•			15-2	
	NM OIL CONSERVAT	ION		
	OCD Attestatict			
Form 3160-3 (March 2012)	OCT 24 2016		FORM APPROVED OMB No. 1004-0137 Expires October 31, 2014	
UNITED STATES		5. Lease Serial No.		
DEPARTMENT OF THE BUREAU OF LAND MAN		NMLC 068282B; NMLC068282A		
APPLICATION FOR PERMIT TO	6. If Indian, Allotce or T	6. If Indian, Allotce or Tribe Name		
la. Type of work: XDRILL REENT	ER	7 If Unit or CA Agreemen	it, Name and No.	
lb. Type of Well: X Oil Well Gas Well Other	X Single Zone Multiple Zon	8. Lease Name and Well STAMPEDE 34 FEDER		
2. Name of Operator CONOCOPHILLIPS COMPANY		9. API Well No. 30-025 015-4	3941	
3a. Address P.O. BOX 51810 MIDLAND, TX 79710	3b. Phone No. (include area code) (432)688-6938	10. Field and Pool, or Explo WOLFCAMP		
4. Location of Well (Report location clearly and in accordance with an	ny State requirements.*)	11. Sec., T. R. M. or Blk.an	d Survey or Area	
At surface 734 FSL & 2177 FWL 34-26S-31E At proposed prod. zone 280 FNL & 2360 FWL 27 -26S-31E	UNORTHODO	LOT 3 34-26S-31E		
<ol> <li>Distance in miles and direction from nearest town or post office* ~48.5 MILES SOUTH/WEST OF JAL, NM</li> </ol>	LOCATION	12. County or Parish EDDY	13. State NM	
15. Distance from proposed* location to nearest 280' property or lease line, ft.	16. No. of acres in lease         17. Sp           NMLC068282B: 900.8         17. Sp	pacing Unit dedicated to this well		
property or lease line, fl. (Also to nearest drig. unit line, if any)	NMLC068282A; 1221.6	225.20		
<ol> <li>Distance from proposed location* to nearest well, drilling, completed, SHL: 33' (S.F. 14H) applied for, on this lease, ft.</li> </ol>	TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	LM/BIA Bond No. on file S0085	· · · · ·	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3122.4	22. Approximate date work will start* 12/01/2016	23. Estimated duration 30 DAYS	· · · ·	
	24. Attachments			
The following, completed in accordance with the requirements of Onshor	re Oil and Gas Order No.1, must be attached	to this form;		
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office).</li> </ol>	Item 20 above). Lands, the 5. Operator certification	ations unless covered by an exist information and/or plans as may		
25. Signature Bongen	Name (Printed/Typed) ASHLEY BERGEN	Date	•	
Nite   O   O     REGULATORY ASSOCIATE	( <sup>*</sup>			
Approved by (Signature) /s/Cody Layton	Name (Printed/Typed)	BE	T 1 8 2016	
FIELD MANAGER		SBAD FIELD OFFICE	•	
Application approval does not warrant or certify that the applicant hold onduct operations thereon. Conditions of approval, if any, are attached.	s legal or equitable title to those rights in the	subject lease which would entitle APPROVAL	OR TWO YE	
Ytle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a or tates any false, fictitious or fraudulent statements or representations as t	ime for any person knowingly and willfully to any matter within its jurisdiction.	to make to any department or age	cy of the United	
(Continued on page 2)	·	*(Instructi	ons on page 2)	
sbad Controlled Water Basin				
SDAD CONTINUED WATER DASIN				

# SEE ATTACHED FOR CONDITIONS OF APPROVAL

Approval Subject to General Requirements & Special Stipulations Attached

## **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.

Kristina Mickens Sr. Regulatory Specialist

Date: 12-19-14

District [ 1625 N. French Dr., Holbs, Nid 88240 Phones (375) 393:5161 Prov. (575) 393-5720 <u>District [U. 81</u>, Arriche: Nix 88210 Bland, difference: Catholice Dr. Catholice Dr.

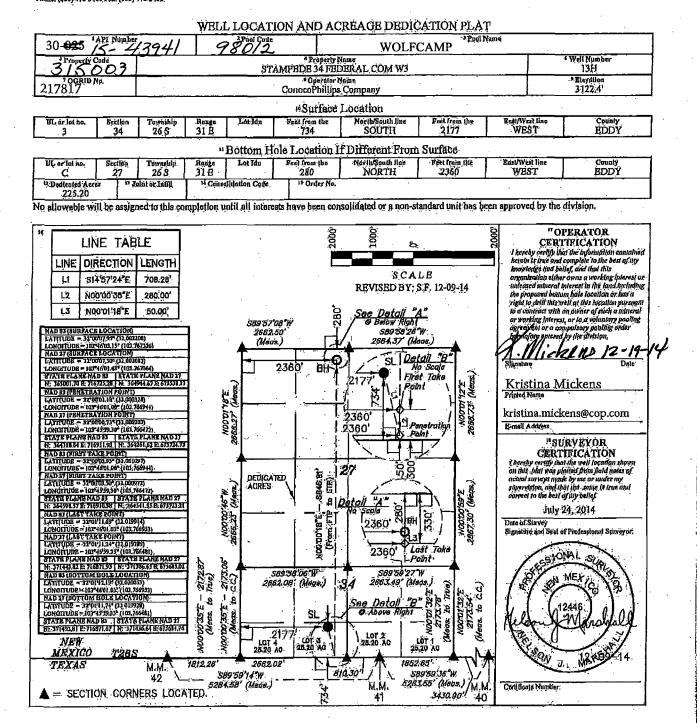
District [] \$11.5: 174, 51, Artesla; NN 89210 Plume; (\$75):748-1283 Paz; (\$75):748-9320 District III 1000 Rio Pinzos Road, Aziro, NM 87410 Phono; (\$05):934-6178 Paz; (\$05):934-6170. District IV.

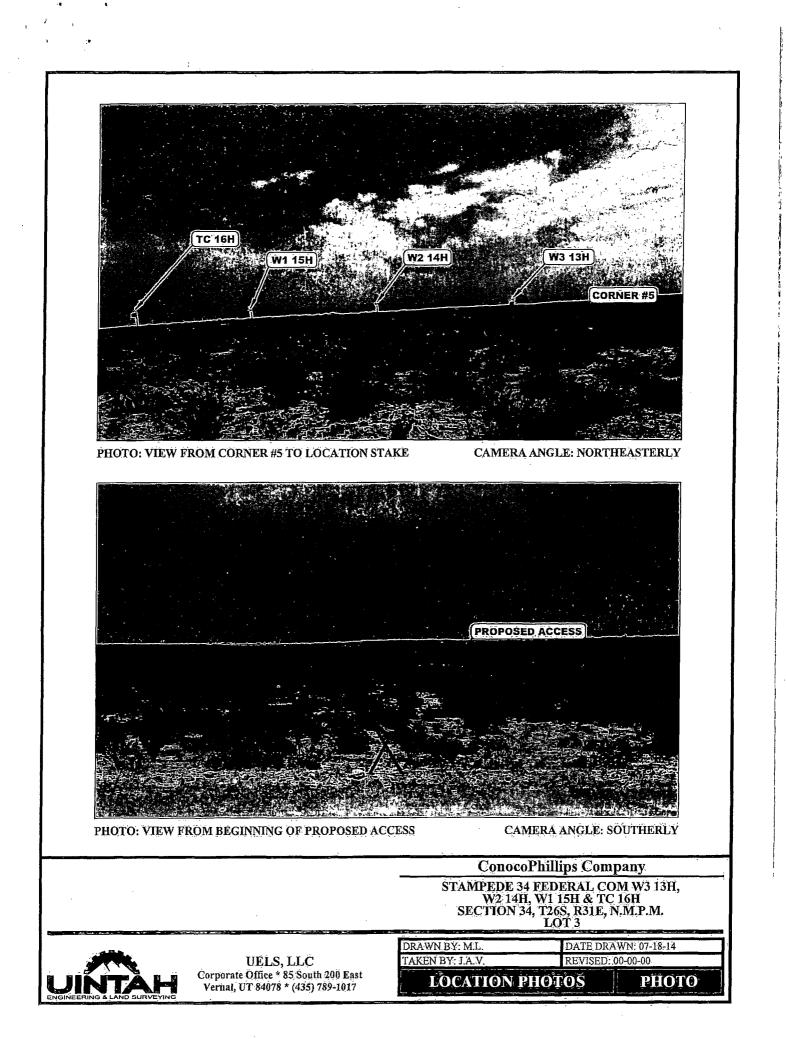
District IV 1220 S. St. Francis Dr., Santa Pa, NM 87505 Phone: (\$05) 476-3460 Fex: (505) 476-3462

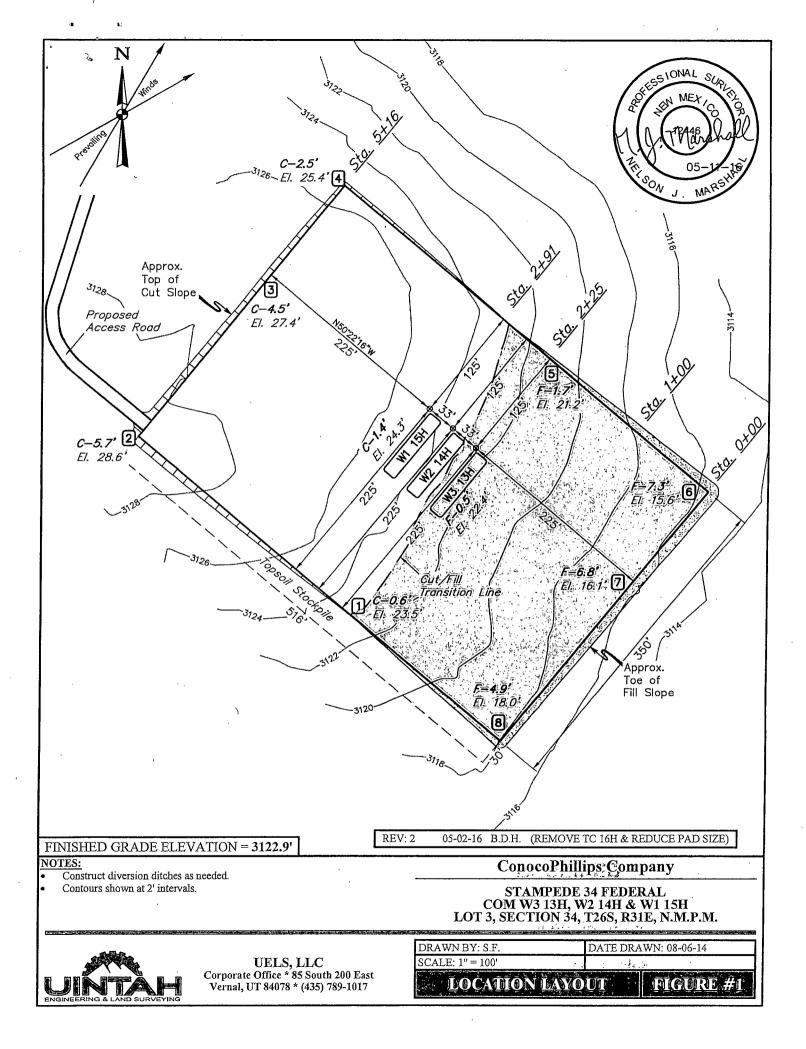
### State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

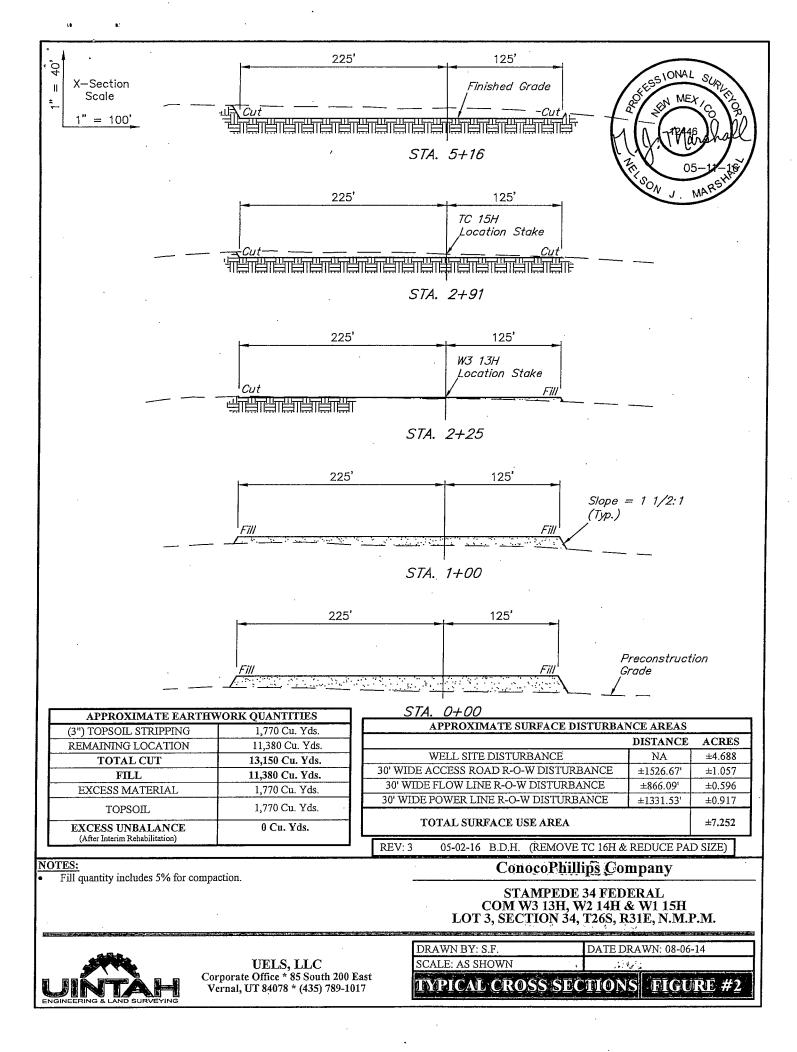
Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

