- 45/2012		
Industrial Kft.	Page:	9 / 50	

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### **Hose Data Sheet**

CRI Order No.	516273
Customer	ContiTech Beattie Co.
Customer Order No	P05438 STOCK
ltem No.	3
Hose Type	Flexible Hose
Standard	API SPEC 16 C
Inside dia in inches	3
Length	35 ft
Type of coupling one end	FLANGE 4 1/16" API SPEC 6A TYPE 6BX FOR 10000 PSIBX155 RING GROOVE
Type of coupling other end	FLANGE 4 1/16" API SPEC 6A TYPE 6BX FOR 10000 PSI BX155 RING GROOVE
H2S service NACE MR0175	Yes
Working Pressure	10 000 psi
Design Pressure	10 000 psi
Test Pressure	15 000 psi
Safely Factor	2,25
Marking	USUAL PHOENIX
Cover	NOT FIRE RESISTANT
Outside protection	Stateel outer wap
Internal stripwound tube	No
Lining	OIL RESISTANT
Safety clamp	No
Lifting collar	No
Element C	No
Safely chain	No
Safety wire rope	No
Max.design temperature [°C]	100
Min.design temperature [°C]	-20
MBR operating [m]	1,60
MBR storage [m]	1,40
Type of packing	WOODEN CRATE ISPM-15

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Continential<sup>®</sup> CONTITECH

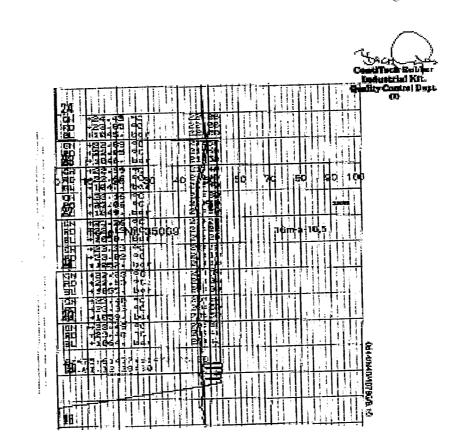
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Page:	7/50

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Fluid Technology

Quality Document

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE			<u>6</u>	184			
PURCHASER:	ContiTech B	eattie Co.		P.O. Nº:		005438	
CONTITECH ORDER Nº:	516273	HOSE TYPE:	3″ ID	(	Choke and	d Kill Hose	
HOSE SERIAL Nº:	61477 NOMINAL / ACTUAL LENGTH: 10,67 m / 10,71 m						
W.P. 68,9 MPa 1	)аq 0000	T.P. 103,4	MPa 1500	0 psi	Duration:	60	min.
Pressure test with water at ambient temperature See attachment. (1 page) € 19 mm ≅ 10 Min.							
→ t0 mm = 20 MP;	<u> </u>						
COUPLINGS Type		Serial Nº		Quality		Heal Nº	
3" coupling with	10174	8 10173	A	SI 4130		20231	
4 1/16" 10K API Flange er	nd		A	SI 4130		33051	
NOT DESIGNED FOR WELL TESTING API Spec 16 C Temperature rate:"B"							
WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER INSPECTED AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT. STATEMENT OF CONFORMITY: We hereby certify that the above items/equipment supplied by us are in conformity with the terms, conditions and specifications of the above Purchaser Order and that these items/equipment were fabricated in napected and lested in accordance with the referenced standards, codes and coeffications and unet the reference criteria and design requirements.				terma, ted in			
COUNTRY OF ORIGIN HUNGARY/EU					(1) ( <b>1</b> 11 <b>4</b> )		
Date: 30. January 2012.	inspector		Quality Contro	c	untiTech & Industrial I ality Control (1)	K6+ /	
Endapped of 10, Steeped 11 0730 Fo PO Box 162 Strated N-6701 or	1200. +30 62 565 737 ×: +36 62 565 735 nal. kisäkkä canta suel, www.contect.u	Rogens Ci Juba Hersetre Ci	e' Orangsal Coursy au Ref Dei Mar I (D. 65-16) 6309 : Hill (Dariatio	Birk dat Conness 302 Bidgers 142008	607% JA.	8903	



### ATTACHMENT OF QUALITY CONTROL INSPECTION AND TEST CERTIFICATE No: 182.184, 185 Page: 1/1

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### **Request for Variance**

### **ConocoPhillips Company**

Rig: If drilled with H&P 453 Date: 7/24/2014

## **Request:**

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ConocoPhillips Company respectfully requests a variance to install a flexible choke line instead of a straight choke line prescribed in the Onshore Order No. 2, III.A.2.b Minimum standards and enforcement provisions for choke manifold equipment. This request is made under the provision of Onshore Order No. 2, IV Variances from Minimum Standard. The rig to be used to drill this well is equipped with a flexible choke line if the requested variance is approved and determined that the proposed alternative meets the objectives of the applicable minimum standards.

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- Attachment # 2 Mill & Test Certification from Manufacturer

# **Contact Information:**

Program prepared by: Jason A. Levinson Drilling Engineer, ConocoPhillips Company Phone (281) 206-5335 Cell (281) 682-2783 Date: 05 February 2014

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CONTITECH RUBBER	No: QC-DB-	45/2012
Industrial Kft.	Page:	9/50
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### Hose Data Sheet

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Customer Order No	P05438 STOCK
item No.	3
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H2S service NACE MR0175	Yes
Working Pressure	10 000 psi
Design Pressure	10 000 psi
Test Preasure	15 000 psi
Safety Factor	2,25
Marking	USUAL PHOENIX
Cover	NOT FIRE RESISTANT
Outside protection	Stateel outer wap
Internal stripwound tube	No
Lining	OIL RESISTANT
Safety clamp	No
Lifting collar	No
Element C	No
Safely chain	No
Safety wire ropa	No
Max.design temperature [°C]	100
Min.design temperature [°C]	-20
MBR operating [m]	1,60
MBR storage [m]	1,40
Type of packing	WOODEN CRATE ISPM-15

### Attachment # 2

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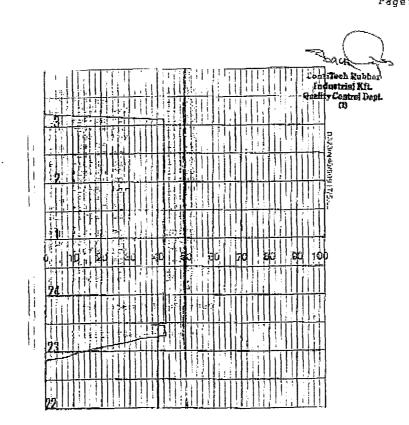
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### Fiuld Technology

Quality Document 453.369-001.

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PURCHASER	ContiTo	ech Beatt	ie Co.			P.O. N*:		00445	2
CONTITECH ORDER N":	482598	на	SE TYPE:	3"	۳.		Choke ar	nd Kill Ho	ise
HOSE SERIAL NT:	56839	ND	MINAL I AC	TUAL U	ENGTH	,	10,67	m / 10,6	9 m
W.P 68,9 MPa	10000	ры Т.Р	103,4	MPa	15000	) psi	Duration:	60	
		See	attachmi	eni. ( 1	page ;	)			
∱ :n-mas 10 k	.Sin							2	
	√in. MPa	Serie	11 N*		a	vality		2.	Bt N <sup>a</sup>
→ 10 mm • 25 x		Seri; 8436	1882			Mality N 4130		,	et N° 1837
→ 10 mm • 25 to COUPLINGS Type					Als			,	a
→ 10 mm • 25 M COUPLINGS Type 3° coupling with 4 1/16° Flange end					Als	N 4130		16	837 31501 c 16 C
→ 10 mm • 25 k COUPLINGS Type 3° coupling with	APa	8436 AS BEEN M	1882		AIS	N 4130 N 4130	Temp	16 31295 PI Spec berature	837 31501 c 16 C e rate:"
→ 10 mm • 25 A COUPLINGS Type 3" coupling with 4 1/16" Flange end All motel parts are itswiezz WE CERTIFY THAT THE ASC	DVE HOSE M/ E TESTED AS TTY: We have of fite above d standards, c	8436 AS BEEN M ABOVE W Purchaser odes and sp	1882 ANUFACTUR TH SATISFA Ibal like abor Order and th	CTORY i we items/ wet these and meet	AIS AIS CCORDAN RESULT agupment items/equ items/equ	N 4130 N 4130 N 4130 CE WITH Supplied	Temp ITHE TERM by us one in sere tetricate	16 31295 PI Spec Delature s OF THE C	837 31501 c 16 C c rate;" ORDER
→ 10 mm • 25 A COUPLINGS Type 3° coupling with 4 1/16° Flange end All mctol parts are itswiezs WE CERTIFY THAT THE ASC (NSPECTED AND PRESSURI BIATEMENT OF CONFORM STATEMENT OF CONFORM	DVE HOSE M/ E TESTED AS TTY: We have of fite above d standards, c	8436 AS BEEN MA ABOYE W Purchasso Todes and sp DUNTRY OF	1882 NUFACTUR TH SATISFA that the abor Order and th politications a	ICTORY i re templi ret these and meet INGARY/I I	AIS AIS CCORDAN RESULT agupment items/equ items/equ	N 4130 N 4130 CE WITT SUpplied sprink w nt accept	Temp ITHE TERM by us one in sere tetricate	16 31296 PISpec perature s OF THE C conformity of mapsclet and design of	837 31501 c 16 C c rate;" ORDER

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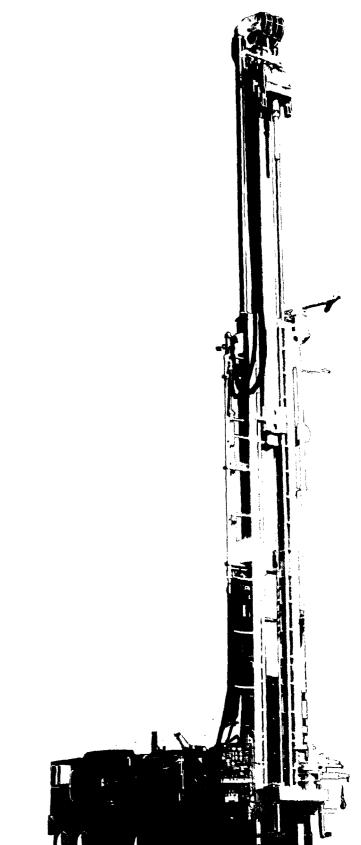
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# Attachment #8

# T130XD

A heavy duty, heavy hoist carrier mounted drill rig. The T130XD utilizes innovative Telemast technology to achieve Range III pipe capability in a compact over the road package.

- Equipped with Schramm Telemast
- 50' head travel handles Range III casing
- 43' transport length with less than
   6' overhang
- 130,000 lbs hoist
- No sub-structure required
- Mast slides to clear BOP



### CARRIER MOUNTED RIG EQUIPPED WITH TELEMAST

### T130XD ROTADRILL SPECIFICATIONS

### Engine

Detroit Diesel DDC/MTU 12V-2000TA DDEC 760 bhp (567 kw) @ 1800 rpm

### Standard Compressor

Variable volume two-stage, oil flooded rotary screw

1350 cfm @ 350 psi (38.0 cu. m/min @ 24.1 bar), up to 1150 cfm @ 500 psi (32.6 cu. m/min @ 35.5 bar)

### Cooling

Three core, side by side type 130°F (54.4°C) ambient design temp.

### Dimensions

OA length, transport - 42' 9" (13 m) OA width - 8' 6" (2.6 m) OA height, transport - 13' 6" (4.1 m) Weight std. rig - 92,000 lb (41,723 kg)

### Carrier

CCC 8x4 Carrier Cat C-13, 410 hp @ 2100 rpm engine 44,000 lb (19,955 kg) front axles 21,500 lb (9,750 kg) pusher axle 52,000 lb (23,587 kg) rear axles 117,500 lb (53,298 kg) GVWR

### **Top Head Rotation**

Ductile iron, single reduction oil bath gearbox with two disc valve type hydraulic motors. Infinitely variable rotation speed. 3.5:1 Reduction Gear

3" diameter (76.2 mm) spindle thru hole

0-143 rpm, infinitely variable

106,600 in-lb (12,045 N·m) torque

### Feed System

Top head is driven by hydraulic traverse cylinders through special wire rope and large diameter Nylatron sheaves. As top head is raised, the inner mast section extends by a ratio of 1:2 until it reaches its fully extended position at 50' of clear head travel.

42′ 9″ (13 m) OA height (retracted)

69' 9" (21.65 m) OA height (extended)

50' (15.24 m) top head travel

130,000 lb (59,090 kg) pullup 8 fpm (2.44 mpm) pullup speed-slow feed 125 fpm (38.1 mpm) pullup speed-rapid feed 32,000 lb (14,545 kg) pulldown capacity 26 fpm (7.92 mpm) pulldown speed-slow feed 270 fpm (82.3 mpm) pulldown speed-rapid feed 52' 10" (16.1 m) working clearance mast spindle to table (sub removed)

48' 10" (14.9 m) working clearance mast sub to table

### Drill Pipe & Casing

30' x 4-1/2" OD x 2-7/8 IF breakout style drill pipe, range III casing

28" (711 mm) max. diameter through slipbox

### Mast

Telescoping construction permits long head travel and working height, yet short OA length in transport position.

32" (813 mm) cylinder operated slide Free-standing mast

hydaulically operated adjustable mast feet

hydraulically retracted slip box

20" (508 mm) table opening w/o slips

### Winch

Planetary with spring applied hydraulic release brake

9,600 lb (4,354 kg) bare drum line pull

151 fpm (46 mpm) bare drum line speed

### Hydraulic System

Open loop load sensing system 7 micron filtration

200 gallon (760 l) system capacity

### Water Injection System

25 gpm (95 lpm) water pump Electric foam pump

### Outriggers

Front - (1) 5" bore x 41" stroke (127 mm x 1.4 m)

Rear - (2) 5" bore x 41" stroke (127 mm x 1.4 m)

### Tool Lubricator

Positive displacement, air pump operated piston type pump variable to 5.0 gph (18.9 lph)

Lighting & Electrical System - 24 Volt Mast - (4) 60 watt floodlights Control Panel - (2) 60 watt gauge floodlights Work - (3) 70 watt halogen

### Accessories

Pipe handling sling, 60" breakout wrench, and 50 hour maintenance kit.

### **Optional Equipment**

Many modifications are available including: Third driving axle Reverse circulation package Tilt-out top head High capacity top head Single pipe loading arm Auxiliary winch controls Auxiliary air supply

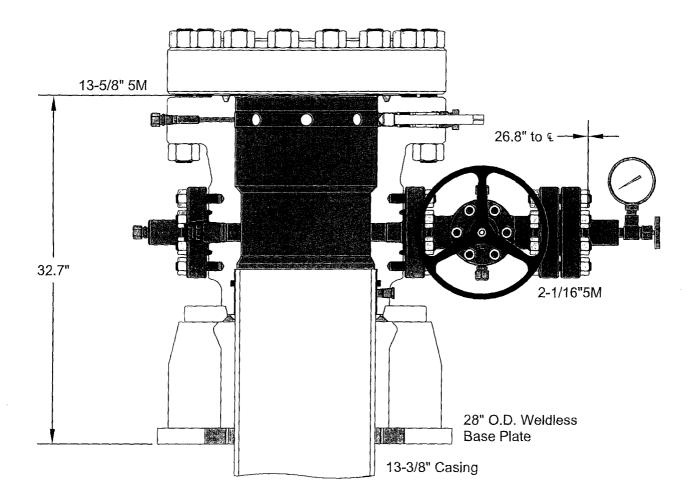
These specifications are based on theoretical calculations and industry standards. Performance will vary according to actual drilling conditions. Schramm, Inc. continuously improves its products and reserves the right to change specifications, design, prices and terms at any time without notification or obligation. These specifications do not extend any warranty, expressed or implied, nor do they or Schramm, Inc. make or imply any representation of the machine's merchantability or fitness for a particular purpose.



SCHRAMM, INC. 800 E. Virginia Avenue West Chester, PA 19380 USA Phone: 610-696-2500 Fax: 610-696-6950 E-mail: schramm@schramminc.com



# Attachment #9



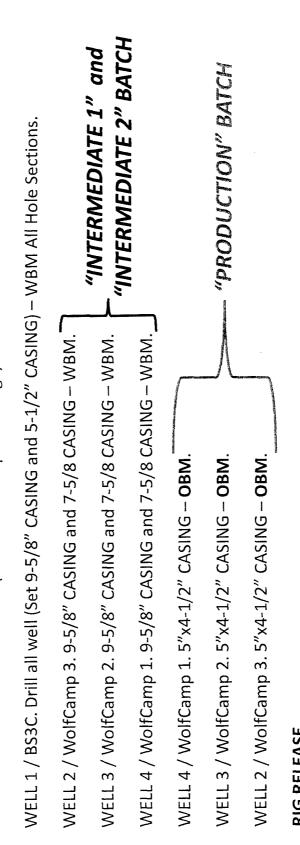
ALL DIMENSIONS ARE APPROXIMATE				
This drawing is the property of GE Oil & Gas Pressure Control LP and is considered confidential. Unless otherwise approved in writing, neither it nor its contents may be used, copied, transmitted or reproduced except for the sole purpose of GE Oil & Gas Pressure Control LP.	CONOCOPHILLIPS SPUDDER RIG			
HSG,WG,SH2-LWR,13-5/8 5M X 13-3/8 SOW,W/2 2-1/16 5M FP	DRAWN	VJK	19AUG14	
	APPRV	KN	16AUG14	
BASEPLATE,WELDLESS,28 OD	FOR REFERENCE ONLY			
FLANGE,BLIND, 13-5/8 5M		DRAWING NO. PE00624		

SKID / BATCH DRILLING OPERATIONS – "QUAD PAD"

SKID / BATCH DRILLING OPERATION PLAN FOR "QUAD PAD":

- ALL SURFACE CASINGS PRE-SET (Pre-set with "Spudder Rig"). ų.
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- m.
- WELL 3 / WolfCamp 2. 9-5/8" CASING and 7-5/8 CASING WBM. 4.
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- ٦.
- ∞.
- **RIG RELEASE.** <u>б</u>





# SPECIFICATIONS

FLOOR: 3/16" PL one piece CROSS MEMBER: 3 x 4.1 channel 16" on center

WALLS: 3/16" PL solid welded with tubing top, insi de liner hooks

DOOR: 3/16" PL with tubing frame FRONT: 3/16" PL slant formed

PICK UP: Standard cable with 2" x 6" x 1/4" rails, gu sset at each crossmember WHEELS: 10 DIA x 9 long with rease fittings

DOOR LATCH: 3 Independent ratchet binders with chains, vertical second latch GASKE TS: Extruded rubber seal with metal retainers

WELDS: All welds continuous except substructure crossmembers

FINISH: Coated inside and out with direct to metal, rust inhibiting acrylic enamel color coat HYDROTESTING: Full capacity static test DIMENSIONS: 22'-11" long (21'-8" inside), 99" wide (88" inside), see drawing for height OPTIONS: Steel grit blast and special paint, Ampliroll, Heil and Dino pickup