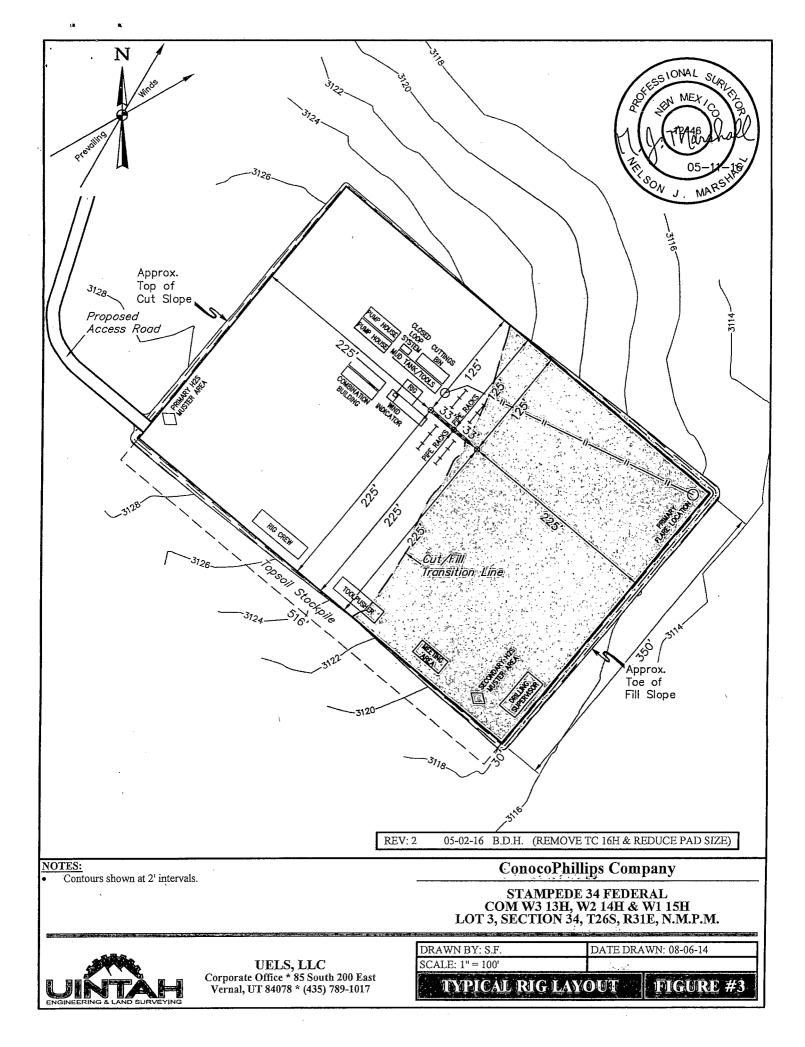
AMENDED REPORT

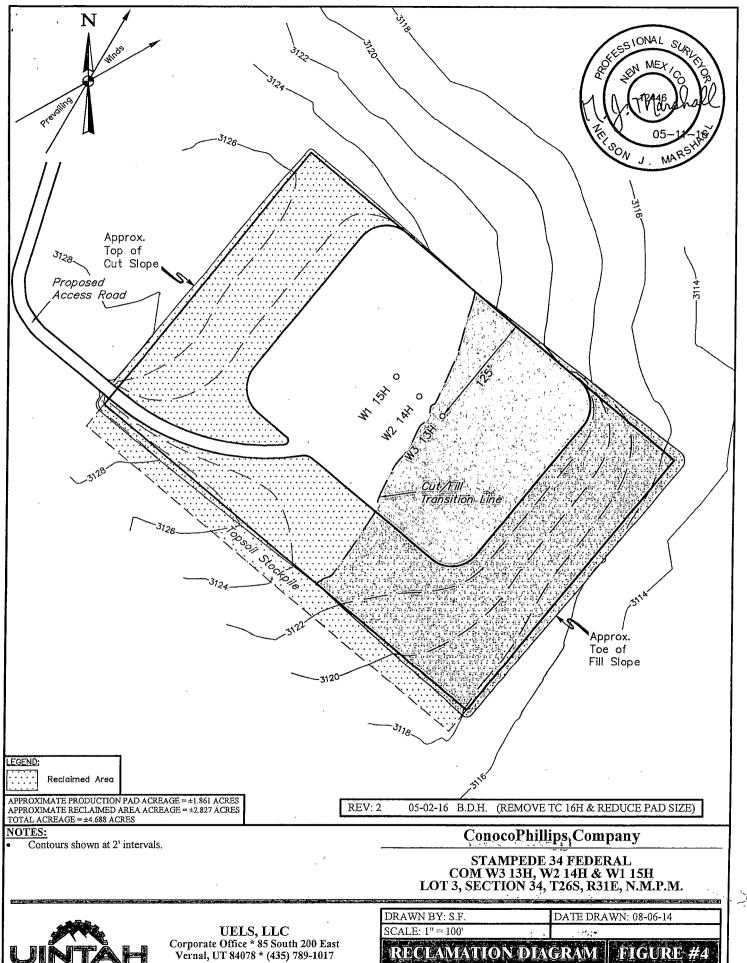




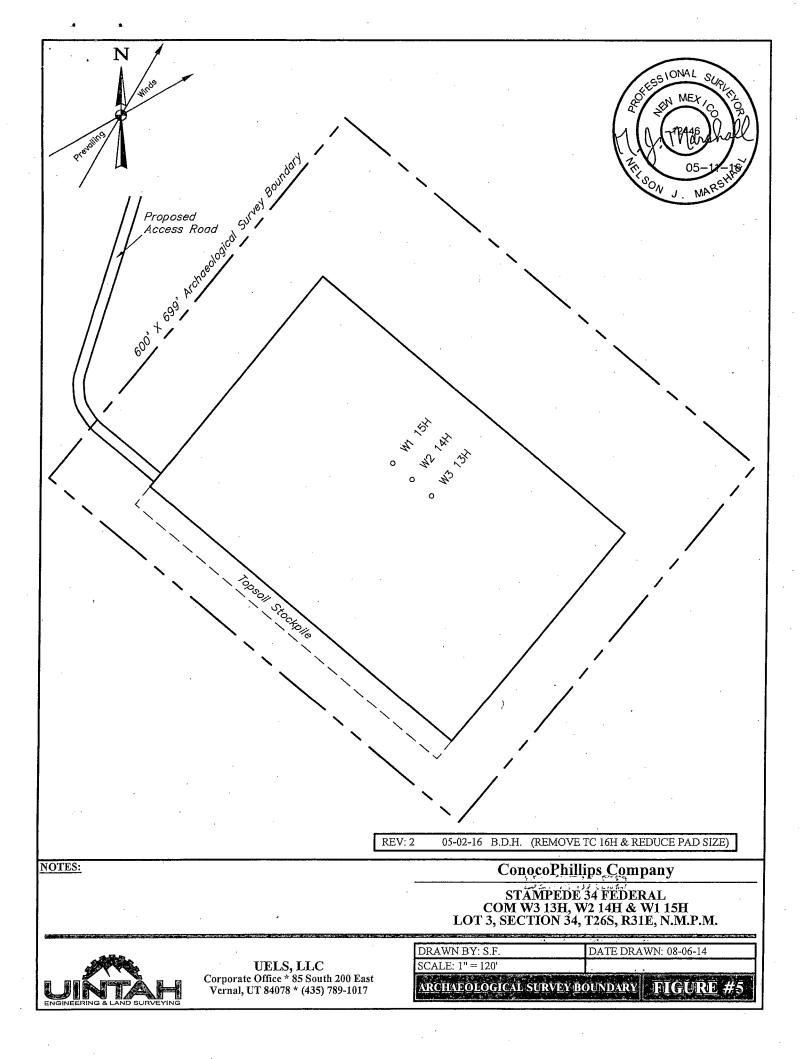


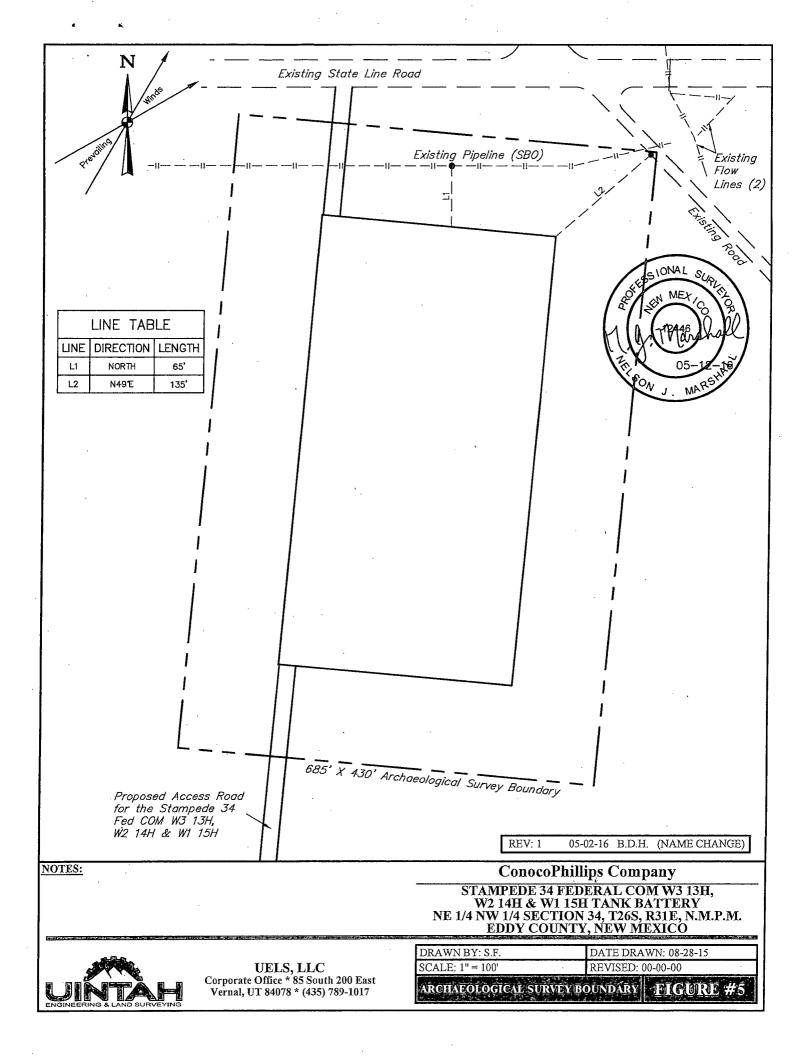


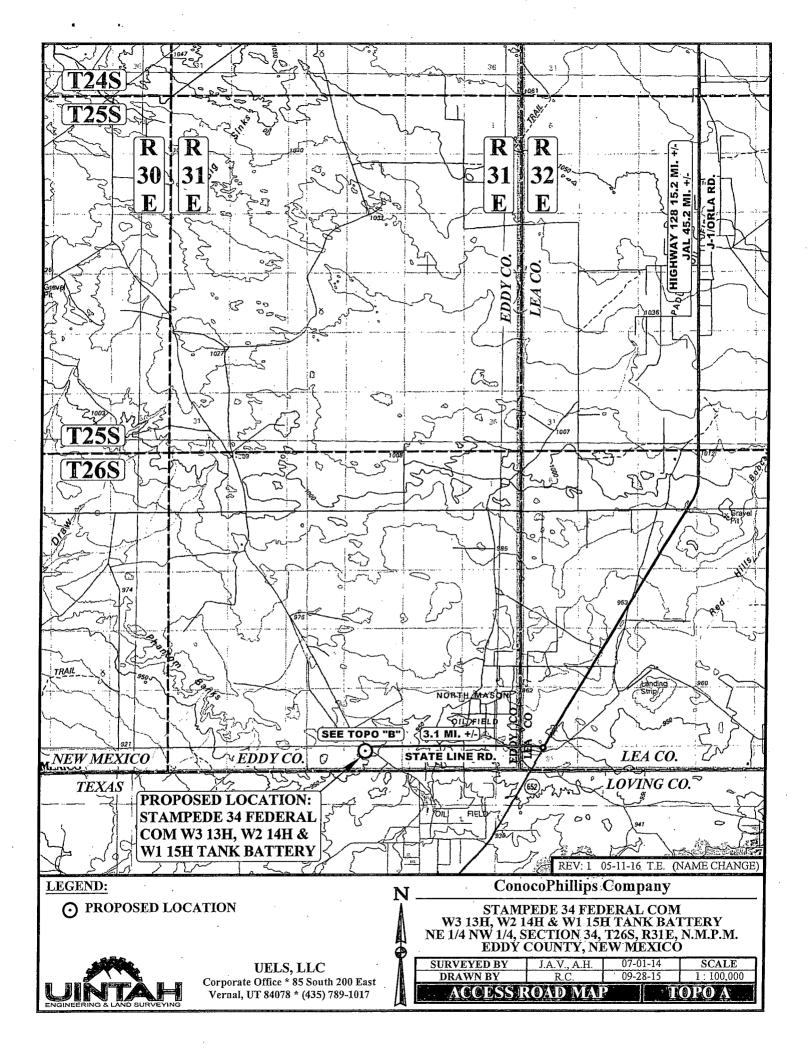


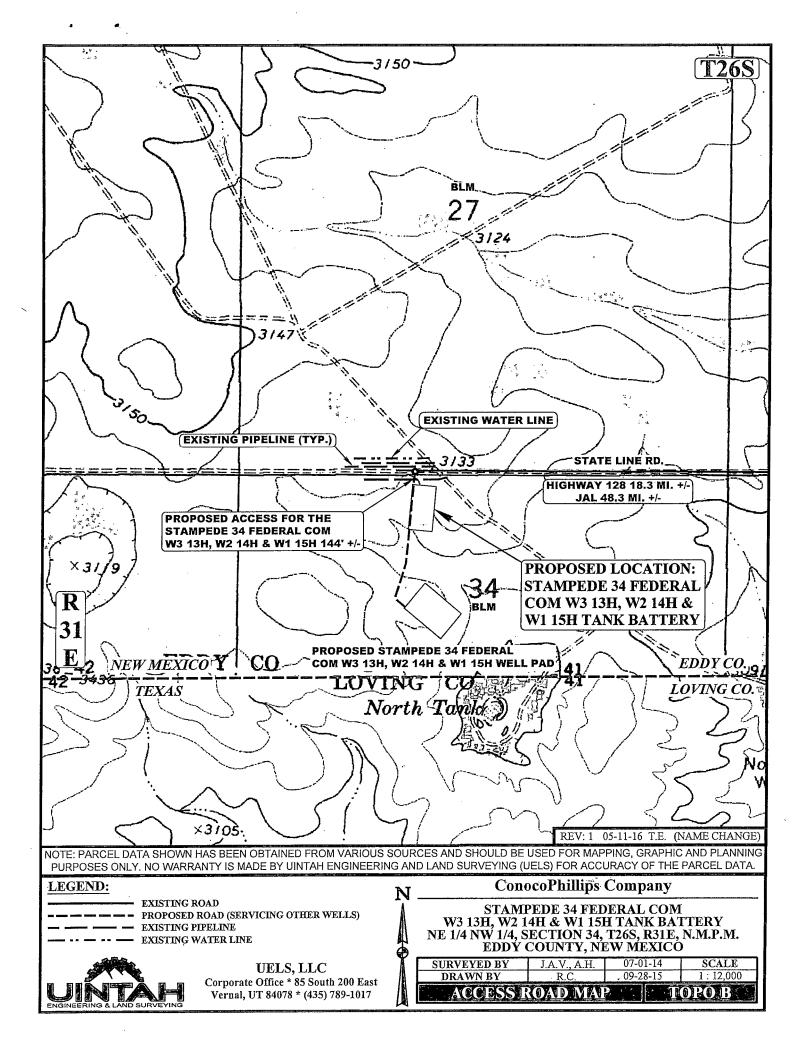


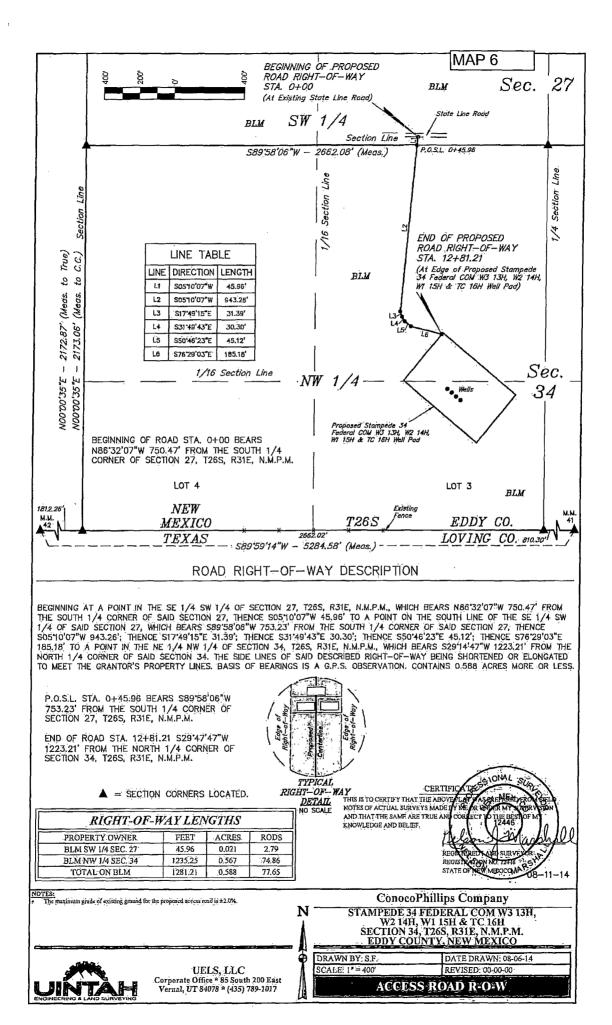
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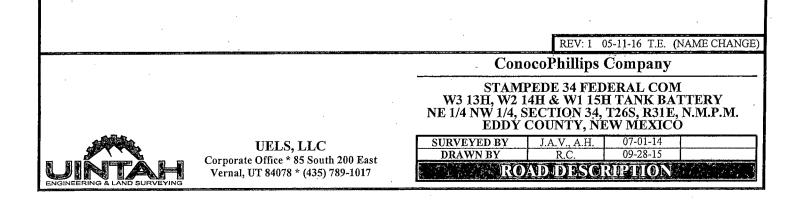




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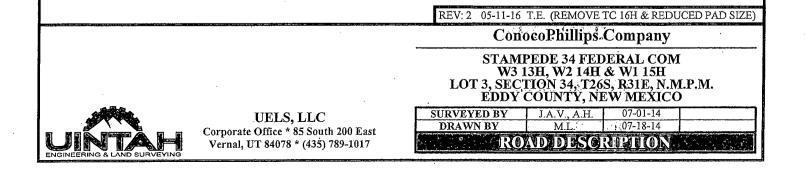
PROCEED IN A WESTERLY DIRECTION FROM JAL, NEW MEXICO ALONG HIGHWAY 128 APPROXIMATELY 30.0 MILES TO THE JUNCTION OF THIS ROAD AND J-1/ORLA ROAD TO THE SOUTH; TURN LEFT AND PROCEED IN A SOUTHERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 15.2 MILES TO THE JUNCTION OF THIS ROAD AND STATE LINE ROAD TO THE WEST; TURN RIGHT AND PROCEED IN A WESTERLY DIRECTION APPROXIMATELY 3.1 MILES TO THE BEGINNING OF THE PROPOSED ACCESS ROAD FOR THE STAMPEDE 34 FEDERAL COM W3 13H, W2 14H & W1 15H TO THE SOUTH; FOLLOW ROAD FLAGS IN A SOUTHERLY DIRECTION APPROXIMATELY 144' TO THE PROPOSED LOCATION.

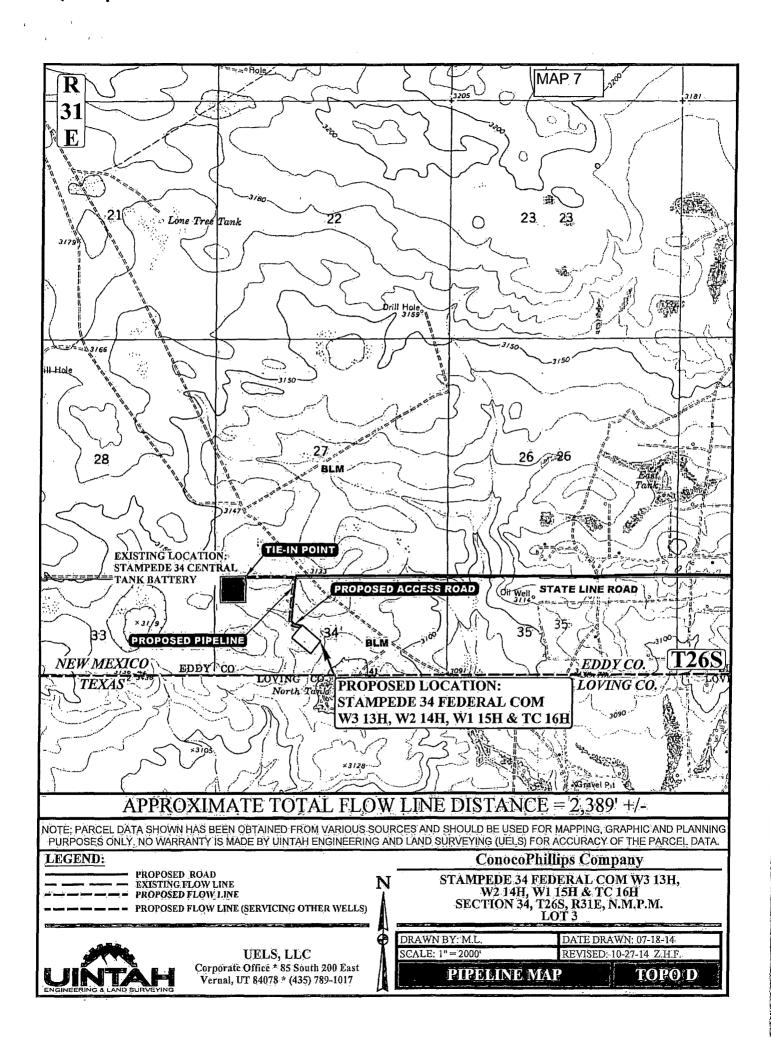
TOTAL DISTANCE FROM JAL, NEW MEXICO TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 48.3 MILES.