ROOF: 3/16" PL roof panels with tubing and channel support frame

LIDS: (2) 68" x 90" metal rolling lids spring loaded, self raising

ROLLERS: 4" V-groove rollers with delrin bearings and grease fittings

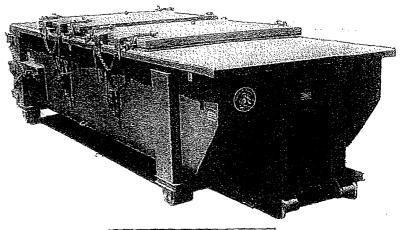
OPENING: (2) 60" x 82" openings with 8" divider centered on

container LATCH:(2) independent

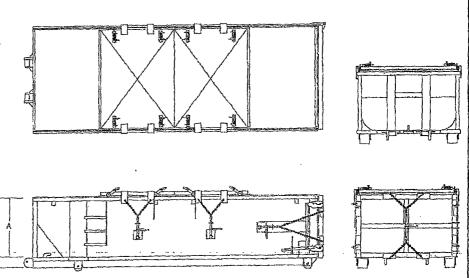
ratchet binders with chains per lid

GASKETS: Extruded rubber seal with metal retainers





CONT.	A	В
20 YD	41	53
25 YD	53	65
30 YD	65	77



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### Closed Loop System Design, Operating and Maintenance, and Closure Plan

ConocoPhillips Company Well: Stampede 34 Federal COM W3 5H Location: Sec. 34, T26S, R31E Date: 12/1/2014

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ConocoPhillips proposes the following plan for design, operating and maintenance, and closure of our proposed closed loop system for the above named well:

1. We propose to use a closed loop system with steel pits, haul-off bins, and frac tanks for containing all cuttings, solids, mud, water, brine, and liquids. We will not dig a pit, nor will we use a drying pad, nor will we build an earth pit above ground level, nor will we dispose of or bury any waste on location.

All drilling waste and all drilling fluids (fresh water, brine, mud, cuttings, drill solids, cement returns, and any other liquid or solid that may be involved) will be contained on location in the rig's steel pits or in hauloff bins or in frac tanks as needed. The intent is as follows:

- We propose to use the rigs' steel pits for containing and maintaining the drilling fluids.
- We propose to remove cuttings and drilled solids from the mud by using solids control equipment and to contain such cuttings and drilled solids on location in haul-off bins.
- We propose that any excess water that may need to be stored on location will be stored in tanks.

# The closed loop system components will be inspected daily by each tour and any needed repairs will be made immediately. Any leak in the system will be repaired immediately, and any spilled liquids and/or solids will be cleaned immediately, and the area where any such spill occurred will be remediated immediately.

2. Cuttings and solids will be removed from location in haul-off bins by an authorized contractor and disposed of at an authorized facility. For this well, we propose the following disposal facility:

R-360 Inc. 4507 West Carlsbad Hwy, Hobbs, NM 88240, P.O. Box 388; Hobbs, New Mexico 88241 Toll Free Phone: 877.505.4274, Local Phone Number: 432.638.4076

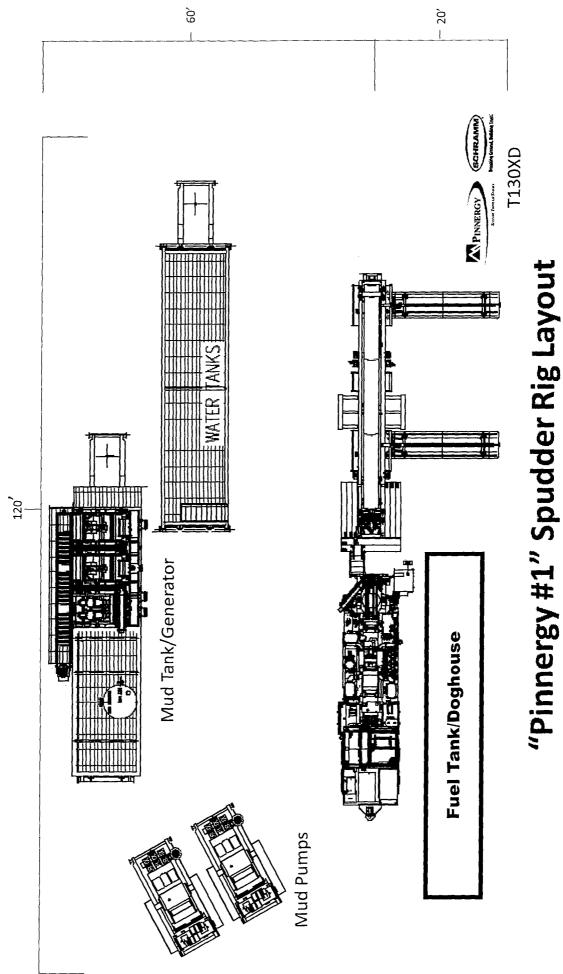
The physical address for the plant where the disposal facility is located is Highway 62/180 at mile marker 66 (33 miles East of Hobbs, NM and 32 miles West of Carlsbad, NM).

The Permit Number for R-360 is NM-01-0006.

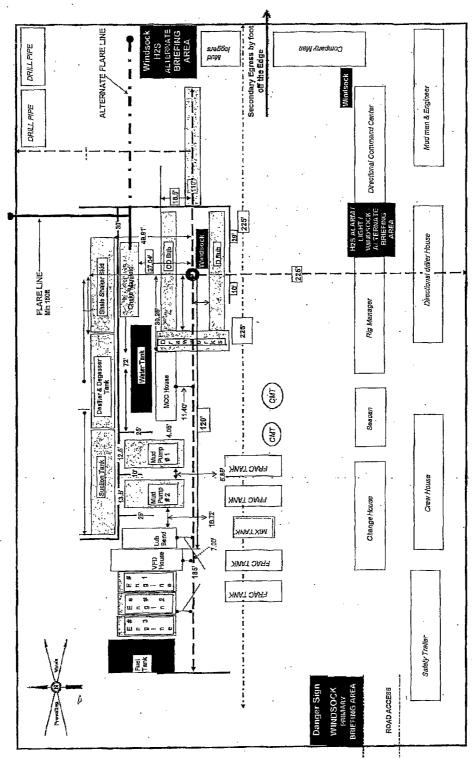
A photograph showing the type of haul-off bins that will be used is attached.

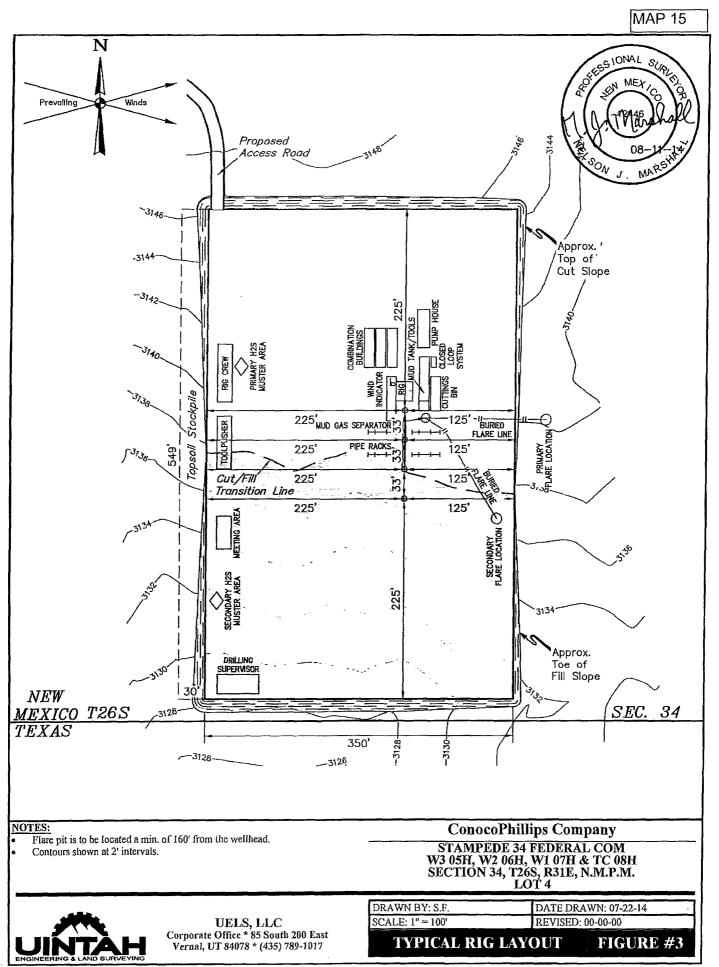
- 3. Mud will be transported by vacuum truck and disposed of at R-360 Inc. at the facility described above.
- 4. Fresh Water and Brine will be hauled off by vacuum truck and disposed of at an authorized salt water disposal well. We propose the following for disposal of fresh water and brine as needed:
  - Nabors Well Services Company, 3221 NW County Rd; Hobbs, NM 88240, PO 5208 Hobbs, NM, 88241, Permit SWD 092. (Well Location: Section 3, T19S R37E)
  - Basic Energy Services, P.O. Box 1869; Eunice, NM 88231 Phone Number: 575.394.2545, Facility located at Hwy 18, Mile Marker 19; Eunice, NM.

Roger Ramos Staff Drilling Engineer Office: 281-206-5334 Cell: 832-566-0804



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H<sub>2</sub>S Contingency Plan

H<sub>2</sub>S Contingency Plan Holders:

Attached is an H<sub>2</sub>S Contingency Plan for COPC Permian Drilling working in the West Texas and Southeastern New Mexico areas operated by ConocoPhillips Company.

If you have any questions regarding this plan, please call Tom Samarripa at ConocoPhillips Company, 432.368.1263.

### **Table of Contents**

### **Section**

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### I. Purpose

### II. Scope

### **III.** Procedures

### **IV.** Emergency Equipment and Maintenance

Emergency Equipment Suppliers General Information H2S Safety Equipment and Monitoring Systems

### V. Emergency Call List

### VI. Public/Media Relations

### VII. Pubic Notification/Evacuation

### **VIII.** Forms/Reports



## HYDROGEN SULFIDE (H<sub>2</sub>S) OPERATIONS

Contingency Plan For Permian Drilling Operations

ConocoPhillips Company Mid-Continent Business Unit Permian Asset Area

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### I. PURPOSE

The purpose of this Contingency Plan is to provide an organized plan of action for alerting and protecting the public following the release of a potentially hazardous volume of hydrogen sulfide. This plan prescribes mandatory safety procedures to be followed in the event of a release of  $H_2S$  into the atmosphere from exploration and production operations included in the scope of this plan. The extent of action taken will be determined by the supervisor and will depend on the severity and extent of  $H_2S$  release. Release of  $H_2S$  must be reported to the Drilling Superintendent and documented on the IADC and in Wellview.

### II. SCOPE

This Contingency plan shall cover the West Texas and Southeastern New Mexico areas, which contain H2S gas and could result in a release where the R.O.E. is greater than 100 ppm at 50' and less than 3000' and does not include a public area and 500 ppm R.O.E. does not include a public road. Radius of exposure is defined as the maximum distance from the source of release that a specified calculated average concentration of  $H_2S$  could exist under specific weather conditions.

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### **III. PROCEDURES**

First Employee on Scene

\_\_\_\_\_ Assess the incident and ensure your own safety.

Note the following:

—— Location of the incident.

\_\_\_\_\_ Nature of the incident.

— Wind direction and weather conditions.

\_\_\_\_\_ Other assistance that may be needed.

- \_\_\_\_\_ Call local supervisory personnel (refer to Section V: Emergency Call List) until personal contact is made with a person on the list.
- Perform emergency assessment and response as needed. The response may include rescue and/or evacuation of personnel, shutting in a system and/or notification of nearby residents/public (refer to Section VII: Public Notification/Evacuation).
- Secure the site.
- Follow the direction of the On-scene Incident Commander (first ConocoPhillips supervisor arriving on-scene).

First Supervisor on Scene (ConocoPhillips On-scene Incident Commander)

- ----- Becomes ConocoPhillips' On-scene Incident Commander upon arrival to location.
- ----- Follow the principles of the **D.E.C.I.D.E.** process below to assess the incident. (Note wind direction and weather conditions and ensure everyone's safety).

DETECT the problem ESTIMATE likely harm without intervention CHOOSE response objectives IDENTIFY action options DO the best option EVALUATE the progress

\_\_\_\_\_ Complete the Preliminary Emergency Information Sheet (refer to Section VIII: Forms/Reports).

\_\_\_\_\_ Call your supervisor (refer to Section V: Emergency Call List).

— Perform emergency response as necessary. (This may include notification & evacuation of all personnel and/or nearby residents/public (refer to Section VII: Public Notification/Evacuation), requesting assistance from ConocoPhillips personnel or outside agencies (refer to Section V: Emergency Call List) and obtaining any safety equipment that may be required (refer to Section IV: Emergency Equipment and Maintenance).

- Notify appropriate local emergency response agencies of the incident as needed. Also notify the appropriate regulatory agencies. (refer to Section V: Emergency Call List).
- —— Ensure site security.

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---- Set barricades and /or warning signs at or beyond the calculated 100 ppm H<sub>2</sub>S radius of exposure (ROE). All manned barricades must be equipped with an H<sub>2</sub>S monitor and a 2-way radio.

----- Set roadblocks and staging area as determined.

----- Establish the Incident Command Structure by designating appropriate on-scene response personnel as follows:

Recording Secretary	
Public Information Officer	
Safety/Medical Officer	
Decontamination Officer	

- Have the "Recording Secretary" begin documenting the incident on the "Incident Log" (refer to Section VIII: Forms/Reports).
- ----- If needed, request radio silence on all channels that use your radio tower stating that, until further notice, the channels should be used for emergency communications only.
- —— Perform a Site Characterization and designate the following:

Hot Zone	 Hazardous Area
Warm Zone	 Preparation & Decontamination Area
Cold Zone	 Safe Area

### <u>AND</u>

On-Scene Incident Command Post Public Relations Briefing Area Staging Area Triage Area Decontamination Area (Cold Zone) (Cold Zone) (Cold Zone) (Cold Zone) (Warm Zone)

——— Refer all media personnel to ConocoPhillips' On-Scene Public Information Officer (refer to Section VI: Public Media Relations).

Coordinate the attempt to stop the release of  $H_2S$ . You should consider closing upstream and downstream values to shut-off gas supply sources, and/or plugging or clamping leaks. Igniting escaping gas to reduce the toxicity hazard should be used **ONLY AS A LAST RESORT**. (It must first be determined if the gas can be safely ignited, taking into consideration if there is a possibility of a widespread flammable atmosphere.)

Once the emergency is over, return the situation to normal by:

Confirming the absence of H<sub>2</sub>S and combustible gas throughout the area,

Discontinuing the radio silence on all channels, stating that the emergency incident is over,

Removing all barricades and warning signs,

Allowing evacuees to return to the area, and

Advising all parties previously notified that the emergency has ended.

- Ensure the proper regulatory authorities/agencies are notified of the incident (refer to Section V: Emergency Call List).
- Clean up the site. (Be sure all contractor crews have had appropriate HAZWOPER training.)
- \_\_\_\_\_ Report completion of the cleanup to the Asset Environmentalist. (Environmentalist will report this to the proper State and/or Federal agencies.)

 Fill out all required incident reports and send originals to the Safety Department. (Keep a copy for your records.)

• Company employee receiving occupational injury or illnesses.

• Company employee involved in a vehicle accident while driving a company vehicle.

• Company property that is damaged or lost.

• Accident involving the public or a contractor; includes personal injuries, vehicle accidents, and property damage. Also includes any situation, which could result in a claim against the Company.

- Hazardous Material Spill/Release Report Form
- Emergency Drill Report

3 4

Assist the Safety Department in the investigation of the incident. Review the factors that caused or allowed the incident to occur, and modify operating, maintenance, and/or surveillance procedures as needed. Make appropriate repairs and train or retrain employees in the use and operation of the system.

If this incident was simulated for practice in emergency response, complete the Emergency Drill Report found in Section VIII: Forms/Reports and submit a copy to the Drilling Manager. (Keep one copy in area files to document exercising of the plan.)

### Emergency Procedures <u>Responsibility</u>

In the event of a release of potentially hazardous amounts of H2S, all personnel will immediately proceed upwind/ crosswind to the nearest designated briefing area. The COPC Drilling Rep. will immediately, upon assessing the situation, set this into action by taking the proper procedures to contain the gas and notify appropriate people and agencies.

- 1. In an emergency situation, the Drilling Rep. on duty will have complete responsibility and will take whatever action is deemed necessary in an emergency situation to insure the personnel's safety, to protect the well and to prevent property damage.
- 2. The Toolpusher will assume all responsibilities of the Drilling Rep. in an emergency situation in the event the Drilling Rep. becomes incapacitated.
- 3. Advise each contractor, service company, and all others entering the site that H2S may be encountered and the potential hazards that may exist.
- 4. Authorize the evacuation of local residents if H2S threatens their safety.
- 5. Keep the number of persons on location to a minimum during hazardous operations.
- 6. Direct corrective actions to control the flow of gas.
- 7. Has full responsibility for igniting escaping gas to reduce the toxicity hazard. This should be used **ONLY AS A LAST RESORT**.

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### **IV. EMERGENCY EQUIPMENT and MAINTENANCE**

### **Emergency Equipment Suppliers**

3 4 4

# Safety International – Odessa, Tx. $H_2S$ monitors432.580.3770Breathing air includes cascade systems432.580.3770First aid and medical suppliesSafety equipmentH2S Specialist432.561.5049 Odessa, Tx.Total Safety US Odessa, Tx/ Hobs, NM432.561.5049 Odessa, Tx. $H_2S$ monitors575.392.2973 Hobbs, NM

H<sub>2</sub>S monitors Breathing air includes cascade systems Fire fighting equipment First aid and medical supplies Safety equipment

575.393.3093

Indian Fire & Safety – Hobbs, NM H<sub>2</sub>S monitors Breathing air including cascade systems trailer mounted 30 minute air packs Safety Equipment

### General Information

Materials used for repair should be suitable for use where  $H_2S$  concentrations exceed 100 ppm. In general, carbon steels having low-yield strengths and a hardness below RC-22 are suitable. The engineering staff should be consulted if any doubt exists on material specifications.

Appropriate signs should be maintained in good condition at location entrance and other locations as specified in Texas Rule 36 and NMOCD Rule 118.

All notification lists should be kept current with changes in names, telephone numbers, etc.

All shutdown devices, alarms, monitors, breathing air systems, etc., should be maintained in accordance with applicable regulations.

All personnel working in  $H_2S$  areas shall have received training on the hazards, characteristics, and properties of  $H_2S$ , and on procedures and safety equipment applicable for use in  $H_2S$  areas.

### H2S Safety Equipment and Monitoring Systems

An H2S emergency response package will be maintained at locations requiring H2S monitoring. The package will contain at a minimum the following:

- 3 Fixed H2S sensors located as follows:
  - 1 -on the rig floor

1. 10

- 1 at the Bell Nipple
- 1 at the Shale Shaker or Flowline

1 -<u>Entrance Warning Sign</u> located at the main entrance to the location, with warning signs and colored flags to determine the current status for entry into the location.