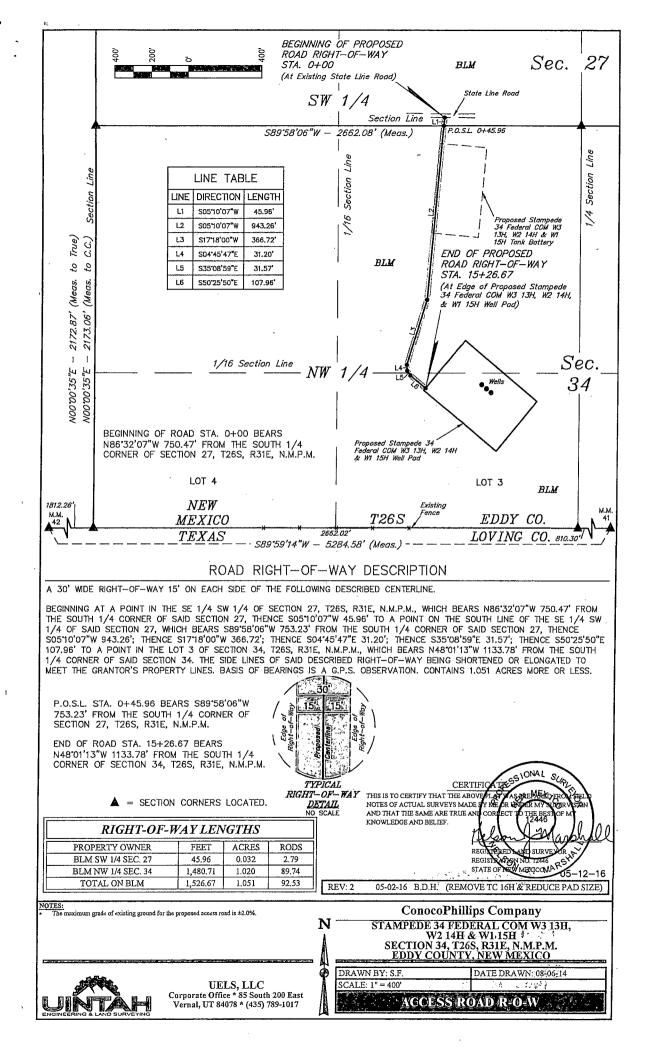


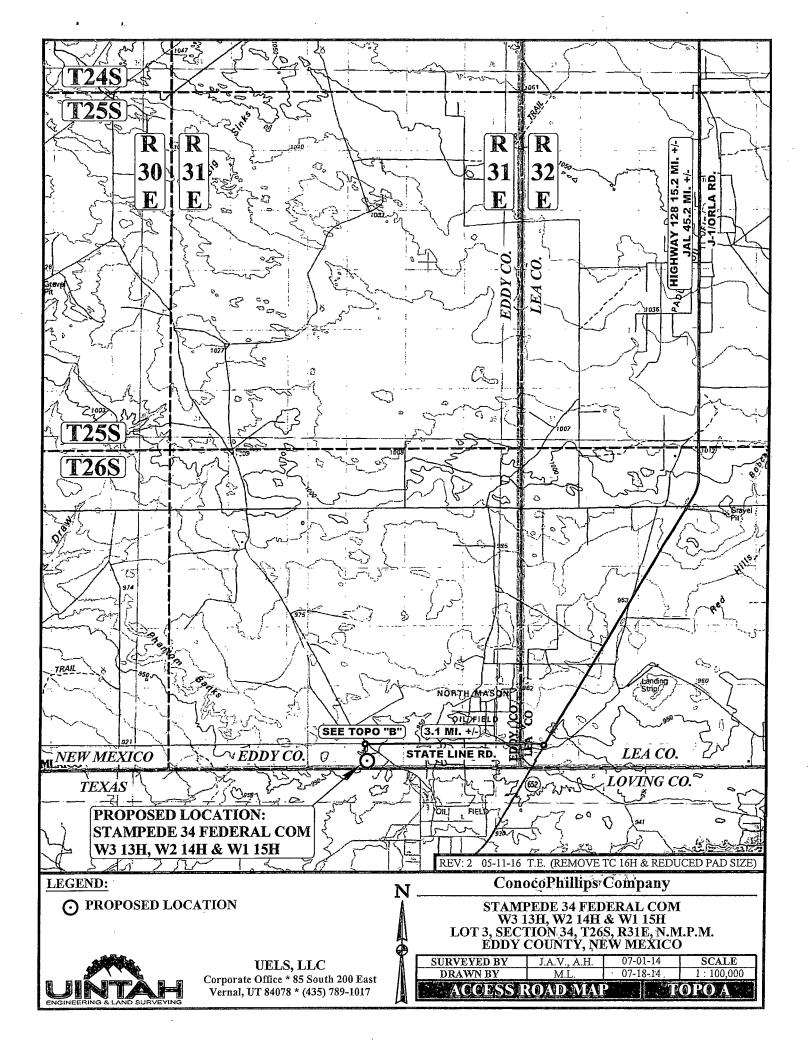
PROCEED IN A WESTERLY DIRECTION FROM JAL, NEW MEXICO ALONG HIGHWAY 128 APPROXIMATELY 30.0 MILES TO THE JUNCTION OF THIS ROAD AND J-1/ORLA ROAD TO THE SOUTH; TURN LEFT AND PROCEED IN A SOUTHERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 15.2 MILES TO THE JUNCTION OF THIS ROAD AND STATE LINE ROAD TO THE WEST; TURN RIGHT AND PROCEED IN A WESTERLY DIRECTION APPROXIMATELY 3.1 MILES TO THE BEGINNING OF THE PROPOSED ACCESS ROAD TO THE SOUTH; FOLLOW ROAD FLAGS IN A SOUTHERLY DIRECTION APPROXIMATELY 1,527' TO THE PROPOSED LOCATION.

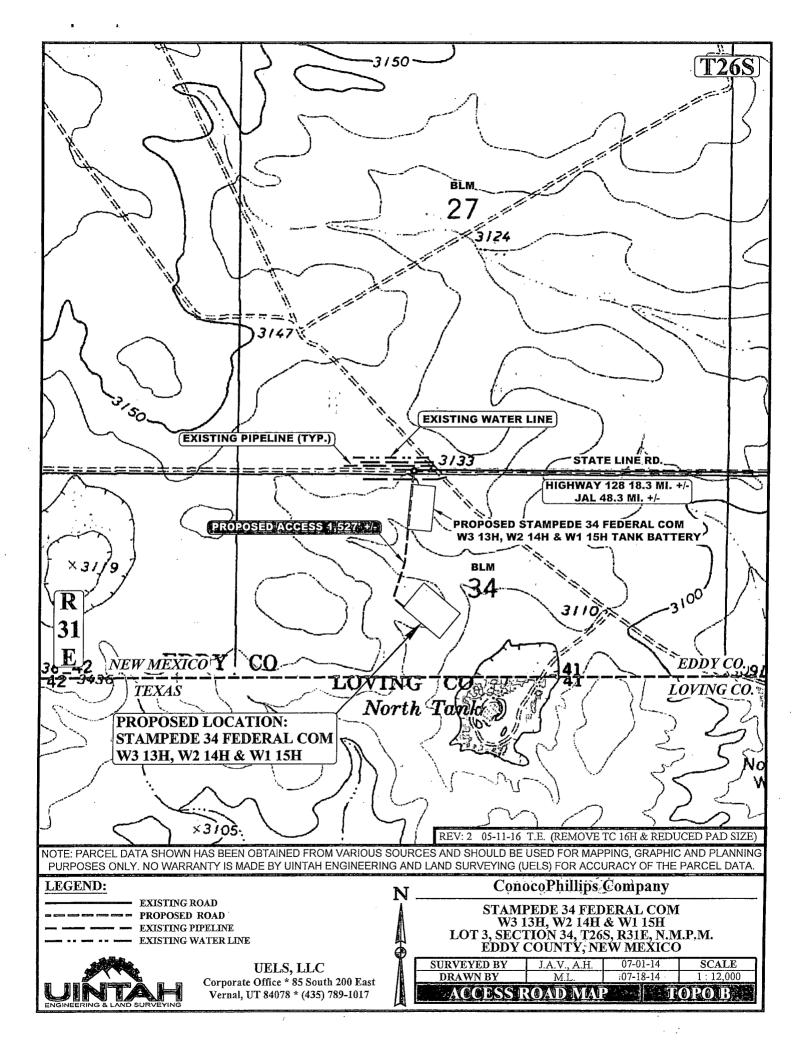
TOTAL DISTANCE FROM JAL, NEW MEXICO TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 48.6 MILES.

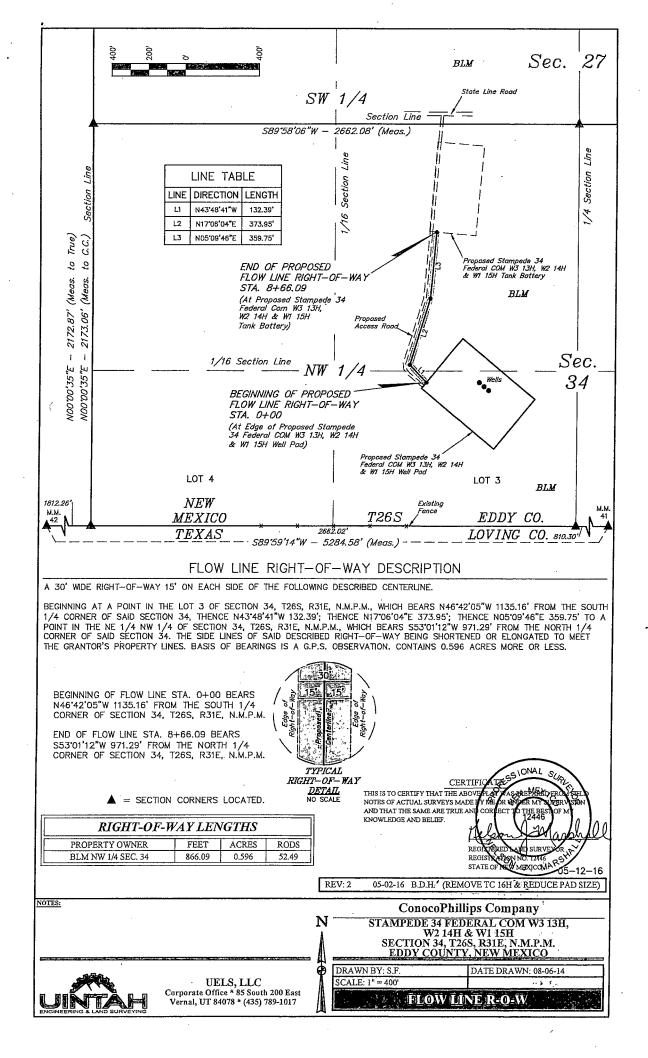


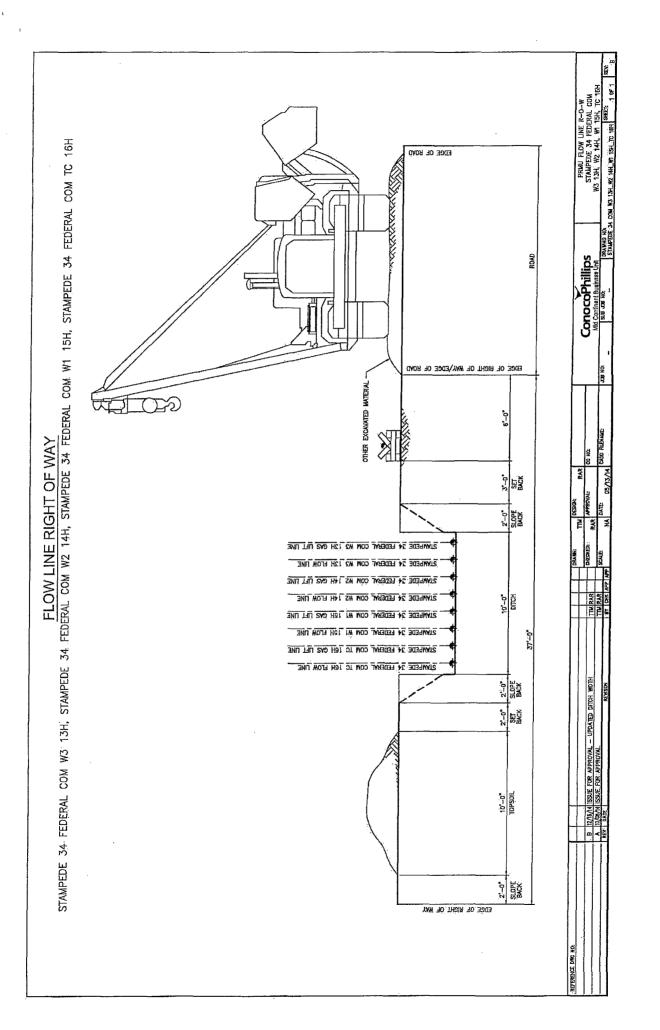








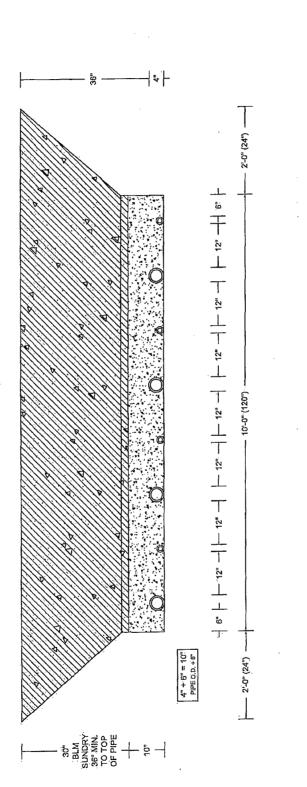




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**BACKFILL AROUND PIPE** 

STAMPEDE 34 FEDERAL COM W3 13H, STAMPEDE 34 FEDERAL COM W2 14H, STAMPEDE 34 FEDERAL COM W1 15H, STAMPEDE 34 FEDERAL COM TC 16H



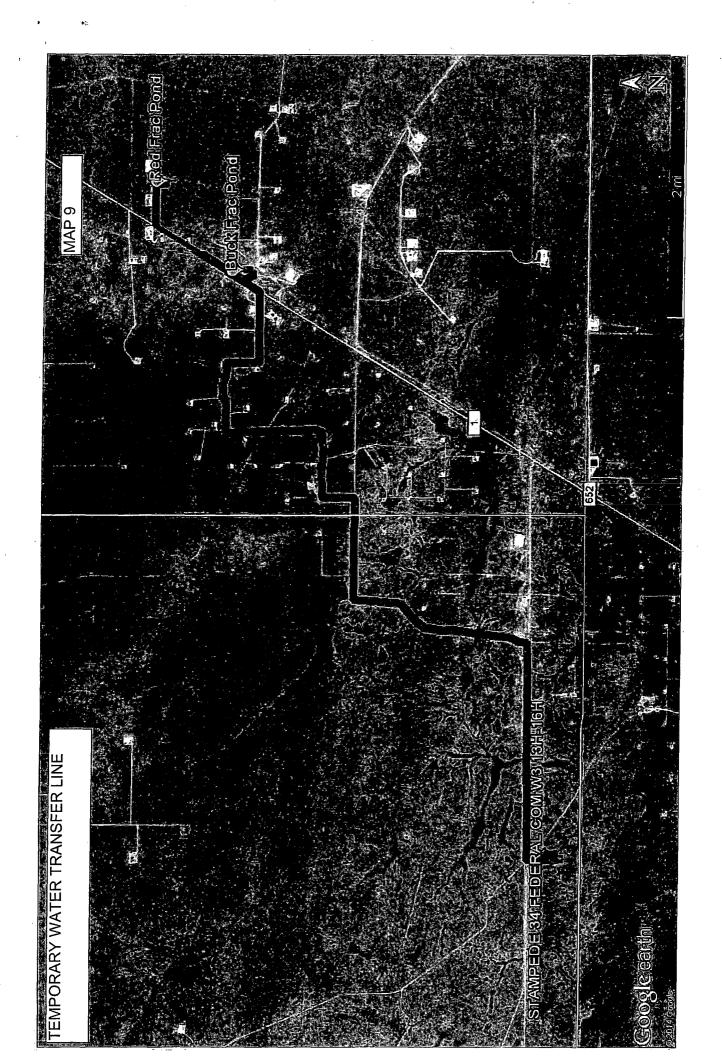
SOFT FILL DIRT OR SAND WITH NO ROCKS OR SOLID PARTICLES GREATER THAN 1" IN CIRCUMFERENCE FLOW LINE WILL BE 4" COATED STEEL PIPE W/ AN OPERATING PRESSURE UP TO 1480# PSI. GAS SUPPLY LINE WILL BE 2" STEEL PIPE W/AN OPERATING PRESSURE UP TO 1100# PSI. BACKFILL DIRT TO BE AS FREE OF ROCKS AND LARGE PARTICLES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