- 2 Windsocks that are clearly visible.
- 1 Audible warning system located on rig floor
- 2 <u>Visual</u> warning systems (Beacon Lights)
  - 1 -located at the rig floor
  - 1 -located in the mud mixing room

### Note: All alarms (audible and visual) should be set to alarm at 10 ppm.

2 - Briefing areas clearly marked

2 - SCBA's at each briefing area

1- SCBA located at the Drilling Reps office

Note:

1. All SCBA's must be positive pressure type only!!!

2. All SCBA's must either be Scott or Drager brand.

# 3. All SCBA's face pieces should be <u>size large</u>, unless otherwise specified by the Drilling Supervisor.

5 – <u>Emergency Escape Paks</u> located at Top Doghouse.

Note: Ensure provisions are included for any personnel working above rig floor in derrick.

 $1 - \underline{\text{Tri or Quad gas monitor}}$  located at the Drilling Reps office. This will be used to determine if the work area if safe to re-enter prior to returning to work following any alarm.

### V. EMERGENCY CALL LIST:

The following is a <u>priority</u> list of personnel to contact in an emergency situation. Use the latitude and longitude shown on the NMOCD Form C-102 when reporting the location.

Supervisory Personnel	Office No.	Home	Cellular
R.W. "Cottton" Hair	432.368.1302	432.563.9467	432.556.9116
Permian Drilling Supt.			
Dennis Paschall	432.368.1517	432.683.9400	432.238.3150
Permian Drilling Field Supt.			
<b>Tom Samarripa</b> WSER	423.368.1263	432.367.4961	432.556.9113
<b>Ty Maxey</b> Permian Asset Operations Manager	432.368.1100		281.217.8492
Leo Gatson Safety and Environmental Coordinator	432.368.1248		432.631.066
<b>Lynn Dooley</b> Drilling Mngr.	832.486.2567	281.225.8063	281.435.3517

### **Regulatory Agencies**

\* \*

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New Mexico Oil Conservation Commission P. O. Box 1980 Hobbs New Mexico 88240-1980 Office: 575.393.6161

Hobbs, New Mexico 88240-1980

Bureau of Land Mngt. Carlsbad Field Office

Carlsbad Field Office 620 E. Greene St. Carlsbad, NM 88220 Office: 575.234.5972 Fax: 575.885.9264

### VI. Public Media Relations

The **Public Information Officer** becomes the ConocoPhillips on-scene contact (once designated by the Phillips On-Scene Incident Commander).

Confers with Houston Office's Human Relations Representative, who is responsible for assisting in the coordination of local public relations duties.

Answer media questions honestly and <u>only with facts</u>, do not speculate about the cause, amount of damage, or the potential impact of the incident of the community, company, employees, or environment. (This information will be formally determined in the incident investigation.)

If you are comfortable answering a question or if you are unsure of the answer, use terms such as the following:

- "I do not know. I will try to find out."
- I am not qualified to answer that question, but I will try to find someone who can."
- "It is under investigation."

### Note:

**Do Not** Say "No Comment." (This implies a cover-up.)

**Do Not Disclose Names of Injured or Dead!** Confer with the Houston Office's Human Relations Representative, who is responsible for providing that information.

### VII. Public Notification/Evacuation

### Alert and/or Evacuate People within the Exposure Area

1. <u>Public Notification</u> – If the escape of gas could result in a hazard to area residents, the general public, or employees, the person <u>first</u> observing the leak should take <u>immediate</u> steps to cause notification of any nearby residents. The avoidance of injury or loss of life should be of prime consideration and given top priority in all cases. If the incident is of such magnitude, or at such location as to create a hazardous situation, local authorities will be requested to assist in the evacuation and roadblocks of the designated area until the situation can be returned to normal.

Note: Bilingual employees may be needed to assist in notification of residents.

2. <u>Evacuation Procedures</u> – Evacuation will proceed upwind from the source of the release of H<sub>2</sub>S. Extreme caution should be exercised in order to avoid any depressions or low-lying areas in the terrain. The public area within the radius of exposure should be evacuated in a southwesterly and southeasterly direction so as to avoid the prevailing southern wind direction.

Roadblocks and the staging area should be established as necessary for current wind conditions.

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**Note:** In all situations, consideration should be given to wind direction and weather conditions.  $H_2S$  is heavier than air and can settle in low spots. Shifts in wind direction can also change the location of possible hazardous areas.

### VIII. FORMS & REPORTS

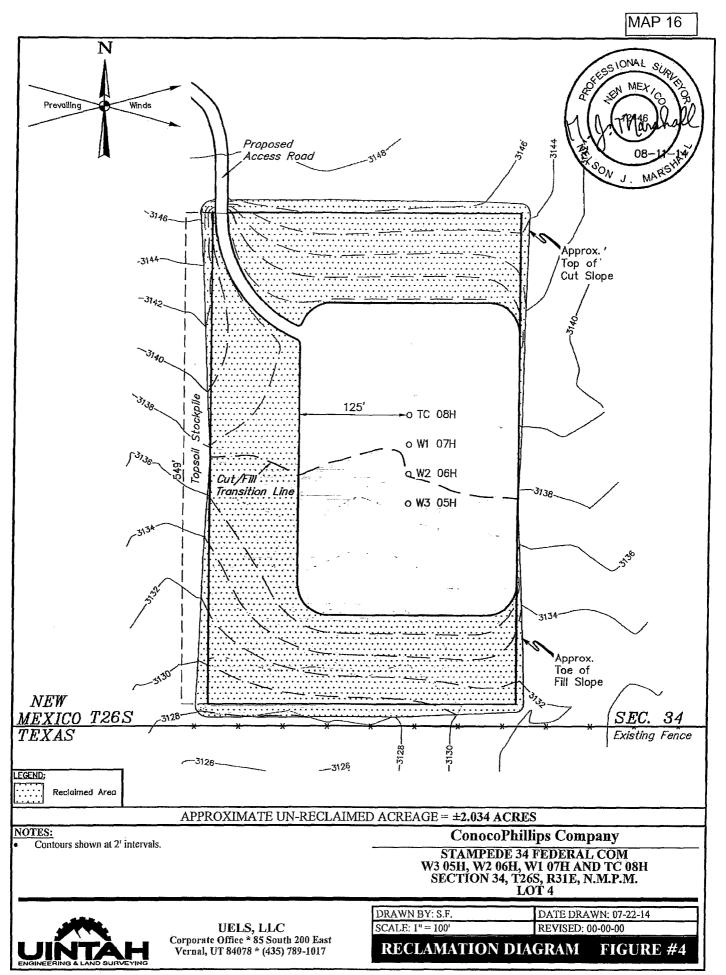
I. Incident Log

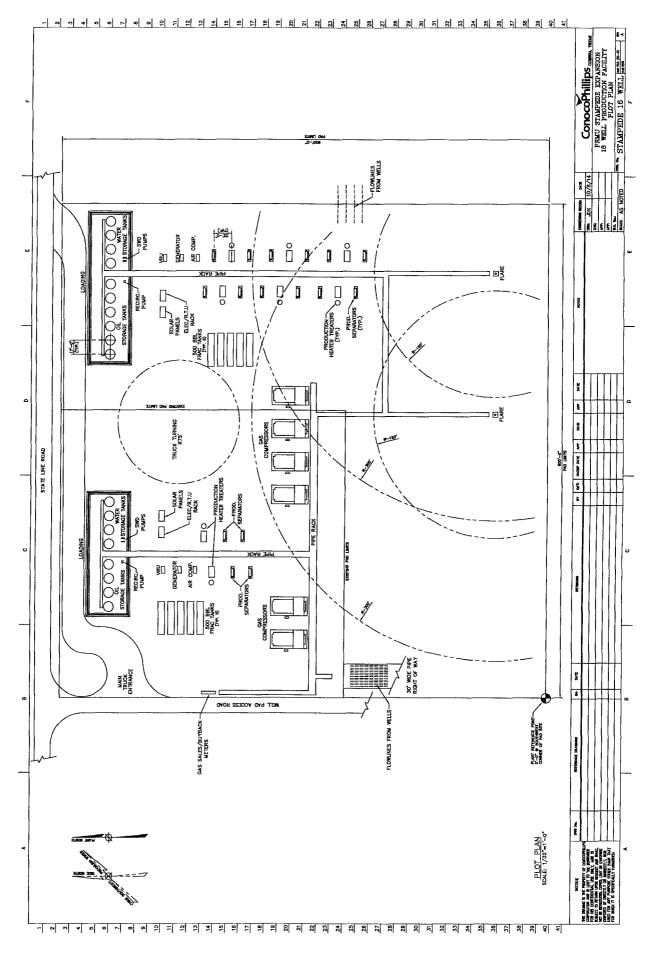
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- II. Preliminary Emergency Information Sheet
- III. Emergency Drill Report
- IV. Onshore Hazardous Material Spill/Release Report Form
- V. Immediate Report of Occupational Injury or Illness Report of Accident-Public Contractor Report of Loss or Damage to Company Property Report of Automotive Incident







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ConocoPhillips Company Stampede 34 Federal COM 5H

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### **Surface Use Plan of Operations**

### Introduction

The following surface use plan of operations will be followed and carried out once the APD is approved. No other disturbance will be created other than what was submitted in this surface use plan. If any other surface disturbance is needed after the APD is approved, a BLM approved sundry notice or right of way application will be acquired prior to any new surface disturbance.

Before any surface disturbance is created, stakes or flagging will be installed to mark boundaries of permitted areas of disturbance, including soils storage areas. As necessary, slope, grade, and other construction control stakes will be placed to ensure construction in accordance with the surface use plan. All boundary markers will be maintained in place until final construction cleanup is completed. If disturbance boundary markers are disturbed or knocked down, they will be replaced before construction proceeds.

If terms and conditions are attached to the approved APD and amend any of the proposed actions in this surface use plan, we will adhere to the terms and conditions.

### **1. Existing Roads**

a. The existing access road route to the proposed project is depicted on Access Road R-O-W. Improvements to the driving surface will be done where necessary. No new surface disturbance will be done, unless otherwise noted in the New or Reconstructed Access Roads section of this surface use plan.

b. The existing access road route to the proposed project does not cross lease or unit boundaries, so a BLM rightof-way grant will not be acquired for this proposed road route.

c. The operator will improve or maintain existing roads in a condition the same as or better than before operations begin. The operator will repair pot holes, clear ditches, repair the crown, etc. All existing structures on the entire access route such as cattleguards, other range improvement projects, culverts, etc. will be properly repaired or replaced if they are damaged or have deteriorated beyond practical use.

d. We will prevent and abate fugitive dust as needed, whether created by vehicular traffic, equipment operations, or wind events. BLM written approval will be acquired before application of surfactants, binding agents, or other dust suppression chemicals on roadways.

### 2. New or Reconstructed Access Roads

a. An access road will be needed for this proposed project. See the survey plat for the location of the access road.

b. The length of access road needed to be constructed for this proposed project is about 257 feet.

c. The maximum driving width of the access road will be 20 feet. The maximum width of surface disturbance when constructing the access road will not exceed 25 feet. All areas outside of the driving surface will be revegetated.

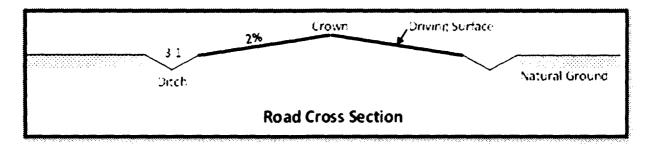
d. The access road will be constructed with 6 inches of compacted Caliche.

e. When the road travels on fairly level ground, the road will be crowned and ditched with a 2% slope from the tip of the road crown to the edge of the driving surface. The ditches will be 3 feet wide with 3:1 slopes. See Road Cross Section diagram below.

### ConocoPhillips Company

Stampede 34 Federal COM 5H

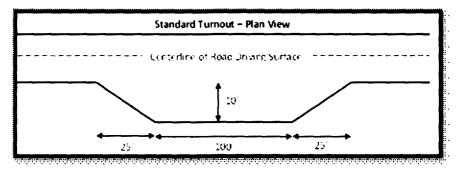
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f. The access road will be constructed with a ditch on each side of the road.

g. The maximum grade for the access road will be 3 percent.

h. Turnouts will be constructed for the proposed access road and will be constructed to the dimensions shown in the diagram below. See survey plat or map for location of the turnouts.



- i. No cattleguards will be installed for this proposed access road.
- j. No BLM right-of-way grant is needed for the construction of this access road.
- k. No culverts will be constructed for this proposed access road.
- 1. No low water crossings will be constructed for the access road.
- m. Since the access road is on level ground, no lead-off ditches will be constructed for the proposed access road.

n. Newly constructed or reconstructed roads, on surface under the jurisdiction of the Bureau of Land Management, will be constructed as outlined in the BLM "Gold Book" and to meet the standards of the anticipated traffic flow and all anticipated weather requirements as needed. Construction will include ditching, draining, crowning and capping or sloping and dipping the roadbed as necessary to provide a well-constructed and safe road.

o. A 30' Road R-O-W is requested, 20' for the driveable surface and 5' on each side.

### 3. Location of Existing Wells

a. Stampede 34 Federal COM W3 5H Map 12 of the APD depicts all known wells within a one mile radius of the proposed well.

b. There is no other information regarding wells within a one mile radius.

### 4. Location of Existing and/or Proposed Production Facilities

a. All permanent, lasting more than 6 months, above ground structures including but not limited to pumpjacks, storage tanks, barrels, pipeline risers, meter housing, etc. that are not subject to safety requirements will be painted

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a non-reflective paint color, Shale Green, from the BLM Standard Environmental Colors chart, unless another color is required in the APD Conditions of Approval.

b. If any type of production facilities are located on the well pad, they will be strategically placed to allow for maximum interim reclamation, recontouring, and revegetation of the well location.

c. Production from the proposed well will be transported to the production facility named Stampede 34 Central Tank Battery. The location of the facility is as follows: Sect. 34, T26S, R31E.

d. A pipeline to transport production will be installed from the proposed well to the existing production facility.

i. We plan to install a 4 inch buried Coated Steel pipeline from the proposed well to the offsite production facility. The proposed length of the pipeline will be 1677 feet. The working pressure of the pipeline will be about 1480 psi. A 30 feet wide work area will be needed to install the buried pipeline. In areas where blading is allowed, topsoil will be stockpiled and separated from the excavated trench mineral material. Final reclamation procedures will match the procedures in Plans for Surface Reclamation. When the excavated soil is backfilled, it will be compacted to prevent subsidence. No berm over the pipeline will be evident.

ii. Flow Line R-O-W depicts the proposed production pipeline route from the well to the existing production facility.

iii. The proposed pipeline does not cross lease boundaries, so a right of way grant will not need to be acquired from the BLM.

If any plans change regarding the production facility or other infrastructure (pipeline, electric line, etc.), we will submit a sundry notice or right of way (if applicable) prior to installation or construction.

### **Additional Pipeline(s)**

We propose to install 1 additional pipeline(s):

1. Buried Gas pipeline:

a. We plan to install a 2 inch buried steel pipeline from proposed well to facility. The proposed length of the pipeline will be 1677 feet. The working pressure of the pipeline will be about 1100 psi. A 30 feet wide work area will be needed to install the buried pipeline. We will need an extra 10 foot wide area near corners to safely install the pipeline. In areas where blading is allowed, topsoil will be stockpiled and separated from the excavated trench mineral material. Final reclamation procedures will match the procedures in Plans for Surface Reclamation. When the excavated soil is backfilled, it will be compacted to prevent subsidence. No berm over the pipeline will be evident.

b. Flow Line R-O-W depicts the proposed Gas pipeline route.

c. The proposed pipeline does not cross lease boundaries, so a right of way grant will not need to be acquired from the BLM.

### Electric Line(s)

a. We plan to install an overhead electric line for the proposed well. The proposed length of the electric line will be 198 feet. Power Line R-O-W depicts the location of the proposed electric line route. The electric line will be construction to provide protection from raptor electrocution.

b. The proposed electric line does not cross lease boundaries, so a right of way grant will not need to be acquired from the BLM.

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### 5. Location and Types of Water

a. The source and location of the water supply are as follows: The water source is from an approved source and a temporary permit to lay the lines will be filed under a separate cover.

### 6. Construction Material

a. Clean caliche will be from a BLM source or a third party provider.

### 7. Methods for Handling Waste

a. Drilling fluids and produced oil and water from the well during drilling and completion operations will be stored safely and disposed of properly in an NMOCD approved disposal facility.

b. Garbage and trash produced during drilling and completion operations will be collected in a trash container and disposed of properly at a state approved disposal facility. All trash on and around the well site will be collected for disposal.

c. Human waste and grey water will be properly contained and disposed of properly at a state approved disposal facility.

d. After drilling and completion operations, trash, chemicals, salts, frac sand and other waste material will be removed and disposed of properly at a state approved disposal facility.

e. The well will be drilled utilizing a closed loop system. Drill cutting will be properly disposed of into steel tanks and taken to an NMOCD approved disposal facility.

### 8. Ancillary Facilities

a. No ancillary facilities will be needed for this proposed project.

### 9. Well Site Layout

- a. The following information is presented in the well site survey plat or diagram:
  - i. reasonable scale (near 1":50')
  - ii. well pad dimensions
  - iii. well pad orientation
  - iv. drilling rig components
  - v. proposed access road
  - vi. elevations of all points
  - vii. topsoil stockpile
  - viii. reserve pit location/dimensions if applicable
  - ix. other disturbances needed (flare pit, stinger, frac farm pad, etc.)
  - x. existing structures within the 600' x 600' archaeoligical surveyed area (pipelines, electric lines, well pads, etc

b. The proposed drilling pad was staked and surveyed by a professional surveyor. The attached survey plat of the well site depicts the drilling pad layout as staked.

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c. The submitted survey plat does depict all the necessary information required by Onshore Order No. 1.

d. Topsoil Salvaging

i. Grass, forbs, and small woody vegetation, such as mesquite will be excavated as the topsoil is removed. Large woody vegetation will be stripped and stored separately and respread evenly on the site following topsoil respreading. Topsoil depth is defined as the top layer of soil that contains 80% of the roots. In areas to be heavily disturbed, the top 6 inches of soil material, will be stripped and stockpiled on the perimeter of the well location and along the perimeter of the access road to control run-on and run-off, to keep topsoil viable, and to make redistribution of topsoil more efficient during interim reclamation. Stockpiled topsoil should include vegetative material. Topsoil will be clearly segregated and stored separately from subsoils. Contaminated soil will not be stockpiled, but properly treated and handled prior to topsoil salvaging.

### **10. Plans for Surface Reclamation**

### **Reclamation Objectives**

i. The objective of interim reclamation is to restore vegetative cover and a portion of the landform sufficient to maintain healthy, biologically active topsoil; control erosion; and minimize habitat and forage loss, visual impact, and weed infestation, during the life of the well or facilities.

ii. The long-term objective of final reclamation is to return the land to a condition similar to what existed prior to disturbance. This includes restoration of the landform and natural vegetative community, hydrologic systems, visual resources, and wildlife habitats. To ensure that the long-term objective will be reached through human and natural processes, actions will be taken to ensure standards are met for site stability, visual quality, hydrological functioning, and vegetative productivity.

iii. The BLM will be notified at least 3 days prior to commencement of any reclamation procedures.

iv. If circumstances allow, interim reclamation and/or final reclamation actions will be completed no later than 6 months from when the final well on the location has been completed or plugged. We will gain written permission from the BLM if more time is needed.

v. Interim reclamation will be performed on the well site after the well is drilled and completed. Reclamation Diagram, Figure #4 depicts the location and dimensions of the planned interim reclamation for the well site.