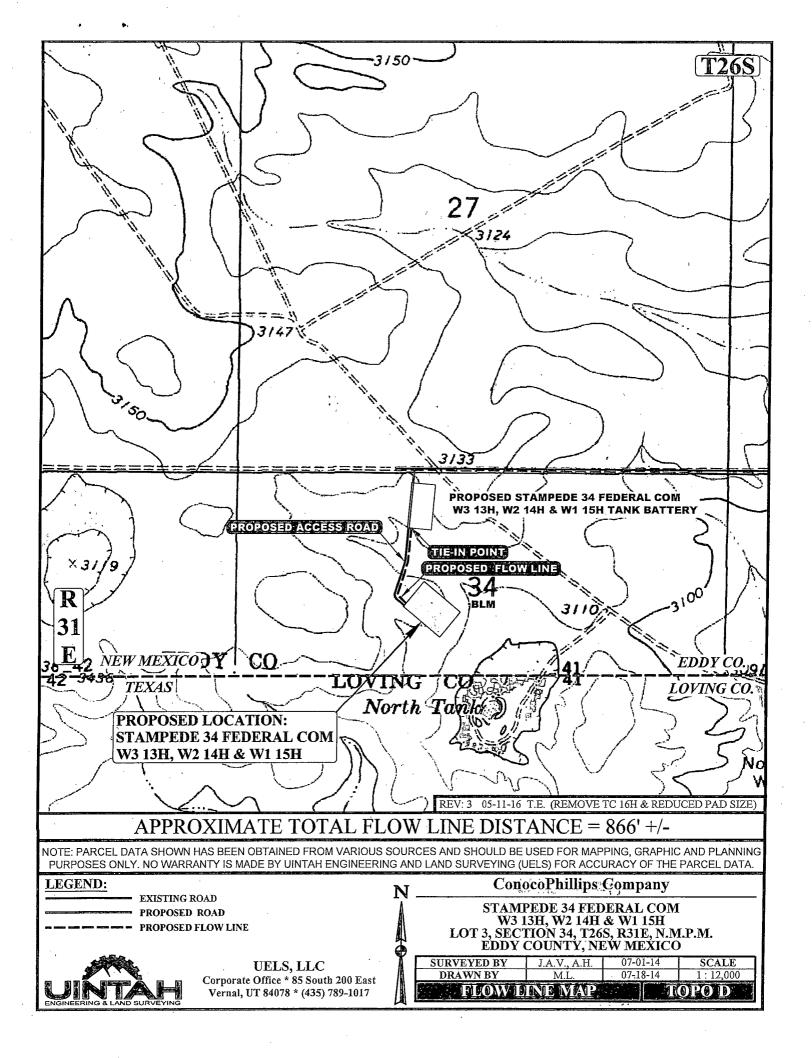
ALTERNATING 4" PIPE (FLOW LINE) + 2" PIPE (GAS LIFT) 6" CLEARANCE AT BOTH ENDS

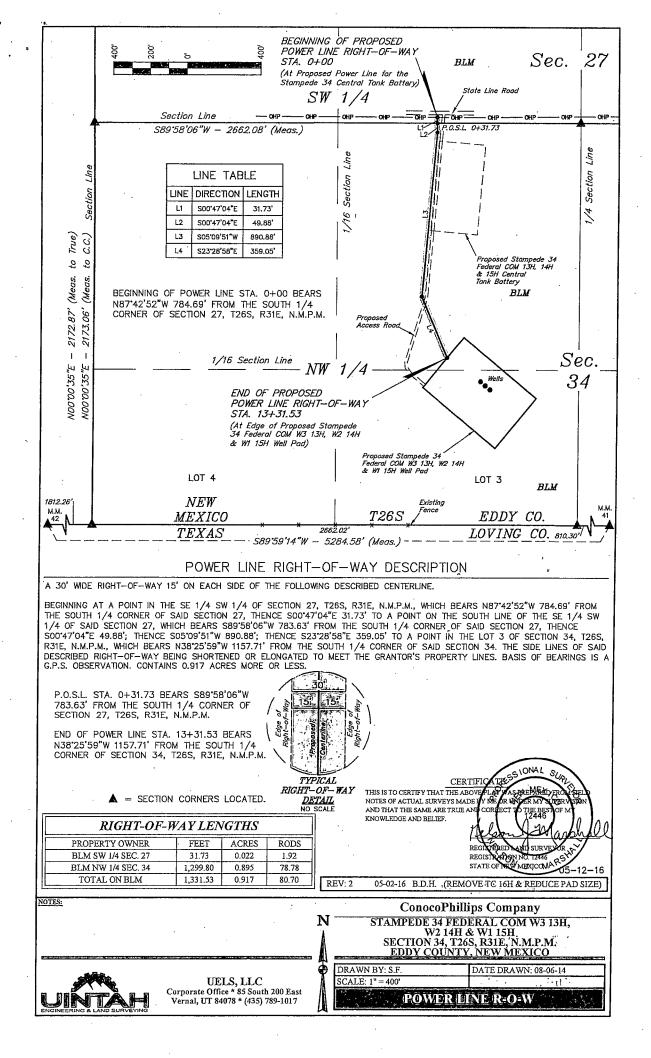
12" CLEARANCE BETWEEN EACH PIPE

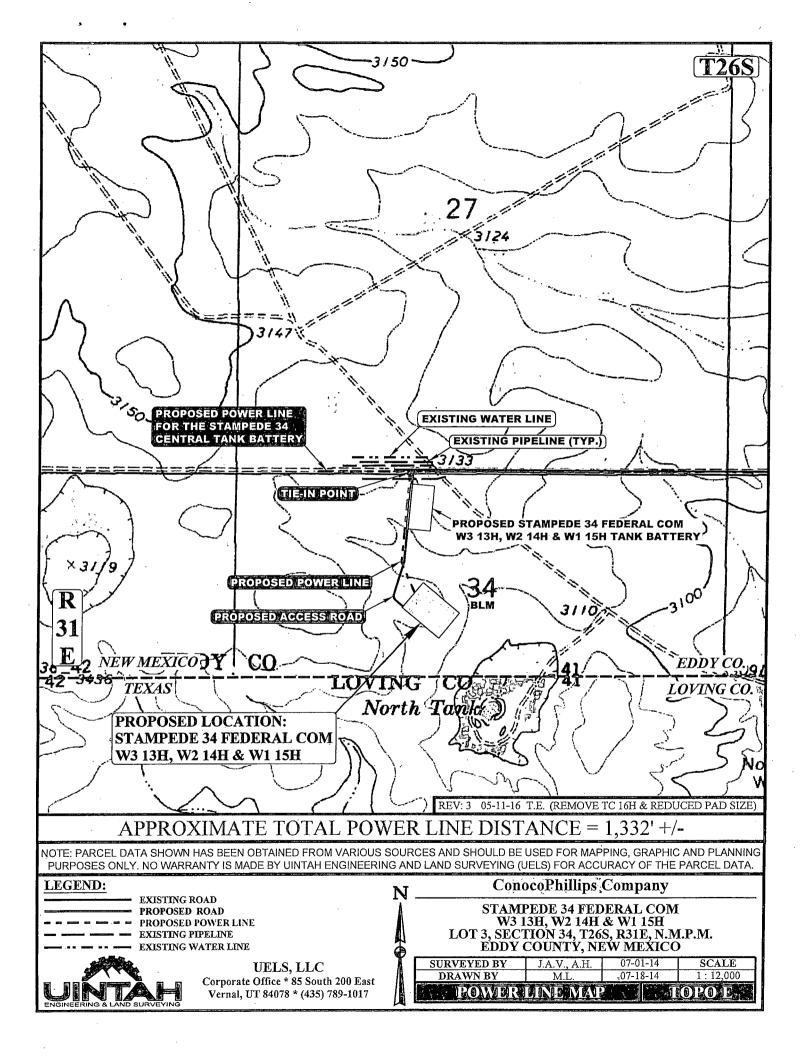
NOT DRAWN TO SCALE

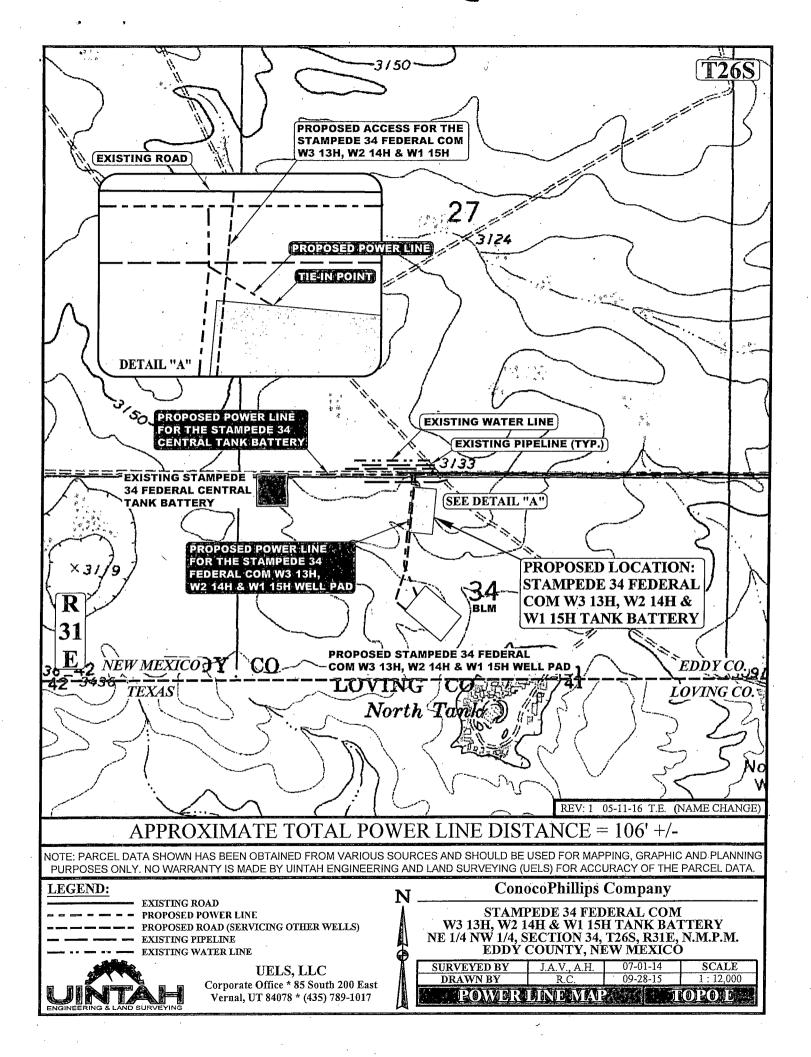
PAGE 1 OF 1

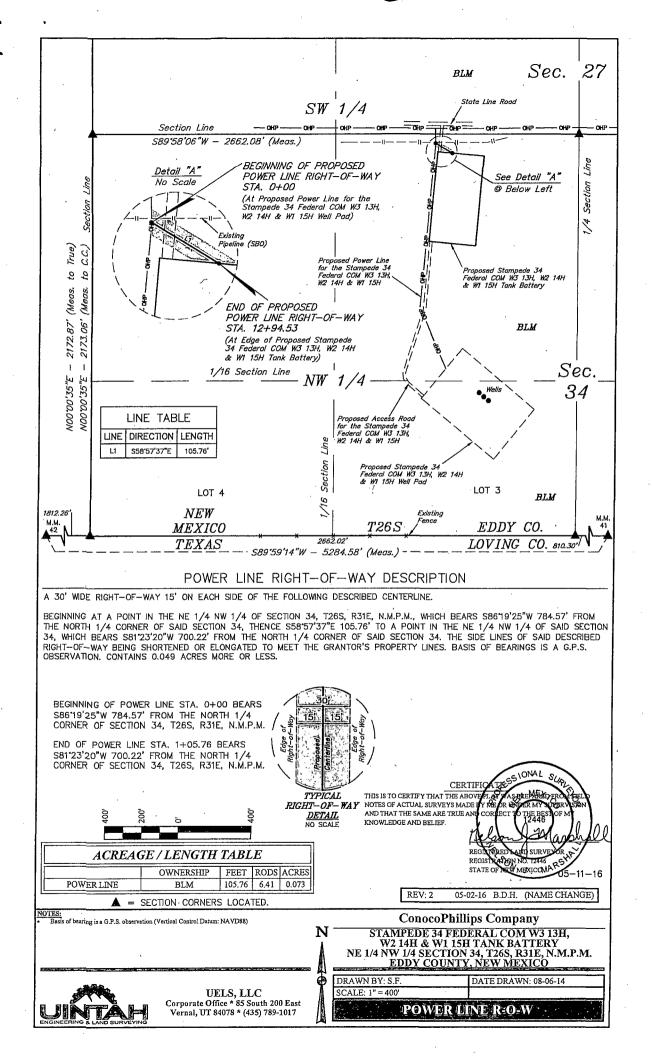




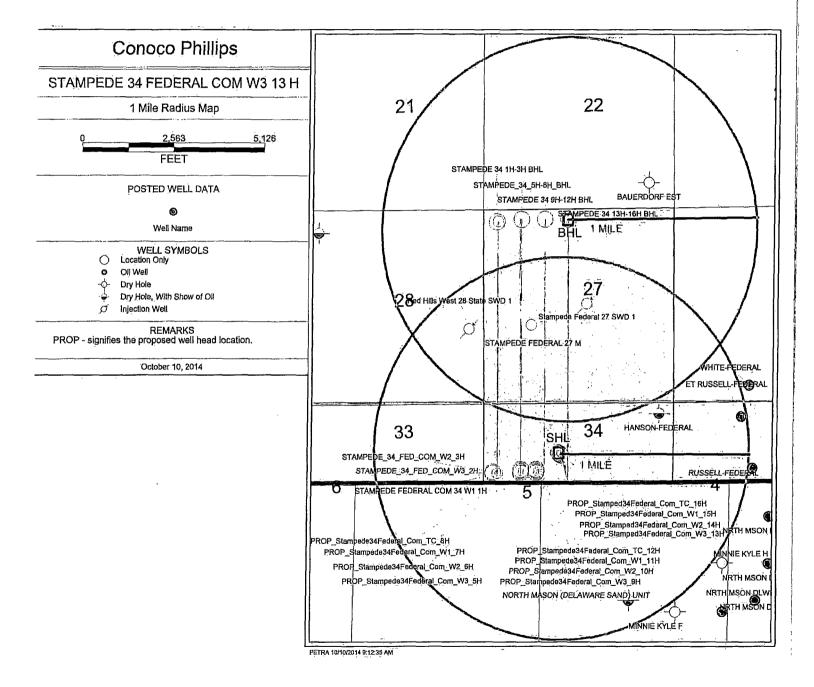






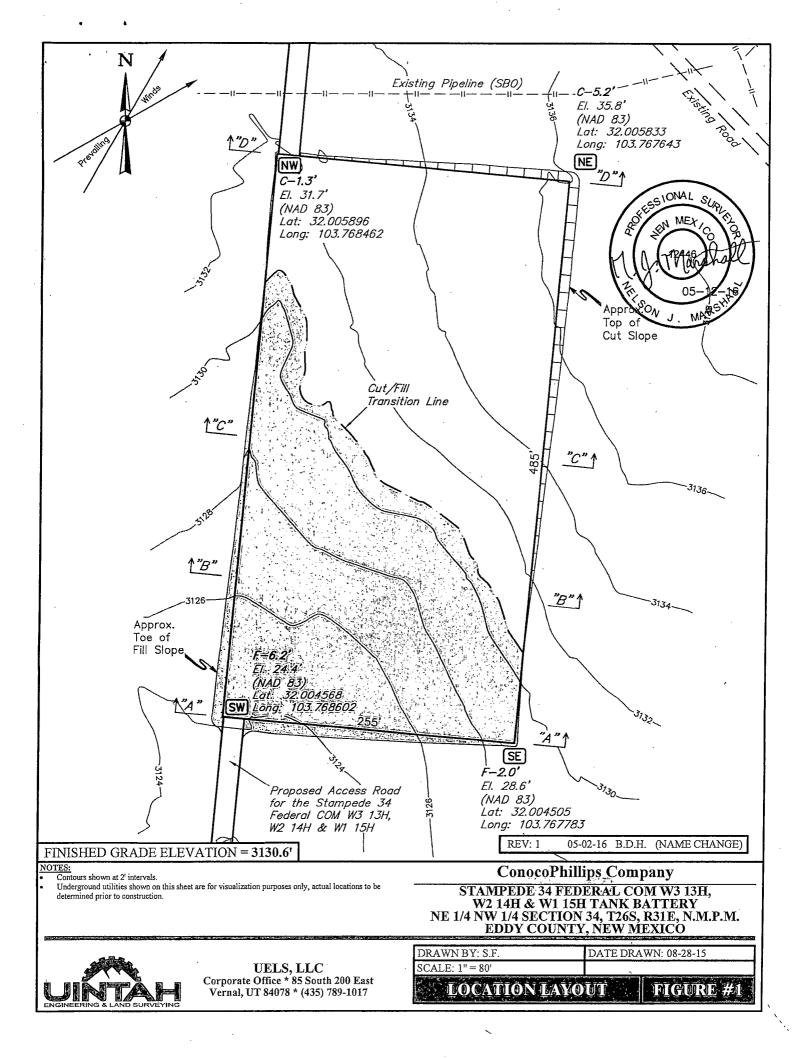


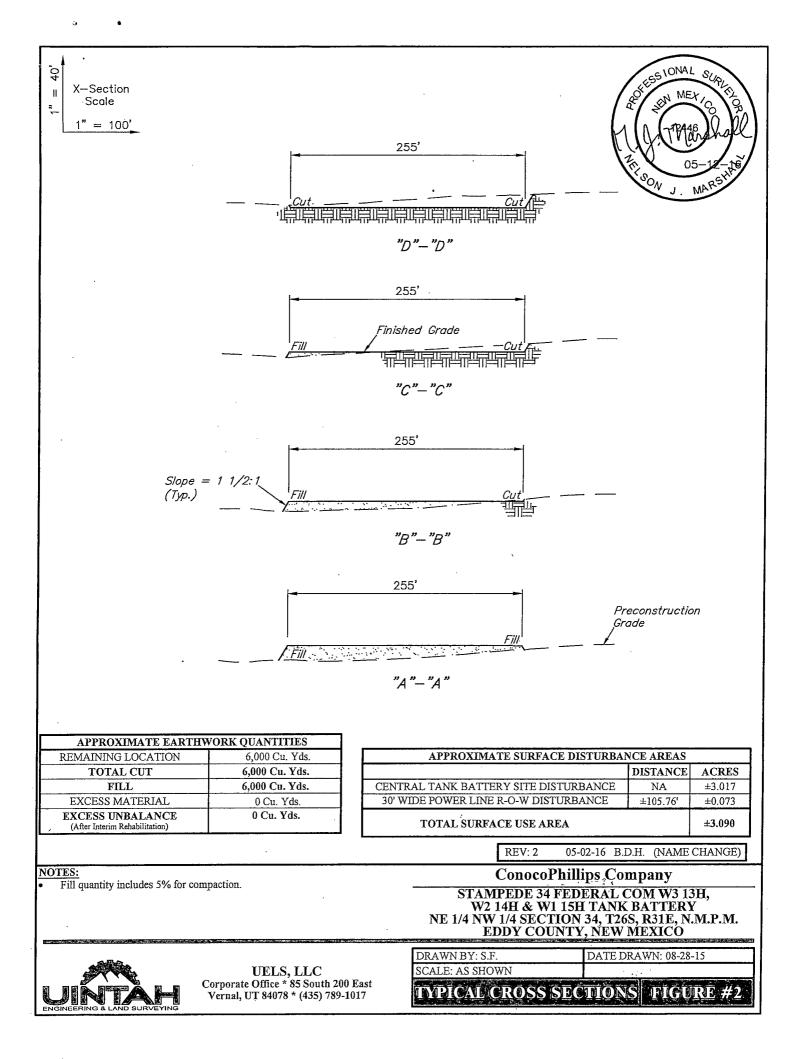
MAP 12



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BEGINNING AT THE INTERSECTION OF HIGHWAY 18 AND HIGHWAY 128 PROCEED IN A WESTERLY, THEN NORTHWESTERLY 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 AN STATE LINE ROAD TO THE WEST; TURN RIGHT AND PROCEED IN A WESTERLY DIRECTION APPROXIMATELY 3.4 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM JAL, NEW MEXICO TO THE PROPOSED LOCATION IS APPROXIMATELY 48.6 MILES.

**ConocoPhillips** Company

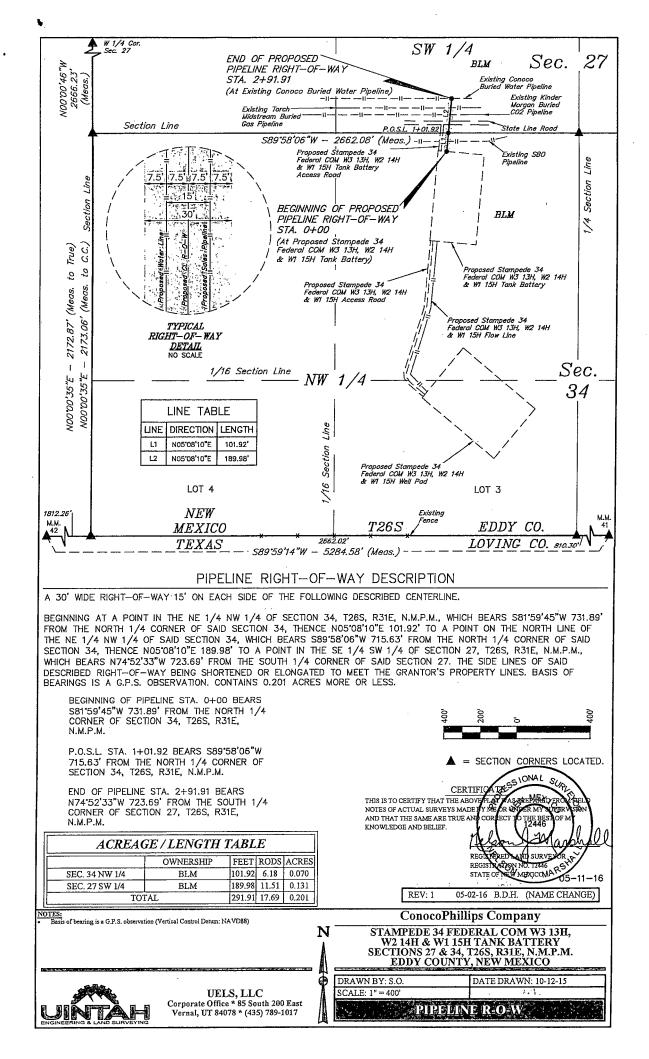
STAMPEDE 34 CENTRAL TANK BATTERY FACILITY PAD (EXPANSION) SECTIONS 27 & 34, T26S, R31E, N.M.P.M.

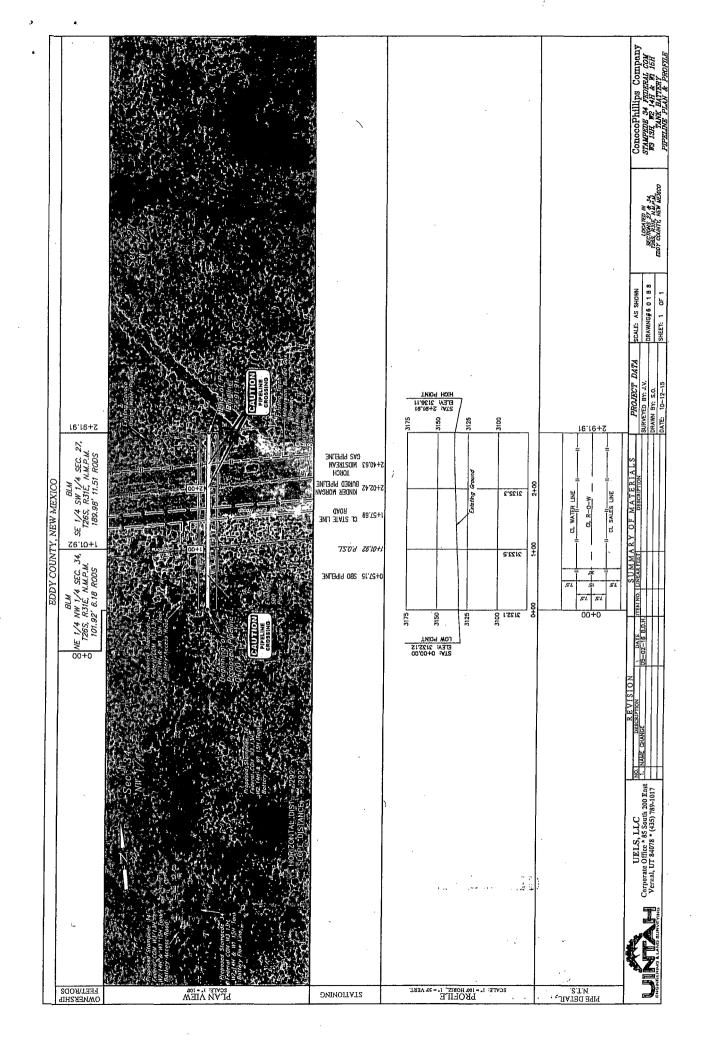


UELS, LLC Corporate Office \* 85 South 200 East Vernal, UT 84078 \* (435) 789-1017 DRAWN BY: L.S.

DATE DRAWN: 04-02-14 REV: 08-18-14 Z.H.F.

**ROAD DESCRIPTION** 





	DEFLECTION	N/A	N/A	
STAMPEDE 34 FEDERAL COM W3 13H, W2 14H, W1 15H & TC 16H TANK BATTERY	LONGITUDE (NAD 83)	W 103°46'05.91"	W 103*46'05.61"	
M W3 13H, W2 14H, W1 15	LATITUDE (NAD 83)	N 32°00'21.18"	N 32 'UU'24.Ub'	
STAMPEDE 34 FEDERAL CO	STATION	0+00.00	TA:141	
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## ConocoPhillips, STAMPEDE 34 FEDERAL COM W3 13H

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## 1. Geologic Formations

TVD of target	12,334	Pilot hole depth	N/A
MD at TD:	19,219	Deepest expected fresh water:	300

Basin

Formation	Depth (TVD)	Water/Mineral Bearing/	Hazards*
		Target Zone?	
Quaternary Fill	Surface	Water	
Base of Fresh Water	300	Water	
Rustler	980	Water	
Top of Salt / Salado	1,465	Salt	
Castile	1,710	Salt	
Delaware Top / Base Salt	3,950	Oil/Gas	Loss of Circulation
Ford Shale	4,100	Oil/Gas	
Cherry Canyon	4,895	Oil/Gas	Loss of Circulation
Brushy Canyon	6,285	Oil/Gas	Loss of Circulation
Bone Springs	7,670	Oil/Gas	
Bone Springs 3 <sup>rd</sup> Carb	9,940	Oil/Gas	
WolfCamp	11,140	Oil/Gas	
WolfCamp 1	11,295	Oil/Gas	
WolfCamp 2	11,700	Oil/Gas	
WolfCamp 3	12,165	Target Zone	

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

Hole	Casin	Casing Interval Csg. Weight		Weight	Grade	Grade Conn.		SF	SF
Size	From	То	Siże	(lbs)			Collapse	Burst	Tension
17.50"	0	1,005 940'	13.375"	54.5	J55	BTC	2.38	5.74	18.09
12.25"	0	4,137 3930	9.625"	40.0	L80	BTC	1.43	2.66	6.58
8.75"	0	11,402	7.625"	33.7	P110	TenW523	1.43	1.98	3.26
6.625"	0	11,402	5.0"	21.4	P110	TenBLUE	2.05	1.96	3.64
	11,402	19,219	4.5"	15.1	P110	TXPBTC	1.54	1.55	3.34
				BLM Mi	nimum Sa	fety Factor	1.125	1.00	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

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Must have table for contingency casing

	Y or N		
Is casing new? If used, attach certification as required in Onshore Order #1	Y		
Does casing meet API specifications? If no, attach casing specification sheet.	Y		
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	Y		
justification (loading assumptions, casing design criteria).			
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching	Y		
the collapse pressure rating of the casing?	•		
Is well located within Capitan Reef?	<u>N</u>		
If yes, does production casing cement tie back a minimum of 50' above the Reef?			
Is well within the designated 4 string boundary.			
	Y		
Is well located in SOPA but not in R-111-P?			
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back			
500' into previous casing?			
Is well located in R-111-P and SOPA?	<u>N</u>		
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?	<u>N</u>		
If yes, are there three strings cemented to surface?			

	Wt.	Yld ft3/	H <sub>2</sub> 0 gal/sk	500#	Slurry Description
	gal	sack	Sullar	Strength (hours)	
590	13.7	1.68	8.684	7	Lead: Class C + 4.0% Bentonite + 0.2% Anti-Foa + 2.0% CaCl2 +0.125lb/sk LCM + 0.1% Dispersa
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)
1,010	11.9	2.58	15.392	10	Lead: Class C + 8.0% Bentonite + 0.2% Anti-Foa + 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).
				DV/EC	P Tool: NO
680	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).
			DV	//ECP Tool 8	3,000' (OPTIONAL)
410	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).
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.
				DV/EC	P Tool NO'
	310 1,010 420 680 140 410	590       13.7         310       14.8         1,010       11.9         420       14.8         680       9.7         140       13.2         410       9.7	galsack $590$ $13.7$ $1.68$ $310$ $14.8$ $1.35$ $1,010$ $11.9$ $2.58$ $420$ $14.8$ $1.35$ $420$ $14.8$ $1.35$ $680$ $9.7$ $2.44$ $140$ $13.2$ $1.53$ $410$ $9.7$ $2.44$	galsack $590$ $13.7$ $1.68$ $8.684$ $310$ $14.8$ $1.35$ $6.349$ $1,010$ $11.9$ $2.58$ $15.392$ $420$ $14.8$ $1.35$ $6.199$ $680$ $9.7$ $2.44$ $9.116$ $140$ $13.2$ $1.53$ $7.474$ $410$ $9.7$ $2.44$ $9.116$	galsackStreigth (hours)59013.71.688.684731014.81.356.34971,01011.92.5815.3921042014.81.356.1995DV/EC6809.72.449.11614013.21.537.4748UV/ECP Tool 84109.72.449.1161,53016.41.074.4645

### 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.

Casing String	TÕC	%:Excess
Surface	0'	100%
Intermediate 1	0'	120%
Intermediate 2	3,537 See COA	100%
Production	10,402'	35%
	1	-1

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

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

### 4. Pressure Control Equipment

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N 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?		Min. Required WP	Ţ	уре	Ś	Tested to:
				Ar	mular	X	50% of working pressure
				Blin	d Ram	x	
	12-1/4"	13-5/8"	5M		e Ram	x	5M
					ole Ram	X	5141
				Other*			
	8-3/4"	13-5/8"	5M	Annular		x	50% testing pressure
/				Blind Ram		X	
/ Jol				5M Pipe Ram		X	
COA				Double Ram		x	5M
COR				Other *			
				Annular		x	50% testing pressure
				Blin	d Ram	x	
	6-5/8"	12 5/8"	10M	Pip	e Ram	x	
	0-578	13-5/8"	10101	Double Ram		x	10M
				Other *			

\*Specify if additional ram is utilized.

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 ChokeManifold. See attached for specs and hydrostatic test chart.Y /NAre anchors required by manufacturer?
	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.
See	<b>,</b>	Provide description here
		See attached schematic.

### 5. Mud Program

	De	pth	Type	Weight (ppg)	Viscosity	Water Loss
	From	То				
/	0	1,005940',	Spud Mud	8.6-9.3	32-36	N/C
all_	1,005	4.137-3930	Brine	9.3-10.2	28-30	≤5
$\sim$	4,137	11,402	Cut Brine	8.6-9.2	30-40	≤5
COH-	11,402	19,219	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 of fluid?	PVT/Pason/Visual Monitoring
or mart.	

#### 6. Logging and Testing Procedures

Logg	ing, 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	1			
PEX				

### 7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	6,857 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

# See A

#### 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.

Attachment #1 ConocoPhillips

### ConocoPhillips

Eddy County, NM Stampede Fed COM W3 13H W3 13H

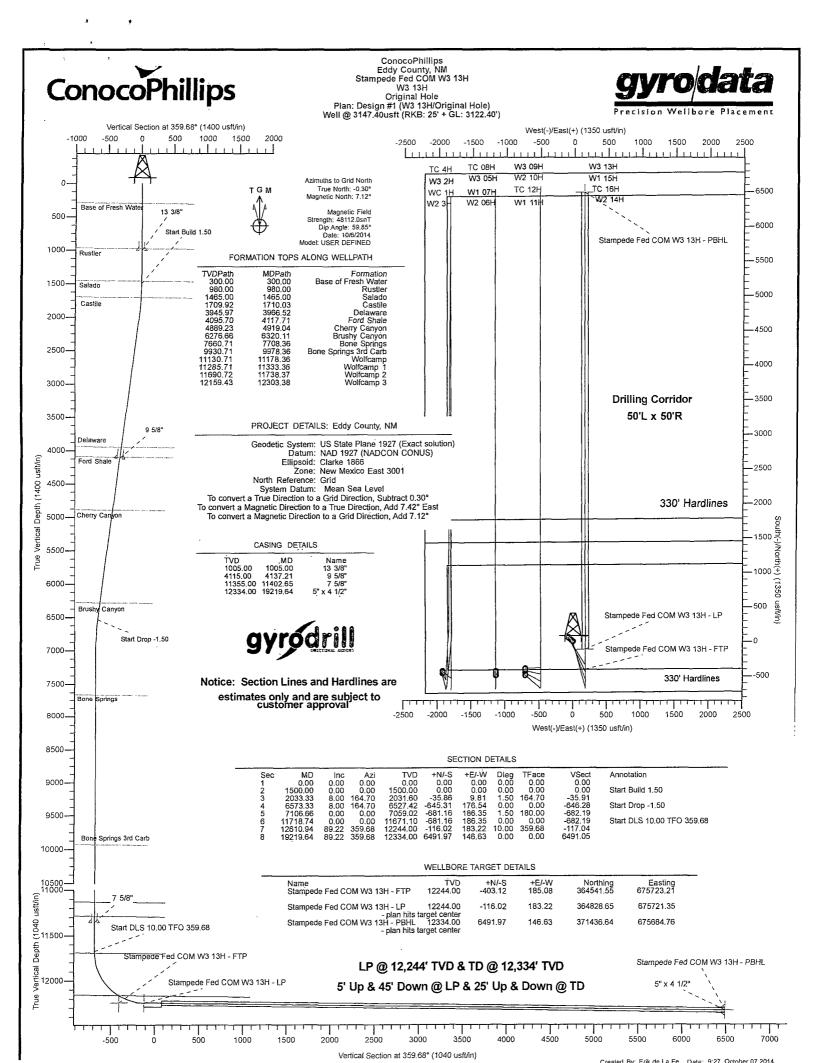
**Original Hole** 

Plan: Design #1

### **Standard Planning Report**

07 October, 2014





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### **Gyrodata Inc.** Planning Report



ecision Wellbore Placement

[										
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Company:	Conoc	x2Phillips	2 <sup>10</sup> 10		TVD Refe	rence:		Well @ 3147.40	usft (RKB: 25	+ GL:
Project:	Eddy	County, NM		· · · .	MD Refere	ence:	1	3122.40') Well @ 3147.40u	usft (RKB: 25	'+ GL:
Site:	Stam	ede Fed COM	1 M/3 13H		North Daf			3122.40') Grid	* • · · ·	
Well:	W3 1	•	1 443 1311		North Ref	erence: alculation Meth	( )	Vinimum Curvati	ura	
Wellbore:		al Hole			Survey Ca	aculation met	10 <b>0</b> .	virianum Curvau		
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Geo Datum:	NAD 192	27 (NADCON C	CONUS)							
Map Zone:	New Me	kico East 3001								
Site	Stamp	ede Fed COM	W3 13H			Les La presente		na gyanowa na a sao a sa		ور میں میں میں میں میں میں بینیں اور میں اور
Site Position:			North	ing:	364,	,944.67 usft	Latitude:			32° 0' 7.50 N
From:	Мар	)	Eastir	ıg:	675,	,538.13 usft	Longitude:			103° 46' 1.43 W
Position Uncert	ainty:	0.0	0 usft Slot R	tadius:		13.20 in	Grid Converge	ence:		0.30 °
Well	W3 13H			ىر بىر مەر بىر مار ، مىجمەر مىجمەر مار بىر ،	a an	. ب <del>مر</del> سان <i>ه در محمد بدر درم</i>				
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Wellbore Magnetics Design Audit Notes: Version: Vertical Section Plan Sections Measured Depth (usft) 0.00 1,500,00 2,033,33 6,573,33 7,106,66	ainty Crigina Mo ( Design ( Design ( ) Inclination (°) 0.00 0.00 8.00 8.00 8.00 0.00	0.1 1 Hole del Name User Defined #1 E Azimuth (°) 0.00 0.00 164.70	00 usft W4 Sampl Phase Phase Phase Phase Vertical Depth (usft) 0.00 1,500.00 2,031.60 6,527.42 7,059.02	ellhead Elevati e Date 10/6/2014 e: Pl /D) +N/-S (usft) 0.00 0.00 -35.86 -645.31 -681.16	Declinat (°) LAN +N/-S (usft) 0.00 +E/-W (usft) 0.00 0.00 9.81 176.54 186.35	tion 7.42 Tie ( +E/, (us 0.0 Dogleg Rate (*/100ft) 0.00 0.00 1.50 0.00 1.50	Dip Ai (*) On Depth: W ft) )00 Build Rate (*/100ft) 0.00 0.00 1.50 0.00 -1.50	ngle 59.85 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.00 ction °) 9.68 TFO (°) 0.00 0.00 164.70 0.00 180.00	Strength nT) 48,112
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### Gyrodata Inc.

Planning Report



Database:	Gyrodata NWDB	Well W3 13H
Company:	ConocoPhillips	Well @ 3147,40usft (RKB: 25' + GL:
		3122,40')
Project:	Eddy County, NM	Well @ 3147,40usft (RKB: 25' + GL:
		3122.40'),
Site:	Stampede Fed COM W3 13H	Ĝrid
Well:	W3 13H	Minimum Curvature
Wellbore:	Original Hole	
Design:	Design #1	

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			0.00						
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	· 0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00 1	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
								0.00	
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00		0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0,00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	1.50	164.70	1,599.99	-1.26	0.35	-1.26	1.50	1.50	0.00
1,700.00	3.00	164.70	1,699.91	-5.05	1.38	-5.06	1.50	1.50	0.00
•									
1,800.00	4.50	164.70	1,799.69	-11.36	3.11	-11.37	1.50	1.50	0.00
1,900.00	6.00	164.70	1,899.27	-20.18	5.52	-20.21	1.50	1.50	0.00
2,000.00	7.50	164.70	1,998.57	-31.52	8.62	-31.57	1.50	1.50	0.00
2,033.33	8.00	164.70	2,031.60	-35.86	9.81	-35.91	1.50	1.50	0.00
2,100.00	8.00	164.70	2,097.62	-44.81	12.26	-44.87	0.00	0.00	0.00
2,200.00	8.00	164.70	2,196.65	-58.23	15.93	-58.32	0.00	0.00	0.00
2,300.00	8.00	164.70	2,295.67	-71.65	19.60	-71.76	0.00	0.00	0.00
2,400.00	8.00	164.70	2,394.70	-85.08	23.27	-85.21	0.00	0.00	0.00
•									
2,500.00	8.00	164.70	2,493.73	-98.50	26.95	-98.65	0.00	0.00	0.00
2,600.00	8.00	164.70	2,592.75	-111,93	30.62	-112.09	0.00	0.00	0.00
2,700.00	8.00	164.70	2,691.78	-125.35	34.29	-125,54	0.00	0.00	0.00
2,800.00	8.00	164.70	2,790.81	-138.77	37.96	-138.98	0.00	0.00	0.00
2,900.00	8.00	164.70	2,889.83	-152,20	41.64	-152,43	0.00	0.00	0.00
3,000.00	8.00	164.70	2,988.86	-165.62	45.31	-165.87	0.00	0.00	0.00
3,100.00	8.00	164.70	3,087.89	-179.05	48.98	-179.32	0.00	0.00	0.00
3,200.00	8.00	164.70	3,186.91	-192.47	52.65	-192.76	0.00	0.00	0.00
3,300.00	8.00	164.70	3,285.94	-205.89	56.33	-206.21	0.00	0.00	0.00
3,400.00	8.00	164,70	3,384.97	-219.32	60.00	-219.65	0.00	0.00	0.00
3,500.00	8.00	164.70	3,484.00	-232.74	63.67	-233.09	0.00	0.00	0.00
3,600.00	8.00	164,70	3,583.02	-246.17	67.34	-246.54	0.00	0.00	0.00
3,700.00	8.00	164.70	3,682.05	-259.59	71.02	-259.98	0.00	0.00	0.00
3,800.00	8.00	164.70	3,781.08	-273.01	74.69	-273.43	0.00	0.00	0.00
									0.00
3,900.00	8.00	164.70	3,880.10	-286.44	78.36	-286.87	0.00	0.00	
4,000.00	8.00	164.70	3,979.13	-299.86	82.03	-300.32	0.00	0.00	0.00
4,100.00	8.00	.164.70	4,078.16	-313.29	85.71	-313.76	0.00	0.00	0.00
4,200.00	8.00	164.70	4,177.18	-326.71	89.38	-327.20	0.00	0.00	0.00
4,300.00	8.00	164.70	4,276.21	-340.13	93.05	-340.65	0.00	0.00	0.00
4,400.00	8.00	164.70	4,375.24	-353.56	96.72	-354.09	0.00	0.00	0.00
4,500.00	8.00	164.70	4,474.26	-366.98	100.39	-367.54	0.00	0.00	0.00
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4,600.00	8.00	164.70	4,573.29	-380.41	104.07	-380.98	0.00	0.00	0.00
4,700.00	8.00	164.70	4,672.32	-393.83	107.74	-394.43	0.00	0.00	0.00
4,800.00	8.00	164.70	4,771.34	-407.25	111.41	-407,87	0.00	0.00	0,00
4,900.00	8.00	164.70	4,870.37	-420.68	115.08	-421.31	0.00	0.00	0.00
5,000.00	8.00	164.70	4,969.40	-434.10	118.76	-434.76	0.00	0.00	0.00

### Gyrodata Inc.





ecision Wellbore Placement

Database:	Gyrodata NWDB	Local Co-ordinate Reference:	Well W3 13H
Company:	ConocoPhillips	TVD Reference:	Well @ 3147.40usft (RKB: 25' + GL:
			3122.40')
Project:	Eddy County, NM	MD Reference:	Well @ 3147.40usft (RKB: 25' + GL:
			3122.40')
Site:	Stampede Fed COM W3 13H	North Reference:	Grid
Well:	W3 13H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Design #1		