### **Interim Reclamation Procedures (If performed)**

1. Within 30 days of well completion, the well location and surrounding areas will be cleared of, and maintained free of, all materials, trash, and equipment not required for production.

2. In areas planned for interim reclamation, all the surfacing material will be removed and returned to the original mineral pit or recycled to repair or build roads and well pads.

3. The areas planned for interim reclamation will then be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Where applicable, the fill material of the well pad will be backfilled into the cut to bring the area back to the original contour. The interim cut and fill slopes prior to re-seeding will not be steeper than a 3:1 ratio, unless the adjacent native topography is steeper. Note: Constructed slopes may be much steeper during drilling, but will be recontoured to the above ratios during interim reclamation.

4. Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations including cuts & fills. To seed the area, the proper BLM seed mixture, free of noxious weeds, will be used. Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the

ConocoPhillips Company Stampede 34 Federal COM 5H SHL: 250 FSL & 1040 FWL, Section: 34, T.26S., R.31E. BHL: 50 FNL & 1040 FWL, Section: 27, T.26S., R.31E.

soil crust and create seed germination micro-sites.

5. Proper erosion control methods will be used on the area to control erosion, runoff and siltation of the surrounding area.

6. The interim reclamation will be monitored periodically to ensure that vegetation has reestablished and that erosion is controlled.

### Final Reclamation (well pad, buried pipelines, etc.)

1. Prior to final reclamation procedures, the well pad, road, and surrounding area will be cleared of material, trash, and equipment.

2. All surfacing material will be removed and returned to the original mineral pit or recycled to repair or build roads and well pads.

3. All disturbed areas, including roads, pipelines, pads, production facilities, and interim reclaimed areas will be recontoured to the contour existing prior to initial construction or a contour that blends indistinguishably with the surrounding landscape. Topsoil that was spread over the interim reclamation areas will be stockpiled prior to recontouring. The topsoil will be redistributed evenly over the entire disturbed site to ensure successful revegetation.

4. After all the disturbed areas have been properly prepared, the areas will be seeded with the proper BLM seed mixture, free of noxious weeds. Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites.

5. Proper erosion control methods will be used on the entire area to control erosion, runoff and siltation of the surrounding area.

6. All unused equipment and structures including pipelines, electric line poles, tanks, etc. that serviced the well will be removed.

7. All reclaimed areas will be monitored periodically to ensure that revegetation occurs, that the area is not redisturbed, and that erosion is controlled.

### 11. Surface Ownership

a. The surface ownership of the proposed project is Federal.

### **12. Other Information**

a. The following well pad location was finalized during an onsite conducted June 10, 2014 with Trishia Bad Bear of the BLM. Please review this application with the Stampede 34 Federal COM W2 6H. Temporary Water Lines will be filed under separate cover.

### 13. Maps and Diagrams

Access Road R-O-W - Existing Road Stampede 34 Federal COM W3 5H Map 12 - Wells Within One Mile Flow Line R-O-W - Production Pipeline Flow Line R-O-W - Gas Pipeline Power Line R-O-W - Electric Line Reclamation Diagram, Figure #4 - Interim Reclamation ConocoPhillips Company Stampede 34 Federal COM 5H SHL: 250 FSL & 1040 FWL, Section: 34, T.26S., R.31E. BHL: 50 FNL & 1040 FWL, Section: 27, T.26S., R.31E.

NM OIL CONSERVATION

ARTESIA DISTRICT

### DEC 2 2 2016

### PECOS DISTRICT CONDITIONS OF APPROVAL

### RECEIVED

<b>OPERATOR'S NAME:</b>	ConocoPhillips Company
LEASE NO.:	NMLC-068282A
WELL NAME & NO.:	Stampede 34 Federal Com W3 5H
SURFACE HOLE FOOTAGE:	0250' FSL & 1040' FWL
<b>BOTTOM HOLE FOOTAGE</b>	050' FNL & 1040' FWL Sec. 27, T. 26 S., R 31 E.
LOCATION:	Section 34, T. 26 S., R 31 E., NMPM
COUNTY:	Eddy County, New Mexico

### **TABLE OF CONTENTS**

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

General Provisions Permit Expiration
Archaeology, Paleontology, and Historical Sites
Noxious Weeds
Special Requirements
Communitization Agreement
Cave/Karst
Desert Heronries
Construction
Notification
Topsoil
Closed Loop System
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# I. GENERAL PROVISIONS

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The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

# **II. PERMIT EXPIRATION**

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

# **III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES**

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

# **IV. NOXIOUS WEEDS**

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

# V. SPECIAL REQUIREMENT(S) <u>Communitization Agreement</u>

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• The operator will submit a Communitization Agreement to the Carlsbad Field Office, 620 E Greene St. Carlsbad, New Mexico 88220, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.

If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.

• In addition, the well sign shall include the surface and bottom hole lease numbers. <u>When the Communitization Agreement number is known, it shall also be</u> on the sign.

#### **Desert Heronries**

Surface disturbance will not be allowed within up to 200 meters of active heronries or by delaying activity for up to 120 days, or a combination of both.

Exhaust noise from engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

# **Cave/Karst Surface Mitigation**

The following stipulations will be applied to minimize impacts during construction, drilling and production.

#### **Construction:**

In the advent that any underground voids are opened up during construction activities, construction activities will be halted and the BLM will be notified immediately.

#### No Blasting:

No blasting will be utilized for pad construction. The pad will be constructed and leveled by adding the necessary fill and caliche.

#### **Pad Berming:**

The pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the pad.

## Closed Mud System Using Steel Tanks with All Fluids and Cuttings Hauled Off.

A closed mud system using steel tanks for all cuttings and fluids is required. All fluids and cuttings will be hauled off site for disposal. <u>No pits are allowed</u>.

#### **Tank Battery Liners and Berms:**

Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain  $1\frac{1}{2}$  times the content of the largest tank.

#### Leak Detection System:

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A method of detecting leaks is required. The method could incorporate gauges to measure loss, situating values and lines so they can be visually inspected, or installing electronic sensors to alarm when a leak is present. Leak detection plan will be submitted to BLM for approval.

#### Automatic Shut-off Systems:

Automatic shut off, check values, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

## **Cave/Karst Subsurface Mitigation**

The following stipulations will be applied to protect cave/karst and ground water concerns:

#### **Rotary Drilling with Fresh Water:**

Fresh water will be used as a circulating medium in zones where caves or karst features are expected. SEE ALSO: Drilling COAs for this well.

#### **Directional Drilling:**

Kick off for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone. SEE ALSO: Drilling COAs for this well.

#### Lost Circulation:

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported in the drilling report.

Regardless of the type of drilling machinery used, if a void of four feet or more and circulation losses greater than 70 percent occur simultaneously while drilling in any cavebearing zone, the BLM will be notified immediately by the operator. The BLM will assess the situation and work with the operator on corrective actions to resolve the problem.

#### **Abandonment Cementing:**

Upon well abandonment in high cave karst areas additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

#### **Pressure Testing:**

Annual pressure monitoring will be performed by the operator on all casing annuli and reported in a sundry notice. If the test results indicated a casing failure has occurred, remedial action will be undertaken to correct the problem to the BLM's approval.

# VI. CONSTRUCTION

# A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

## B. TOPSOIL

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

## C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

#### D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

#### E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

## F. EXCLOSURE FENCING (CELLARS & PITS)

#### **Exclosure Fencing**

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The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

## G. ON LEASE ACCESS ROADS

## **Road Width**

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

#### Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

## Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

## Ditching

Ditching shall be required on both sides of the road.

#### Turnouts

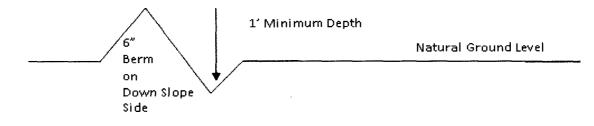
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

## Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

**Cross Section of a Typical Lead-off Ditch** 



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

## Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope: 400' + 100' = 200' lead-off ditch interval 4%

## Cattleguards

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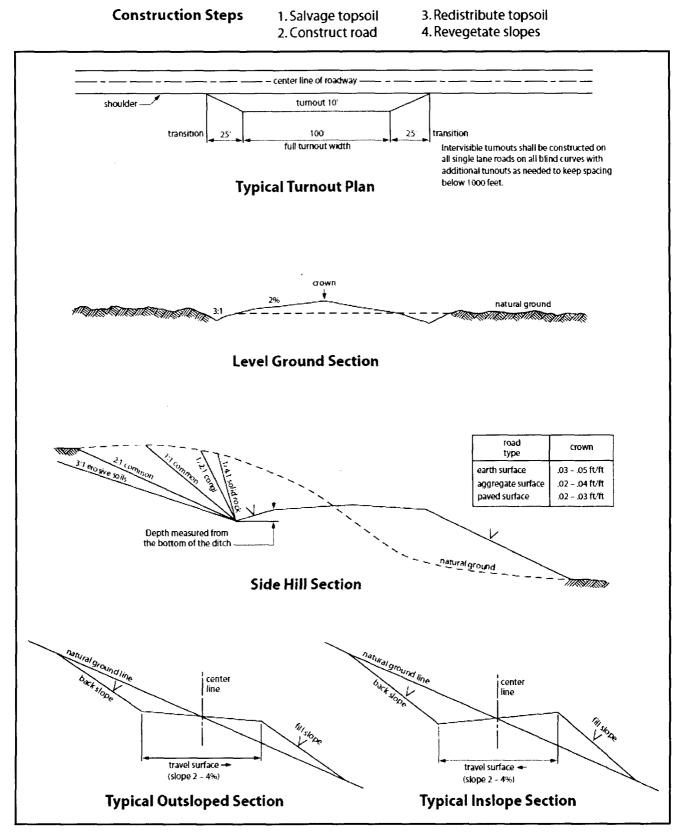
An appropriately sized cattleguard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattleguards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguards that are in place and are utilized during lease operations.