Measured			Vertical			Vertical	Dogleg	Build	Tum
Depth (usft)	Inclination (°)	Azimuth (°)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Section (usft)	Rate (°/100ft)	Rate (°/100ft)	Rate (°/100ft)
5,100.00	8.00	164.70	5,068.42	-447.53	122.43	-448.20	0.00	0.00	0.00
5,200.00	8.00	164.70	5,167.45	-460.95	126.10	-461.65	0.00	0.00	0.00
5,300.00	8.00	164.70	5,266.48	-474.37	129.77	-475.09	0.00	. 0.00	0.00
5,400.00	8.00	164.70	5,365.50	-487.80	133.45	-488.54	0.00	0.00	0.00
5,500.00	8.00	164.70	5,464.53	-501.22	137.12	-501.98	0.00	0.00	0.00
5,600.00	8.00	164.70	5,563.56	-514.65	140.79	-515.43	0.00	0.00	0.00
5,700.00	8.00	164.70	5,662.59	-528.07	144.46	-528.87	0.00	0.00	0.00
5,800.00	8.00	164.70	5,761.61	-541,49	148.14	-542.31	0.00	0.00	0.00
5,900.00	8.00	164.70	5,860.64	-554.92	151.81	-555.76	0.00	0.00	0.00
6,000.00	8.00	164.70	5,959.67	-568.34	155.48	-569.20	0.00	0.00	0.00
6,100.00	8.00	164.70	6,058.69	-581,77	159.15	-582.65	0.00	0.00	0.00
6,200.00	8.00	164.70	6,157.72	-595.19	162.83	-596.09	0.00	0.00	0.00
6,300.00	8.00	164.70	6,256.75	-608,62	166.50	-609.54	0.00	0.00	0.00
6,400.00	8.00	164.70	6,355.77	-622,04	170.17	-622.98	0.00	0.00	0.00
6,500.00	8.00	164,70	6,454,80	-635.46	173.84	-636.42	0.00	0.00	0.00
6,573.33	8.00	164.70	6,527.42	-645.31	176.54	-646.28	0.00	0.00	0.00
6,600.00	7.60	164.70	6,553.84	-648.80	177.49	-649.78	1.50	-1.50	0.00
6,700.00	6.10	164.70	6,653.12	-660.30	180.64	-661.30	1,50	-1.50	0.00
6,800.00	4.60	164.70	6,752.68	-669,30	183.10	-670.31	1,50	-1.50	0.00
6,900.00	3.10	164.70	6,852.46	-675.77	184.87	-676.79	1.50	-1.50	0.00
7,000.00	1.60	164.70	6,952.37	-679.73	185.95	-680.75	1.50	-1.50	0.00
7,100.00	0.10	164.70	7,052.35	-681.16	186.34	-682.19	1.50	-1.50	0.00
7,106.66	0.00	0.00	7,059.02	-681.16	186.35	-682.19	1.50	-1.50	0.00
					186.35	-682.19	0.00	0.00	0.00
7,200.00	0.00	0.00	7,152.35	-681,16	186.35	-682.19	0.00	0.00	0.00
7,300.00	0.00	0.00	7,252.35 7,352.35	-681.16	186.35	-682.19	0.00	0.00	0.00
7,400.00	0.00 0.00	0.00	7,352.35 7,452.35	-681.16	186.35	-682.19	0.00	0.00	0.00
7,500.00 7,600.00	0.00	0.00 0.00	7,552.35	-681,16 -681,16	186.35	-682.19	0.00	0.00	0.00
7,700.00	0.00	0.00	7,652.35	-681.16	186.35	-682.19	0.00	0.00	0.00
7,800.00	0.00	0.00	7,752.35	-681.16	186.35	-682.19	0.00	0,00	0.00
7,900.00	0.00	0.00	7,852.35	-681.16	186.35	-682.19	0.00	0.00	0.00
8,000.00	0.00	0.00	7,952.35	-681.16	186.35	-682.19	0.00	0.00	0.00
8,100.00	0.00	0.00	8,052.35	-681.16	186.35	-682.19	0.00	0.00	0.00
8,200.00	0.00	0.00	8,152.35	-681,16	186.35	-682.19	0.00	0,00	0.00
8,300.00	0.00	0.00	8,252.35	-681,16	186.35	-682.19	0.00	0.00	0.00
8,400.00	0.00	0.00	8,352.35	-681.16	186.35	-682.19	0.00	0.00	0.00
8,500.00	0.00	0.00	8,452.35	-681,16	186.35	-682.19	0.00	0.00	0.00
8,600.00	0.00	0.00	8,552.35	-681.16	186.35	-682.19	0.00	0.00	0.00
8,700.00	0.00	0.00	8,652.35	-681.16	186.35	-682.19	0.00	0.00	0.00
8,800.00	0.00	0.00	8,752.35	-681.16	186.35	-682.19	0.00	0.00	0.00
8,900.00	0.00	0.00	8,852.35	-681.16	186.35	-682.19	0.00	0.00	0.00
9,000.00	0.00	0.00	8,952.35	-681.16	186.35	-682.19	0.00	0.00	0.00
9,100.00	0.00	0.00	9,052.35	-681.16	186.35	-682.19	0.00	0.00	0.00
9,200.00	0.00	0.00	9,152.35	-681,16	186.35	-682.19	0.00	0.00	0.00
9,300.00	0.00	0.00	9,252.35	-681.16	186.35	-682.19	0.00	0.00	0.00
9,400.00	0.00	0.00	9,352.35	-681.16	186.35	-682.19	0.00	0.00	0.00
9,500.00	0.00	0.00	9,452.35	-681.16	186.35	-682.19	0.00	0.00	0.00
9,600.00	0.00	0.00	9,552.35	-681.16	186.35	-682.19	0.00	0.00	0.00
9.700.00	0.00	0.00	9,652.35	-681.16	186.35	-682.19	0.00	0.00	0.00
9,700.00	0.00	0.00	9,752.35	-681.16	186.35	-682.19	0.00	0.00	0.00
9,900.00	0.00	0.00	9,752.35 9,852.35	-681.16	186.35	-682.19	0.00	0.00	0.00
9,900.00 10,000.00	0.00	0.00	9,852.35	-681.16	186.35	-682.19	0.00	0.00	0.00

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### **Gyrodata Inc.** Planning Report



recision Wellbore Placement

Database:	Gyrodata NWDB	ocal Co-ordinate Reference:	Well W3 13H
Company:	ConocoPhillips	VD Reference:	Well @ 3147.40usft (RKB: 25' + GL:
·			3122.40')
Project:	Eddy County, NM	D Reference:	Well @ 3147 40usft (RKB: 25' + GL:
· ·			3122.40')
Site:	Stampede Fed COM W3 13H	lorth Reference:	Grid
Well:	W3 13H	urvey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	Design #1		

esign:	, Design #1						les men acres		
Planned Survey					ه در به محمد میکند. د . افغا سامه ود .		م مربو م <del>می</del> تم رسم. مربع این می اینده د	· · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+Ė/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100ft)	(°/100ft)	(°/100ft)
10,100.00	0.00	0.00	10,052.35	-681.16	186.35	-682.19	0.00	0.00	0.00
10,200.00	0.00	0.00	10,152.35	-681.16	186.35	-682.19	0.00	0.00	0.00
10,300.00	0.00	0.00	10,252,35	-681.16	186.35	-682.19	0.00	0.00	0.00
10,400.00	0.00	0.00	10,352.35	-681.16	186.35	-682.19	0.00	0.00	0.00
10,500.00	0.00	0.00	10,452.35	-681.16	186.35	-682.19	0.00	0.00	0.00
10,600.00	0.00	0.00	10,552.35	-681.16	186.35	-682.19	0.00	0.00	0.00
10,700.00	0.00	0.00	10,652,35	-681.16	186.35	-682.19	0.00	0.00	0.00
10,800.00	0.00	0.00	10,752.35	-681.16	186.35	-682.19	0.00	0.00	0.00
10,900.00	0.00	0.00	10,852.35	-681.16	186.35	-682.19	0.00	0.00	0.00
11,000.00	0.00	0.00	10,952.35	-681.16	186.35	-682.19	0.00	0.00	0.00
11,100.00	0.00	0.00	11,052.35	-681.16	186.35	-682.19	0.00	0.00	0.00
11,200.00	0.00	0.00	11,152.35	-681.16	186.35	-682.19	0.00	0.00	0.00
11,300.00	0.00	0.00	11,252.35	-681.16	186.35	-682.19	0.00	0.00	0.00
11,400.00	0.00	0.00	11,352.35	-681.16	186.35	-682.19	0.00	0.00	0.00
11,500.00	0.00	0.00	11,452.35	-681.16	186.35	-682.19	0.00	0.00	0.00
11,600.00	0.00	0.00	11,552.35	-681.16	186.35	-682.19	0.00	0.00	0.00
11,700.00	0,00	0.00	11,652.35	-681.16	186.35	-682.19	0.00	0.00	0.00
11,718,74	0.00	0.00	11,671,10	-681.16	186.35	-682.19	0.00	0.00	0.00
11,800.00	8.13	359.68	11,752.08	-675.41	186.31	-676.44	10.00	10.00	0.00
11,900.00	18.13	359.68	11,849.35	-652.73	186.19	-653.76	10.00	10.00	0.00
12,000.00	28.13	359.68	11,941.19	-613.51	185.97	-614.54	10.00	10.00	0.00
12,100.00	38.13	359.68	12,024.84	-558.93	185.67	-559.96	10.00	10.00	0.00
	48.13	359.68	,		185.29	-491.68	10.00	10.00	0.00
12,200.00	58.13	359.68	12,097.73	-490.66	184.85	-491.00	10.00	10.00	0.00
12,300.00		359.68	12,157.66	-410.76	184.35	-322.70	10.00	10.00	0.00
12,400.00 12,500.00	68.13 78.13	359.68	12,202.81 12,231.80	-321.68 -226.11	183.83	-322.70	10.00	10.00	0.00
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12,600.00	88.13	359.68	12,243.75	-126.95	183.28	-127.98	10.00	10.00	0.00
12,610.94	89,22	359.68	12,244.00	-116.02	183.22	-117.04	10.00	10.00	0.00
12,700.00	89.22	359.68	12,245.22	-26.97	182.72	-27.99	0.00	0.00	0.00
12,800.00	89.22	359.68	12,246.58	73,02	182.17	72.00	0.00	0,00	0.00
12,900.00	89.22	359.68	12,247.94	173.01	181.62	171.99	0.00	0.00	0.00
13,000.00	89.22	359.68	12,249.30	273.00	181.06	271,99	0.00	0.00	0.00
13,100.00	89.22	359.68	12,250.66	372.99	180.51	371.98	0.00	0.00	0.00
13,200.00	89.22	359.68	12,252.02	472.98	179.96	471.97	0.00	0.00	0.00
13,300.00	89.22	359.68	12,253.39	572.97	179.40	571.96	0.00	0.00	0.00
13,400.00	89.22	359.68	12,254.75	672.96	178.85	671.95	0,00	0.00	0.00
13,500,00	89.22	359.68	12,256.11	772.95	178.29	771.94	0.00	0.00	0.00
13,600.00	89.22	359.68	12,257.47	872.94	177.74	871.93	0.00	0.00	0.00
13,700.00	89.22	359.68	12,258.83	972.92	177.19	971.92	0.00	0.00	0.00
13,800.00	89.22	359.68	12,260.20	1,072.91	176.63	1,071.91	0.00	0.00	0.00
13,900.00	89.22	359.68	12,260.20	1,172.90	176.08	1,171.90	0.00	0.00	0.00
14,000.00	89.22	359.68	12,262.92	1,272.89	175.53	1,271.89	0.00	0.00	0.00
14,100.00	89.22	359.68	12,264.28	1,372.88	174.97	1,371.88	0.00	, 0.00	0.00
14,200.00	89.22	359.68	12,265.64	1,472.87	174.42	1,471.87	0.00	0.00	0.00
14,300.00	89,22	359.68	12,267.00	1,572.86	173.87	1,571.86	0.00	0.00	0.00
14,400.00	89.22	359.68	12,268.37	1,672.85	173.31	1,671.86	0.00	0.00	0.00
14,500.00	89.22	359.68	12,269.73	1,772.84	172.76	1,771.85	0.00	0.00	0.00
14,600.00	89.22	359.68	12,271.09	1,872.83	172.20	1,871.84	0.00	0.00	0.00
14,700.00	89.22	359.68	12,272.45	1,972.82	171.65	1,971.83	0.00	0.00	0.00
14,800.00	89.22	359.68	12,273.81	2,072.81	171.10	2,071.82	0.00	0.00	0.00
14,000.00	03.22	250.60	12,275.01	2,072.01	170.54	2,071.02	0.00	0.00	0.00

14,900.00

15,000.00

89.22

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169.99

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12,275.18

12,276.54

359.68

359.68

0.00

### Gyrodata Inc.





ecision Wellbore Placement

Dátabáse:	Gyrodata NWDB	Local Co-ordinate Reference:	Well W3 13H
Company:	ConocoPhillips	TVD Reference:	Well @ 3147.40usft (RKB: 25' + GL:
		ì.	3122.40')
Project:	Eddy County, NM	MD Reference:	Well @ 3147.40usft (RKB: 25' + GL:
		f	3122.40)
Site:	Stampede Fed COM W3 13H	North Reference:	Grid
Weil:	W3 13H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole	,	
Design:	Design #1	* * *	

Measured			Vertical	·		Vertical	Dogleg	Build	Turn
Depth (usft)	Inclination (°)	Azimuth (°)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Section (usft)	Rate (°/100ft)	Rate (°/100ft)	Rate (°/100ft)
15,100.00	89.22	359.68	12,277.90	2,372.77	169.44	2,371.79	0.00	0.00	0.00
15,200.00	89.22	359.68	12,279.26	2,472.76	168,88	2,471.78	0.00	0.00	0.00
15,300.00	89.22	359.68	12,280.62	2,572.75	168.33	2,571.77	0.00	0.00	0.00
15,400.00	89.22	359.68	12,281.98	2,672.74	167.78	2,671.76	0.00	0.00	0.00
15,500.00	89.22	359.68	12,283.35	2,772.73	167.22	2,771.75	0.00	0.00	0.00
15,600.00	89.22	359.68	12,284.71	2,872.72	166.67	2,871.74	0.00	0.00	0.00
15,700.00	89.22	359.68	12,286.07	2,972.71	166.11	2,971.73	0.00	0.00	0.00
15,800.00	89.22	359.68	12,287.43	3,072.70	165.56	3,071.73	0.00	0.00	0.00
15,900.00	89.22	359.68	12,288.79	3,172.69	165.01	3,171.72	0.00	0.00	0.00
16,000.00	89.22	359.68	12,290.16	3,272.68	164.45	3,271.71	0.00	0.00	0.00
16,100.00	89.22	359.68	12,291.52	3,372.67	163.90	3,371.70	0.00	0.00	0.00
16,200.00	89.22	359.68	12,292.88	3,472.65	163.35	3,471.69	0.00	0.00	0.00
16,300.00	89.22	359.68	12,294.24	3,572.64	162.79	3,571.68	0.00	0.00	0.00
16,400.00	89.22	359.68	12,295.60	3,672.63	162.24	3,671.67	0.00	0.00	0.00
16,500.00	89.22	359.68	12,296.96	3,772.62	161.69	3,771.66	0.00	0.00	0.00
16,600.00	89.22	359.68	12,298.33	3,872.61	161.13	3,871.65	0.00	0.00	0.00
16,700.00	89.22	359.68	12,299.69	3,972.60	160.58	3,971.64	0.00	0.00	0.00
16,800.00	89.22	359.68	12,301.05	4,072.59	160.03	4,071.63	0.00	0.00	0.00
16,900.00	89.22	359.68	12,302.41	4,172.58	159.47	4,171.62	0.00	0.00	0.00
17,000.00	89.22	359.68	12,303.77	4,272.57	158.92	4,271.61	0.00	0.00	0.00
17,100.00	89.22	359.68	12,305.13	4,372.56	158.36	4,371.60	0.00	0.00	0.00
17,200.00	89.22	359.68	12,306.50	4,472.55	157.81	4,471.60	0.00	0.00	0.00
17,300.00	89.22	359.68	12,307.86	4,572.54	157.26	4,571.59	0.00	0.00	0.00
17,400.00	89.22	359.68	12,309.22	4,672.53	156.70	4,671.58	0.00	0.00	0.00
17,500.00	89.22	359.68	12,310.58	4,772.51	156.15	4,771.57	0.00	0.00	0.00
17,600.00	89.22	359.68	12,311.94	4,872.50	155.60	4,871.56	0.00	0.00	0.00
17,700.00	89.22	359.68	12,313.31	4,972.49	155.04	4,971.55	0.00	0.00	0.00
17,800.00	89.22	359.68	12,314.67	5,072.48	154.49	5,071.54	0.00	0.00	0.00
17,900.00	89.22	359.68	12,316.03	5,172.47	153.94	5,171.53	0.00	0.00	0.00
18,000,00	89.22	359.68	12,317.39	5,272.46	153.38	5,271.52	0.00	0.00	0.00
18,100.00	89.22	359.68	12,318.75	5,372.45	152.83	5,371.51	0.00	0.00	0.00
18,200.00	89.22	359.68	12,320.11	5,472.44	152.27	5,471.50	0.00	0.00	0.00
18,300.00	89.22	359.68	12,321.48	5,572.43	151.72	5,571.49	0.00	0.00	0.00
18,400.00	89.22	359.68	12,322.84	5,672.42	151.17	5,671.48	0.00	0.00	0.00
18,500.00	89.22	359.68	12,324.20	5,772.41	150.61	5,771.48	0.00	0.00	0.00
18,600,00	89.22	359.68	12,325.56	5,872.40	150.06	5,871.47	0.00	0.00	0.00
18,700.00	89.22	359.68	12,326.92	5,972.38	149.51	5,971.46	0.00	0.00	0.00
18,800.00	89.22	359.68	12,328.29	6,072.37	148.95	6,071.45	0.00	0.00	0.00
18,900.00	89.22	359.68	12,329.65	6,172.36	148.40	6,171.44	0.00	0.00	0.00
19,000,00	89.22	359.68	12,331.01	6,272.35	147.85	6,271.43	0.00	0.00	0.00
19,100.00	89.22	359.68	12,332.37	6,372.34	147.29	6,371.42	0.00	0.00	0.00
19,200.00	89.22	359.68	12,333.73	6,472.33	146.74	6,471.41	0.00	0.00	0.00

j.