## **Fence Requirement**

Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

## **Public Access**

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.



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Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

# VII. DRILLING

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# A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)
  - Eddy County

- 1. Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.
- 2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. If the drilling rig is removed without approval an Incident of Non-Compliance will be written and will be a "Major" violation.
- 3. The operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other wells.
- 4. Option Setting surface casing with Pinnergy #1 Rig.
  - a. Notify the BLM when removing the Pinnergy #1 Rig.
  - b. Notify the BLM when moving in the H&P Flex Rig. Rig to be moved in within 60 days of notification that Pinnergy #1 Rig has left the location. Failure to notify or have rig on location within 60 days will result in an Incident of Non-Compliance.
  - c. Once the H&P Flex Rig is on location, it shall not be removed from over the hole without prior approval unless the production casing has been run and cemented or the well has been properly plugged. If the drilling rig is removed without approval an Incident of Non-Compliance will be written and will be a "Major" violation.
  - d. BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as H&P Flex Rig is rigged up on well. CIT for the surface casing shall be performed and results recorded on subsequent sundry pressure to be 1200 psi.
- 5. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area

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immediately around the rotary table; the area immediately above the substructure on which the draw works is located, this does not include the dog house or stairway area.

6. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

#### **B.** CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

#### Wait on cement (WOC) for Water Basin:

After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least <u>8 hours</u>. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.

Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

#### High Cave/Karst

Possibility of water flows in the Top of Salt, Castile, and Wolfcamp. Possibility of lost circulation in the Delaware. Abnormal pressures maybe encountered when penetrating the 3<sup>rd</sup> Bone Spring Sandstone and all subsequent formations.

## A MINIMUM OF TWO CASING STRINGS CEMENTED TO SURFACE IS REQUIRED IN HIGH CAVE/KARST AREAS. THE CEMENT MUST BE IN A SOLID SHEATH. THEREFORE, ONE INCH OPERATIONS ARE NOT

## SUFFICIENT TO PROTECT CAVE KARST RESOURCES. A CASING DESIGN THAT HAS A ONE INCH JOB PERFORMED DOES NOT COUNT AS A SOLID SHEATH. IF THE PRIMARY CEMENT JOB ON THE SURFACE CASING DOES NOT CIRCULATE, THEN THE NEXT TWO CASING STRINGS MUST BE CEMENTED TO SURFACE.

- 1. The 13-3/8 inch surface casing shall be set at approximately 960 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. If salt is encountered, set casing at least 25 feet above the salt.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.

Formation below the 13-3/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe and the mud weight for the bottom of the hole. Report results to BLM office.

- 2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing, which shall be set at approximately 3925 feet (basal anhydrite of the Castile Formation or the Lamar Limestone), is:
  - Cement to surface. If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

3. The minimum required fill of cement behind the 7-5/8 inch intermediate casing is:

# Option #1:

Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification.

#### **Option #2:**

Operator has proposed DV tool at depth of 8000', but will adjust cement proportionately if moved. DV tool shall be set a minimum of 50' below previous shoe and a minimum of 200' above current shoe. Operator shall submit sundry if DV tool depth cannot be set in this range. If an ECP is used, it is to be set a minimum of 50' below the shoe to provide cement across the shoe. If it cannot be set below the shoe, a CBL shall be run to verify cement coverage.

- a. First stage to DV tool:
- Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.
- b. Second stage above DV tool:
- Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification.

Formation below the 7-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.

- 4. The minimum required fill of cement behind the 5 X 4-1/2 inch production casing is: Cement as proposed by operator. Operator shall provide method of verification.
- 5. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

## C. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API 53.
- 2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the

**company man's trailer and on the rig floor.** If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).

3. BOP Options:

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Option 1 - BOP testing if wells are drilled conventionally- BOP is not removed between casing strings.

Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 5000 psi.

- a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
- b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
- c. Manufacturer representative shall install the test plug for the initial BOP test.
- d. Operator shall perform the intermediate casing integrity test to 70% of the casing burst. This will test the multi-bowl seals.
- e. Operator shall perform the 9-5/8" integrity tests to 70% of the casing burst. This will test the multi-bowl seals.
- f. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 7-5/8 intermediate casing shoe shall be 10,000 (10M) psi. 10M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

#### Option 2 - BOP testing for Batch Drilling-BOP is removed between casing strings

Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi. **5M** system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure. BOP/BOPE shall be tested after nipple up according to Onshore Order #2.

Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 9-5/8 intermediate casing shoe shall be 5000 (5M) psi. 5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 7-5/8 intermediate casing shoe shall be 10,000 (10M) psi. 10M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

- 4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.
  - c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
  - d. The results of the test shall be reported to the appropriate BLM office.
  - e. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
  - f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
  - g. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

#### D. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented.

#### E. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

#### F. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

#### JAM 052616

# VIII. PRODUCTION (POST DRILLING)

#### A. WELL STRUCTURES & FACILITIES Placement of Production Facilities

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

#### **Exclosure Netting (Open-top Tanks)**

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

#### Chemical and Fuel Secondary Containment and Exclosure Screening

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law;

the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

#### **Open-Vent Exhaust Stack Exclosures**

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

#### **Containment Structures**

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

#### **Painting Requirement**

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, <u>Shale Green</u> from the BLM Standard Environmental Color Chart (CC-001: June 2008).

## **B. PIPELINES**

## BURIED PIPELINE STIPULATIONS

A copy of the application (Grant, APD, or Sundry Notice) and attachments, including conditions of approval, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 <u>et seq.</u> (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

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3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C.6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of holder, regardless of fault. Upon failure of holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.

5. All construction and maintenance activity will be confined to the authorized right-ofway.

6. The pipeline will be buried with a minimum cover of 36 inches between the top of the pipe and ground level.

7. The maximum allowable disturbance for construction in this right-of-way will be  $\underline{30}$  feet:

- Blading of vegetation within the right-of-way will be allowed: maximum width of blading operations will not exceed <u>20</u> feet. The trench is included in this area. (*Blading is defined as the complete removal of brush and ground vegetation.*)
- Clearing of brush species within the right-of-way will be allowed: maximum width of clearing operations will not exceed <u>30</u> feet. The trench and bladed area are included in this area. (*Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.*)
- The remaining area of the right-of-way (if any) shall only be disturbed by compressing the vegetation. (*Compressing can be caused by vehicle tires, placement of equipment, etc.*)

8. The holder shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately  $\______6$  inches in depth. The topsoil will be

segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.

9. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

10. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this right-of-way and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire right-of-way shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted and a 6 inch berm will be left over the ditch line to allow for settling back to grade.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. The holder will reseed all disturbed areas. Seeding will be done according to the attached seeding requirements, using the following seed mix.

() seed mixture 1	() seed mixture 3
(X) seed mixture 2	() seed mixture 4
() seed mixture 2/LPC	() Aplomado Falcon Mixture

13. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2.

14. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.

15. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder before maintenance begins. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway. As determined necessary during the life of the pipeline, the Authorized Officer may ask the holder to construct temporary deterrence structures.

16. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed

is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

17. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes associated roads, pipeline corridor and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

18. <u>Escape Ramps</u> - The operator will construct and maintain pipeline/utility trenches [that are not otherwise fenced, screened, or netted] to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria:

- a. Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them at least 100 yards from the trench.
- b. For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30 degree slope and spaced no more than 500 feet apart) shall be placed in the trench.

# C. ELECTRIC LINES

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STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

A copy of the grant and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 <u>et seq</u>. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the

reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.

5. Power lines shall be constructed and designed in accordance to standards outlined in "Suggested Practices for Avian Protection on Power lines: The State of the Art in 2006" Edison Electric Institute, APLIC, and the California Energy Commission 2006. The holder shall assume the burden and expense of proving that pole designs not shown in the above publication deter raptor perching, roosting, and nesting. Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

Raptor deterrence will consist of but not limited to the following: triangle perch discouragers shall be placed on each side of the cross arms and a nonconductive perching deterrence shall be placed on all vertical poles that extend past the cross arms.

6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.

8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.

9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

11. Special Stipulations:

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- For reclamation remove poles, lines, transformer, etc. and dispose of properly.
- Fill in any holes from the poles removed.

# IX. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

# X. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Seed Mixture 2, for Sandy Sites

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The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)\* per acre. There shall be <u>no</u> primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:		
Species	l <u>b/acre</u>	
Sand dropseed (Sporobolus cryptandrus)	1.0	
Sand love grass (Eragrostis trichodes)	1.0	
Plains bristlegrass (Setaria macrostachya)	2.0	
*Pounds of pure live seed:		

Pounds of seed x percent purity x percent germination = pounds pure live seed

#### NMOCD CONDITION OF APPROVAL

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The New! Gas Capture Plan (GCP) notice is posted on the NMOCD website under Announcements. The Plan became effective May 1, 2016. A copy of the GCP form is included with the NOTICE and is also in our FORMS section under Unnumbered Forms. Please review filing dates for all applicable activities currently approved or pending and submit accordingly. Failure to file a GCP may jeopardize the operator's ability to obtain C-129 approval to flare gas after the initial 60-day completion period.