### Gyrodata Inc.

Planning Report



Database: Company:	Gyrodata NW ConocoPhillip				Local Co-or TVD Refere	dinate Reference: nce:	Well W3 1: Well @ 31 3122.40')	47.40usft (RKB: 25' +	GL:
Project:	Eddy County,	NM	· · ·		MD Referen	ce:		47.40usft (RKB: 25' +	GL:
Site:	Stampede Feo	1 CÓM W3 1	зн : :	,	North Refer	ence:	Grid		
Well:	W3 13H				Survey Calc	ulation Method:	Minimum C	Curvature	
Wellbore: Design:	Original Hole Design #1	·		· · ·	· · · ·		l		· · · · ·
Design Targets		and the second s			<del>مر میں میں میں میں میں میں میں میں م</del> یں میں میں میں میں میں میں میں میں میں م	and a second and a second and a second			· · · · · · · · · · · · · · · · · · ·
Design Targets Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Target Name - hit/miss target	(°) V2 0.00	(°) 0.00	(usft) 12,244.00	(usft) -403.12	<b>(usft)</b> 185.08	(usft) 364,541.55		Latitude 32° 0' 3.50 N	Longitude 103° 45' 59.30 W

675,684.76 32° 1' 11.74 N 103° 45' 59.33 W Stampede Fed COM W3 90.78 359.68 12,334.00 6,491.97 146.63 371,436.64 plan hits target center
Rectangle (sides W100.00 H50.00 D6,410.00)

**Casing Points** a second a second a second ب الالد ستار الدار الدار Vertical Measured Casing Hole Depth Depth Diameter Diameter (usft) (usft) Name (in) (in) 1,005.00 1,005.00 13 3/8" 13.37 17.50 4,137.21 4,115.00 9 5/8" 9.62 12.25 11,402.65 11,355.00 7 5/8" 5.50 6.00 19,219.64 12,334.00 5" x 4 1/2" 5.50 6.00

Formations			مريس بي محمد مريد مريد مريس ميريد مريس بريس بريس مريد. 	an an a carta a mura an Managementer	······		بى سەرىمە دىرسىيە بايىرىمە بىرىمە	
	Measured Depth (usft)	Vertical Depth (usft)	Name		Lithology	Dip (°)	Dip Direction (°)	
	300.00	300.00	Base of Fresh Water			0.78	359.68	
	980.00	980.00	Rustler			0.78	359.68	
	1,465.00	1,465.00	Salado			0.78	359.68	
	1,710.03	1,709.92	Castile			0.78	359.68	
	3,966.52	3,945.97	Delaware			0.78	359.68	
	4,117.71	4,095.70	Ford Shale			0.78	359.68	
	4,919.04	4,889.23	Cherry Canyon			0.78	359.68	
	6,320.11	6,276.66	Brushy Canyon			0.78	359.68	
	7,708.36	7,660.71	Bone Springs			0.78	359.68	
	9,978.36	9,930.71	Bone Springs 3rd Carb			0.78	359.68	
	11,178.36	11,130.71	Wolfcamp			0.78	359.68	
	11,333.36	11,285.71	Wolfcamp 1			0.78	359.68	
	11,738.37	11,690.72	Wolfcamp 2			0.78	359.68	
	12,303.38	12,159.43	Wolfcamp 3			0.78	359.68	

Plan Annotatio	INS .		المسي والأروار الأروار الأروار الم			and the second	ست .
	Measured Depth (usft)	Vertical Depth (usft)	Local Coor +N/-S (usft)	dinates +E/-Ŵ (usft)	Ĉomment	:	
	1,500.00 6,573.33 11,718.74	1,500.00 6,527.42 11,671.09	0.00 -645.31 -681.16	0.00 176.54 186.35	Start Build 1.50 Start Drop -1.50 Start DLS 10.00 TFO 359.68	angana manang di Katagan Angkalang Katagan Angkalang Katagan Katagan Katagan Katagan Katagan Katagan Katagan Ka	

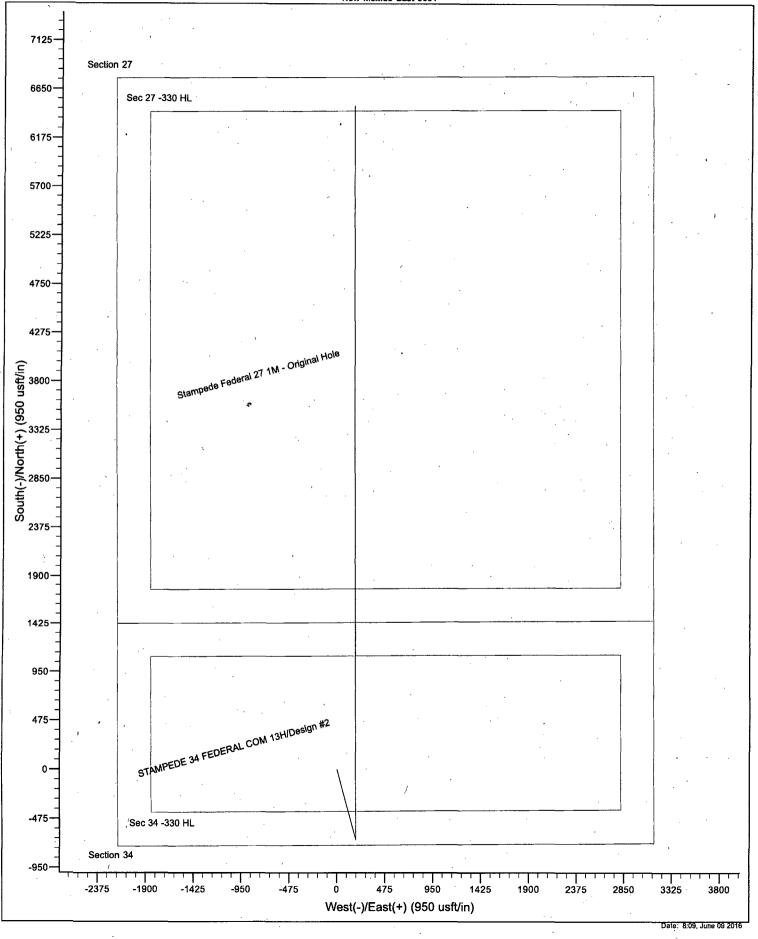


#### ConocoPhillips MCBU Permian Delaware Hz New Mexico STAMPEDE 34 FED TRI PAD (13H, 14H, 15H) - PS STAMPEDE 34 FEDERAL COM W3 13H Original Hole Plan: Design #2 (STAMPEDE 34 FEDERAL COM W3 13H/Original Hole) WELL @ 3147.4usft US State Plane 1927 (Exact solution) NAD 1927 (NADCON CONUS) Clarke 1866 New Mexico East 3001

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

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Magnetic Field Strength: 47951.6snT Dip Angle: 59.84\* Date: 6/7/2016 Model: BGGM2016



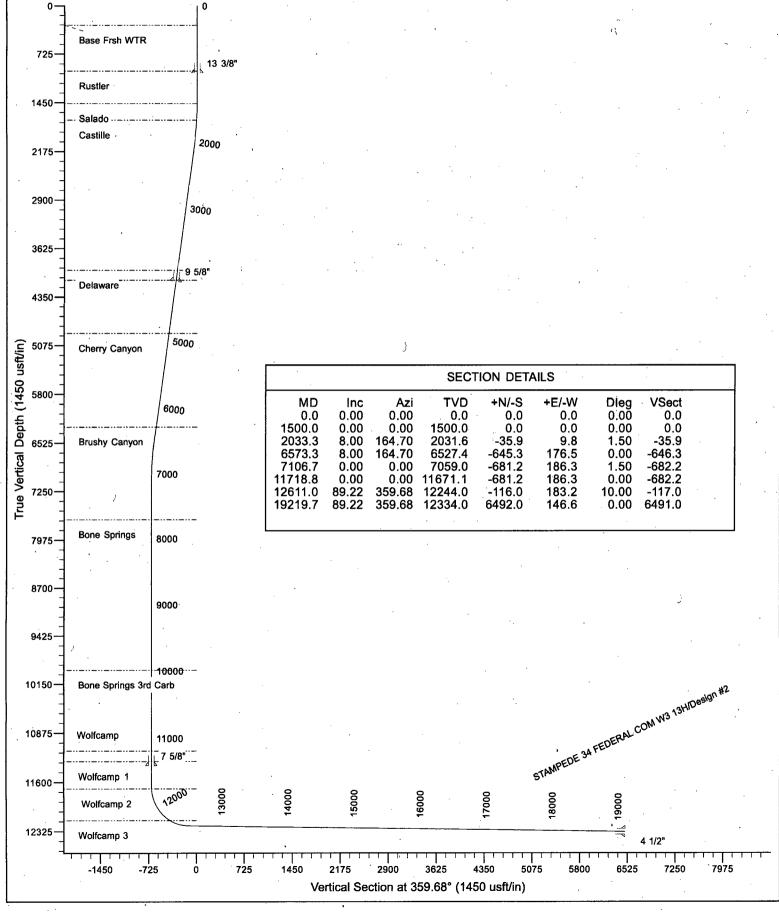


ConocoPhillips MCBU Permian Delaware Hz New Mexico STAMPEDE 34 FED TRI PAD (13H, 14H, 15H) STAMPEDE 34 FEDERAL COM W3 13H Original Hole Plan: Design #2 (STAMPEDE 34 FEDERAL COM W3 13H/Original Hole) WELL @ 3147.4usft US State Plane 1927 (Exact solution) NAD 1927 (NADCON CONUS) Clarke 1866 New Mexico East 3001



TGM

Magnetic Field Strength: 47951.6snT Dip Angle: 59.84° Date: 6/7/2016 Model: BGGM2016



### **ConocoPhillips MCBU**

Permian Delaware Hz New Mexico STAMPEDE 34 FED TRI PAD (13H, 14H, 15H) - PS STAMPEDE 34 FEDERAL COM W2 14H

Original Hole Design #2

### **Anticollision Report**

09 June, 2016

Anticollision Report

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										14 A.	l) - PS				
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Reference	Site:	(15H) -	PEDE 34 FE PS	D TRI PAL	) (1 <b>3</b> ⊟, 14	4 <b>11</b> ,	MD Refe	MD Reference:				8.4usft			م میں اور کی کی کرد اور اور کرد کرد کرد کرد کرد کرد کرد کرد کرد کر
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	11,396.0	18,8	26.0 Desig	ın #2 (Origi	nal Hole)	ŕ	м	IWD+IFR1		MWD	+ IFR1				
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Site Nan Offse STAMPE STAM STAM STAM STAM STAM Stamped Stam Stam Stam Stam Offset Des Survey Progra Refere Messured Depth (usft) 0.0 100.0 200.0 300.0 400.0 500.0 500.0 600.0 700.0 800.0 700.0 800.0 700.0 800.0 700.0	me et Well - We EDE 34 FE MPEDE 34 MPEDE 34 MPEDE 34 MPEDE 34 de Federal pede Fede pede Fede pede Fede pede Fede mede Fede pede Sede pede Sede ped Sede Sede Sede Sede Sede Sede Sede Se	D TRI PAC FEDERAL FEDERAL FEDERAL FEDERAL FEDERAL 27, 1M ral 27, 1M ral 20, 9 20, 9 300, 9 500, 9 600, 9 700, 9 800, 9 9 00, 9 1,000, 9 9 00, 9 1,000, 9	2) (13H, 14H, COM W1 1 COM W1 1 COM W3 1 COM W1 1 COM W3 1 COM 9 COM	5H - Origin 5H - Origin 3H - Origin 3D - TRI PAD ( 127-WW0+IFF 3em Major A tereones 4 (usft) 0.0 0.1 0.5 0.9 1.2 1.6 1.9 2.3 2.6 3.0 3.4	al Hole al Hole al Hole al Hole al Hole al Hole riginal B riginal B 13H 14H 11 (1493/M 45 07feet 97feet 0.0 0.1 0.5 0.9 1.2 1.6 1.9 2.3 2.6 3.0 3.4	H. 1, 15H) - P: WD+IFR1 Higheide Toolface (*) -50.90 -5	easured M Depth (usft) 2,000.0 10,923.5 1,500.0 11,400.0 15,894.7 15,900.0 16,000.0 S - STAMPED Offset Wellbor +W⋅S (usft) 41.8 41.8 41.8 41.8 41.8 41.8 41.8 41.8	easured Depth (usft) 2,000.9 10,918.9 1,499.0 11,405.2 12,041.2 12,041.2 12,041.2 12,041.2 12,042.8 DE 34 FEDEF *E/w (usft) -51.1 -51.1 -51.1 -51.1 -51.1 -51.1 -51.1 -51.1	Between Centres (usft) 33.0 116.9 33.0 121.9 1,051.0 1,056.2 RAL COM W RAL COM W RAL COM W 33.0 33.0 33.0 33.0 33.0 33.0 33.0 33.	Betwee Ellips, (usft 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	es 1 22.4 64.2 24.4 66.5 77.7 77.7 782.1 Drigin eparation (uert) 1.55 2.26 2.97 3.68 4.38 5.09 5.80 6.51 7.21 7.92	actor 3.113 2.218 3.847 2.200 14.342 14.332 14.253 Separation Factor 21.232 14.594 11.118 8.980 7.531 6.485 5.694 5.075 4.577 4.169	Caution CC, ES Caution CC ES SF	- Monita - Monita Site Error:	or Closely, S or Closely, S or Closely, S o.0.ust
Site Nan Offse STAMPE STAM STAM STAM STAM STAM Stamped Stam Stam Stam Stam Control Control Referent Control Control Referent Control C	me et Weil - We EDE 34 FE MPEDE 34 MPEDE 34 MPEDE 34 MPEDE 34 de Federal pede Fede pede Fede pede Fede mede Fede sign 0.0 100.0 200.0 300.0 400.0 500.0 600.0 700.0 800.0 900.0	D TRI PAC FEDERAL FEDERAL FEDERAL FEDERAL FEDERAL 27, 1M ral 27, 1M ral 20, 1	0 (13H, 14H, COM W1 1 COM W1 1 COM W1 1 COM W3 1 COM W1 1 COM W3 1	5H - Origin 5H - Origin 3H - Origin 3H - Origin 3H - Origin 3H - Origin 5000000000000000000000000000000000000	al Hole al Hole al Hole al Hole al Hole al Hole riginal B riginal B 13H_14H 1 (1485) 113H_14H 1 (1485) 0.0 0.1 0.5 0.9 1.2 1.6 1.9 2.3 2.6 3.0	H. 15H) - P: WD IFR1 Highside Toolfice C) -50.90 -50.90 -50.90 -50.90 -50.90 -50.90 -50.90 -50.90 -50.90 -50.90 -50.90 -50.90 -50.90 -50.90 -50.90 -50.90 -50.90	easured M Depth (usft) 2,000.0 10,923.5 1,500.0 11,400.0 15,894.7 15,900.0 16,000.0 S - STAMPED Offeet Wellbor rN/S (usft) 41.8 41.8 41.8 41.8 41.8 41.8 41.8 41.8	easured Depth (usft) 2,000.9 10,918.9 1,499.0 11,405.2 12,041.2 13,11 -51.1	Between Centres (usft) 33.0 116.9 33.0 121.9 1,051.0 1,056.2 RAL COM W Between Between Centres Centres Eili (usft) 33.0 3	99999 115H - C	es 1 ) 22.4 64.2 24.4 66.5 77.7 77.7 77.7 77.7 77.7 77.7 77.7	actor 3.113 2.218 3.847 2.200 14.342 14.332 14.253 Separation Factor 21.232 14.594 11.118 8.980 7.531 6.485 5.694 5.075 4.577	Caution CC, ES Caution CC ES SF	- Monita - Monita Site Error:	or Closely, S or Closely, S or Closely, S o.0.ust

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

Page 2

Anticollision Report

Company: ConocoPhillips MCBU	Local Co-ordinate Reference:	Site STAMPEDE 34 FED TRI PAD (13H, 14H,
		(15H) - PS
Project: Permian Delaware Hz New Mexico	TVD Reference:	WELL @ 3148.4usft
Reference Site: STAMPEDE 34 FED TRI PAD (13H, 14H,	MD Reference:	WELL @ 3148.4usft
15H) - PS		
Site Error:	North Reference:	Grid
Reference Well: STAMPEDE 34 FEDERAL COM W2 14H	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: A Design #2	Offset TVD Reference:	Offset Datum

													,
Offset De	sian 😳	STAMP	EDE 34 FE	ED TRI PAD (	13H-14	H. 15H) - P	S <sup></sup> STAMPED	E 34 FEDE	RAL COM	N1 15H -	Origin	Offse	t Site Error: 0.0 usft ;
Survey Prog	1. 1. 1. 1. 1. A. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.			, 4127-MWD+IFF				21. F 47. 5 2 3	1. 1. 3. 3.	X. 10 . 5 . 5		and a second	t Well Error: 0.0 usft
Refer	ance 👘	Offs	et .	Semi Major A	cis 🖉				S S Distance	:0			
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Weilbore	NO. 19 30 1 Pust				Separation	Warning
Depth (usft)	Depth T (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface	+N/-S (usft)	+E/-W	11 DI TAN & C 10 CANESA 1 - 450	Ellipses (usft)	Separation 🕹	Factor	
- HELESCALES	Ser Constanting	and the second second				المتحدث فالمتكام الم		بمدمنة بسنست المتسل	المستخدمة فالمستشفان الاست	246 4 4 4 4 5 M	a the search and the	ar its an ar an ar	
1,400.0	1,400.0 1,500.0	1,400.9 1,500.9	1,400.9 1,500.9	3.8 3.9	3,8 3.9	-50,90 -50,90	41.8 41.8	-51.1 -51.1	33.0 33.0	24.7 24.4	8.32 8.59	3.967 3.844	
1,600.0	1,600.0	1,600.9	1,600.9	4.1	4.1	-50.90	41.8	-51.1	33.0	24.4	8,91	3.706	
1,700.0	1,700.0	1,700.9	1,700.9	4.2	4.2	-50.90	41.8	-51.1	33.0	23.7	9.27	3.560	e e a
1,800.0	1,800.0	1,800.9	1,800.9	4.4	4.4	-50.90	41.8	-51.1	33.0	23.3	9.68	3.409	
1,900.0	1,900.0	1,900.9	1,900.9	4.7	4.7	-50.90	41.8	-51.1	33.0	22.9	10.13	3,260	
2 000 0	2,000.0	2,000.9	2,000.9	4.0	4.9	-50.90	41.8	-51.1	33.0	22.4	10.60	3.113 CC, ES	
2,000.0	2,000.0	2,000.9	2,000.9	4.9 5.2	4.3 5.2	-50.90	41.8	-51.1	34.1	22.4	11.10	3.077	
2,200.0	2,199.9	2,200.8	2,200.8	5.4	5.4	153,17	41.8	-51.1	37.6	26.0	11.60	3.242	
2,300.0	2,299.7	2,300.6	2,300.6	5.7	5.7	157.02	41.8	-51.1	43.5	31.4	12.12	3.591	
2,400.0	2,399.3	2,400.2	2,400.2	5.9	6.0	160.91	41.8	-51.1	52.1	39.4	12.67	4.112	
0.000.0	a 400 c	0 400 5	0 400 F	Ĺ	~ ~		44.0		ca a	50.4	. 40.00	4 700	
2,500.0 2,600.0	2,498.6 2,597.6	2,499.5 2,600.5	2,499.5 2,600.5	6.2 6.5	6.3 6.6	164.34	41.8	-51.1 -50.6	63.3 75,4	50.1 61,6	\ 13.23 13,79	4.786 5.467	
2,700.0	2,597.6	2,800.5	2,000.0	6.8	6.9	168.85	37.0	-48.8	85.1	70.7	14.35	5.931	
2,800.0	2,795.7	2,804.2	2,803.9	7.1	7.2	170,19	30.9	-45.8	92.2	77.3	14.91	6.184	
2,900.0	2,894.7	2,906.6	2,905.9	7.4	7.5	171.26	22,3	-41.7	96.7	81.2	15.48	6.246	
3,000.0	2,993.7	3,009.2	3,007.7	7.7	7.8	172.18	11.3	-36.3	98.5	82.5	16.06	6.137	
3,100.0 3,200.0	3,092.8 3,191.8	3,109.8 3,209.8	3,107.4 3,206.4	8.0 8.4	8.1 8,4	173.03 173.87	-1.2 -13.7	-30.2	98.5 98.4	81.8 81.1	16.66 17.29	5.912 5.693	*
3,300.0	3,191.8	3,203.8	3,305.4	8.7	8.7	174.72	-16.2	-18.0	98.3	80.4	17.92	5.488	-
3,400.0	3,389.8	3,409.8	3,404.4	9.0	9.0	175.57	-38.7	-11.9	98.3	79.7	18.56	5.296	
3,500.0	3,488.9	3,509.8	3,503.4	9.4	9.3	176.42	-51.2	-5.8	98.3	79.1	19.21	5.116	
3,571.8	3,560.0	3,581.6	3,574.5	9.6 9.7	9.6	177.03	-60.2	-1.4	98.3 98.3	78.6 78.4	19.68 19.86	4.993 4.947	
3,600.0 3,700.0	3,587.9 3,686.9	3,609.8 3,709.8	3,602.4 3,701.5	9.7	9.7 10.0	177.27 178.12	-63.7 -76.2	0.3 6.4	98.3	76.4	20.52	4.789	•
3,800.0	3,785.9	3,809.8	3,800.5	10.4	10.3	178.97	-88.8	12.5	98.3	77.1	21.19	4.640	
	-,												
3,900.0	3,885.0	3,909.8	3,899.5	10.8	10.7	179.81	-101.3	18.6	98,4	76.5	21.86	4.501	
4,000.0	3,984.0	4,009.7	3,998.5	11.1	11.0	-179.34	-113.8	24.7	98.5	75.9	22.53	4.370	
4,100.0	4,083.0 4,182.0	4,109.7 4,209.7	4,097.5 4,196.5	11.5 11.7	11.4 11.5	-178.49 -177.65	-126.3 -138.8	30.8 36.9	.98.6 98.7	75.4 75.4	23.19 23.27	4.249 4.241	
4,200.0	4,182.0	4,209.7	4,190.5	11.7	11.5	-176.81	-151.3	43.0	98.8	75.5	23.29	4,243	
1,000.0	,,	1,000.	.,				•						
4,400.0	4,380.1	4,409.7	4,394.6	11.7	11.6	-175.97	-163.8	49.1	99.0	75.7	23.34	4.241	
4,500.0	4,479.1	4,509.7	4,493.6	11.8	11.6	-175.14	-176.3	, 55.2	99.2	75.8	23.42	4.236	
4,600.0 4,700.0	4,578.2 4,677.2	4,609.7 4,709.7	4,592.6 4,691.6	11.8 11.9	11.7 11.8	-174.30 -173.48	-188.8 -201.3	61.3 67.4	99.4 99.6	75.9 76.0	23.51 23.63	4.227 4.215	
4,700.0	4,077.2	4,709.7	4,790.6	12.0	11.8	-173.48	-201.3	73.5	99.9	76.1	23.78	4.200	
4,900.0	4,875.2	4,909.6	4,889.7	12.1	11.9	-171.83	-226.3	79.6	100.1	76.2	23.94	4.183	
5,000.0	4,974.3	5,009.6	4,988.7	12.2	12.0	-171.02	-238.8	85.7	100.4	76.3	24.13	4.162	
5,100.0	5;073.3	5,109.6 5,209.6	5,087.7 5,186.7	12.3 12.4	12.2 12.3	-170.21 -169.40	-251.4 -263.9	91.8 97.9	100.8 101.1	76.4 76.5	24.34 24.57	4.139 4.114	
5,200.0 5,300.0	5,172,3 5,271,3	5,209.6	5,285.7		12.4	-168.60	-276.4	104.0	101.4	76.6	24.82	4.086	
0,000.0	لەر 1 1غارب ر	2,000,0	-,,	,			2.0.7						
5,400.0	5,370.4	5,409.6	<sup>-</sup> 5,384.7	12.7	12.6	-167.81	-288.9	110.1	101.8	76.7	25.10	4.057	
5,500.0	5,469.4	5,509.6	5,483.8	12.9	12.7	-167.02	-301.4	116.2	102.2	76.8	25.39	4.026	
5,600.0	5,568.4	5,609.6	5,582.8	13,0	12.9	-166.24	-313,9	122.3	102.6	76.9	25.70	3.993	
5,700.0	5,667.5	5,709.6	5,681.8	13,2	13,1	-165.46	-326.4	128.4 · 134.5	103.0 103.5	77.0 77.1	26.02 26.37	3.959 3.925	
5,800.0	5,766.5	5,809.5	5,780.8	13.4	13.2	-164.69	-338.9	134.3	103.5	<i>(1</i> ,1	20.31	3.320	4
5,900.0	5,865.5	5,909.5	5,879,8	13.6	13.4	-163.93	-351.4	140.6	103.9	77,2	26.73	3.889	
6,000.0	5,964.5	6,009.5	5,978.8	13.8	13.6	-163.17	-363.9	146.7	104.4	77.3	27.11	3.853	
6,100.0	6,063.6	6,109.5	6,077.8	, <b>14.0</b>	13.9+	-162.43	-376.4	152.8	104.9	77.4	27.50	3.816	
0.000	6 167 6	6 200 5	6 176 0	14.2	14 1	-161 69	-388 9	158.9	105.5	77.5	27 91	3 779	1

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6,162.6

6,261.6

6,209.5

6,309.5

6,176.9

6,275.9

6,200.0

6,300.0

14.2

14.4

14.1

14.3

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

158.9

165.0

105.5

106.0

77.5

77.7

27.91

28.33

3.779

3.742

-388.9

-401.4

-161.69

-160.95

Anticollision Report

Company:	ConocoPhillips MCBU	Local Co-ordinate Reference:	Site STAMPEDE 34 FED TRI PAD (13H, 14H,
			15H) - PS
Project:	Permian Delaware Hz New Mexico	TVD Reference:	WELL @ 3148.4usft
Reference Site:	STAMPEDE 34 FED TRI PAD (13H, 14H,	MD Reference:	WELL @ 3148.4usft
	1(15H) - IPS		
Site Error:	000 usfi	North Reference:	Grid
Reference Well:	STAMPEDE 34 FEDERAL COM W2 14H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database: Offset TVD Reference:	EDM Central Planning
Reference Design:	Design #2	Offset IVD Reference:	Offset Datum

 Offset Design
 STAMPEDE 34 FED TRI PAD (13H; 14H, 15H) - PS - STAMPEDE 34 FEDERAL COM W1 15H - Origin

 Survey Program
 0-MWD+IFR1, 1005-MWD+IFR1, 4127-MWD+IFR1, 11493-MWD+IFR1

 Reference
 Offset

 Offset
 Same

 Beasured
 Vertical

 Depth
 Depth

 Depth
 Depth

Depth (usft)		Depth (usft)	Depth	(usft) (	usft)	Toolface	THE REAL PROPERTY AND A DESCRIPTION OF A	Contraction of the second second	Centres El (usft)			Factor
and the second second	فنادر والمسلسبات فريو كالمسبقات		تتنقيبه يحتقن	Sundan Bring	الأسر وسنستنقش	and the second and the second seco	(usft) 1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,	- Antonia Marine	and the state of the second	20. 18. 19 19 1	A	
6,400.0	6,360.6	6,408.5	6,374.0	14.7	14.5	-160,28	-413.7	171.0	106.7	78.0	28,77	3,710
6,500.0	6,459.7	6,506.0	6,470.8	14.9	14.7	-160,01	-423.9	176.0	108.8	79.6	29,22	3.725
6,600.0	6,559.1	6,603.5	6,567.8	15.1	15.0	-159.90	-431.8	179.9	110.9	81.3	29.66	3.741
6,700.0	6,658.8	6,700.0	6,664.2	15.4	15.2	-159.90	-437.6	182.6	112.9	82.8	30.07	3.754
6,800.0	6,758.6	6,798.3	6,762.3	15.6	15.4	-160.00	-441.1	184.4	114.7	84.2	30.50	3.760
6,900.0	6,858.6	6,895.6	6,859.7	15.8	15.6	-160.21	-442.4	185.0	116.3	85.4	30.89	3.764
7,000.0	6,958.6	6,995.4	6,959.5	16.0	15.8	-0.32	-442.4	185.0	116.9	85.5	31.30	3.733
7,100.0	7,058.6	7,095.4	7,059.5	16.2	16.0	-0.32	-442.4	185.0	116.9	85.1	31.72	3.683
7,200.0	7,158.6	7,195.4	7,159.5	16.4	16.2	-0.32	442.4	185.0	116.9	.84.7	32.15	3.634
7,300.0	7,258.6	7,295.4	7,259.5	16.7	16.5	-0.32	-442.4	185.0	116.9	84.3	32.59	3.585
	.,	.,	1,200.0		1010	•					02.00	,
7,400.0	7,358.6	7,395.4	7,359.5	16.9	16.7	-0.32	-442.4	185.0	116.9	83.8	33.04	3.536
7,500.0	7,458.6	7,495.4	7,459.5	- 17.1	16.9	-0.32	-442.4	185.0	116.9	83.3	33.50	3.488 ,
7,600.0	7,558.6	7,595.4	7,559.5	17.3	17,2	-0.32	-442.4	185.0	116.9	82.9	33,97	3.440
7,700.0	7,658.6	7,695.4	7,659.5	17.6	17.4	-0.32	-442.4	<sup>·</sup> 185.0	116.9	82.4	34.45	3.392
7,800.0	7,758.6	7,795.4	7,759.5	17.8	17.6	-0.32	-442.4	185.0	116.9	81. <del>9</del>	34.93	3.345
			·									
7,900,0	7,858,6	7,895,4	7,859.5	18,1	17,9	-0.32	-442.4	, 185.0	116,9	81,4	35,42	3.299
8,000.0	7,958.6	7,995.4	7,959.5	18.3	18.1	-0.32	-442.4	185.0	116.9	80.9	35.92	3.253
8,100.0	8,058.6	8,095.4	8,059.5	18.5	18.4	-0.32	-442.4	185.0	116.9	80.4	36.43	3.208
8,200.0	8,158.6	8,195.4	8,159.5	18.8	18.6	-0.32	-442.4	185.0	116.9	79.9	36.94	3.163
8,300.0	8,258.6	8,295.4	8,259.5	19.1	18.9	-0.32	-442.4	185.0	116.9	79.4	37.46	3.120
8,400.0	8,358.6	8,395.4	8,359.5	19.3	19.2	-0.32	-442.4	185.0	116.9	78.9	. 37.98	3.076
8,500.0	8,458.6	8,495.4	8,459.5	19.6	19.4	-0.32	-442.4	185.0	116.9	78.3	38.51	3.034
8,600.0	8,558.6	8,595.4	8,559.5	19.8	19.7	-0.32	-442.4	185.0	116.9	77.8	39.05	2.992
8,700.0	8,658.6	8,695.4	8,659.5	20.1	20.0	-0.32	-442.4	185.0	116.9	77.3	39.59	2.951
8,800.0	8,758.6	8,795.4	8,759.5	20.4	20.2	-0.32	-442.4	185.0	116.9	76.7	40.14	2.911
0,000.0	0,700.0	0,700.4	0,100.0	20.4	20.2	-0.52		100.0	11010		40.14	2.011
8,900.0	8,858.6	8,895.4	8,859,5	20.7	20.5	-0.32	-442,4	185.0	116.9	76.2	40.69	2,872
9,000.0	8,958.6	8,995.4	8,959.5	20.9	20.8	-0.32	-442.4	185,0	116.9	75.6	41.25	2.833
9,100.0	9,058.6	9,095.4	9,059.5	21.2	21,1	-0.32	-442.4	185.0	116.9	75.0	41.81	2,795
9,200.0	9,158.6	9,195.4	9,159.5	21.5	21.4	-0.32	-442.4	185.0	116.9	74.5	42.38	2.757
9,300.0	9,258.6	9,295.4	9,259.5	21.8	21.7	-0.32	-442.4	185.0	116.9	73.9	42.95	2,721
9,400.0	9,358.6	9,395.4	9,359.5	22.1	21,9	-0.32	-442.4	185.0	116,9	73.3	43.52	2.685
9,500.0	9,458.6	9,495.4	9,459.5	22,4	22,2	-0.32	-442.4	185.0	116.9	72.7	44.10	2.650
9,600.0	9,558.6	9,595.4	9,559.5	22.6	22,5	-0.32	-442.4	185.0	116.9	72.2	44.68	2.615
9,700.0	9,658.6	9,695.4	9,659.5	22.9	22.8	-0.32	-442.4	185.0	116.9	71.6	45.27	2.581
9,800.0	9,758.6	9,795.4	9,759.5	23.2	23.1	-0.32	-442.4	185.0	116.9	71.0	45.86	2.548
9,900.0	9,858.6	9,895.4	9,859.5	23.5	23.4	-0.32	-442.4	185.0	116.9	70.4	46.45	2.516
10,000.0	9,958.6	9,995.4	9,959.5	23.8	23.7	-0.32	-442.4	185.0	116.9	69.8	47.05	2.484 Caution - Monitor Closely
10,100.0	10,058.6	10,095.4	10,059.5	24.1	24.0	-0.32	-442.4	185.0	116.9	69:2	47.65	2.452 Caution - Monitor Closely
10,200.0	10,158.6	10,195.4	10,159.5	24.4	24.3	-0.32	-442.4	185.0	116.9	68.6	48.25	2.422 Caution - Monitor Closely
10,300.0	10,258.6	10,295.4	10,259.5	24.7	24.6	-0.32	-442.4	185.0	116.9	68.0	48.85	2.392 Caution - Monitor Closely
10,000.0	10,200.0	10,200.4	10,200.0	24.7	24.0	-0.02		100.0	110.0	00.0	40.00	2.002 Gauton - monitor Globaly
10,400.0	10,358.6	10,395.4	10,359.5	25,0	24.9	-0.32	-442.4	185.0	116.9	67.4	49,46	2.362 Caution - Monitor Closely
10,500.0	10,458.6	10,495.4	10,459.5	25.3	່ 25.2	-0.32	-442.4	185.0	116.9	66.8	50.07	2.334 Caution - Monitor Closely
10,600.0	10,558.6	10,595.4	10,559.5	25.6	25.5	-0.32	-442,4	185.0	116.9	66.2	50.68	2.305 Caution - Monitor Closely
10,700.0	10,658,6	10,695.4	10,659.5	25.9	25.8	-0.32	-442,4	185.0	116.9	65,6	51,30	2.278 Caution - Monitor Closely
10,800.0	10,758.6	10,795.4	10,759.5	26.3	26.2	-0.32	-442,4	185.0	116.9	64.9	51,92	2,251 Caution - Monitor Closely
10,900.0	10,858.6	10,895.4	10,859.5	26.6	26.5	-0.32	-442.4	185.0	116.9	64.3	52.54	2.224 Caution - Monitor Closely
10,923.5	10,882.1	10,918.9	10,883.0	26.6	26.5	-0.32	-442.4	185.0	116.9	64.2	52.68	2.218 Caution - Monitor Closely, SF
11,000.0	10,958.6	10,985.7	10,949.8	26.9	26.8	-0.32	-440.5	185.0	119.2	66.3	52.87	2.254 Caution - Monitor Closely
11,100.0	11,058.6	11,066.7	11,029.8	27.2	27.0	-0.32	-428.2	184.9	134.4	81.9	52.44	2.562
. 11,200.0	11,158.6	11,142.9	11,102.7	27.5	27.2	-0.32	-406.5	184.8	163.0	111.5	51.48	3.165
							ant point SE.				11*	

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

Offset Site Error:

• Offset Well Error:

0.9

0.0 usft

0.0 úsft

Anticollision Report

Company:	ConocoPhillips MCBU	Local Co-ordinate Reference:	Site STAMPEDE 34 FED TRI PAD (13H, 14H,
in han an her see			15H) - PS
Project:	Permian Delaware Hz New Mexico	TVD Reference:	WELL @ 3148.4usft
Reference Site:	STAMPEDE 34 FED TRI PAD (13H, 14H,	MD Reference:	WELL @ 3148.4usft
	( 15H) - PS		
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	STAMPEDE 34 FEDERAL COM W2 14H	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 #2	Offset TVD Reference:	Offset Datum

			tanan se analasi s			that y to to the back of a				er vara si er varg		aar menaner ing		
Offset Des	And the Party of t	AS	A WARD AND MADE AND	A DESCRIPTION OF THE PARTY OF T	1071565 7005 1985 T 407740	A REAL PROPERTY OF THE PROPERTY OF	PS - STAMPEDE	34 FEDE	RAL COM V	N1 15H (	Origin		Offset Site Error:	0.0 usft
Survey Progra	Star Sugar	SKREET, SK. 20. 25 126-	1. 25. 4. 2. 5. 5.	, 4127-MWD+IFF	2 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - 1	VD+IFR1	5 R. 1997 - 199		t i dente	i de la seconda			Offset Well Error:	0.0 usft
Refere	- OV 7412 (134 3)	Offse Measured	PARTICE STATES	Semi Major A Reference	16.3 1 4 10 10 10 10	lighside	Offeret Wallhams C	$\pi_{M_{2}}$	Distanc	on the second second	Winimum		and the second second	
Measured Depth	Vertical Depth	Depth	Vertical Depth	Reference		Toolface	Offset Wellbore C +N/-S +	entre E/-W	TOTAL CONTRACTOR STREET	CHALLER PERSONNAL PROPERTY	ioparation *	Separation	Warning	$1.000 \times 10^{11}$
die (usft)	- (usft)	(usft)	(usft)	(usft)	(usft)	1		usft)	the second strain and second strains	(usft)	(usft)			
44,000,0	11,258.6	44.040.0					ter son an arrest states and		000 F	450.0	60.40			
11,300.0	-	11,212,2	11,166.1	27.8	27.4	-0.32	-378.5	184.7	203.5	153.3 205,7	50.19	4.054		
11,400.0	11,358.6	11,273.9	11,219.2	28.0 28.0	27.6	-0.32 0.00	-347.3	184.5 184.3	254.2 311,4	205.7	48,48 46.83	5,243 6,648		
11,500.0	11,458.5	11,328.8 11,382.5	11,263.5 11,303.6		27.7 27.8	0.00	-314.8 -279.2		363.5		46.83		۰.	
11,600.0 11,700.0	11,556.8 11,650.5	11,382.5	-	28.0	27.0	0.00	-240.2	184.1	408.5	318.3 365.1	43.13	8.054 9.409		
		11,435.6	11,339.9	. 28.0				183.9 183.7	408.5	404.4	43.42 41.66			
11,800.0	11,736.7	11,400.0	11,372.3	28.0	29.3	0.00	-198.3	103,7	440,1	404.4	41.00	10,708		
11,900.0	11,813.0	11,550.0	11,404.7	28.0	29.7	0.00	-146.4	183.4	476.1	436.1	40.01	11.900		
12,000.0	11,876.8	11,600.0	11,426.9	28.0	29.8	0.00	-101.6	183.1	497.9	459.7	38.17	13.044		
12,100.0	11,926.4	11,650.0	11,445.1	28.0	29.8	0.00	-55.1	182.9	511.6	474.9	36.72	13,935		
12,200.0	11,960.2	11,700.0	11,459.3	28.1	29.8	0.00	-7.1	182.6	517.2,	481.4	35.73	14.476	·	
12,300.0	11,977.1	11,750.0	11,469.1	28.1	29.8	0.00	41.9	182.3	514.4	479.2	35.28	14.582		
		·	·										· ·	
12,400.0	11,979.7	11,800.0	11,474.7	28.2	29.8	0.00	91.5	182.1	506.5	471.1	35.42	14.301	•	
12,500.0	11,980,9	11,881.0	11,476.6	28,4	29.9	0.00	172,5	181.6	505,3	469.4	35,83	14.101		
12,600.0	11,982.1	11,981.0	11,477.9	28.6	29.9	0.00	272.5	181.1	505.2	469.0	36.19	13.958		
12,700.0	11,983.3	12,081.0	11,479.1	28.8	29.9	0.00	372.5	180.5	505.1	468.5	, 36.62	13.795		
12,800.0	11,984.5	12,181.0	11,480.4	29.1	30.0	0.00	472.5	· 180.0	505.1	468.0	37.10	13.614		
									_		_			
12,900.0	11,985.7	12,281.0	11,481.6	29,3	30.0	0.00	572,4	179,4	505,0	467.4	37.64	13.417		
13,000.0	11,986.9	12,381.0	11,482.9	29.7	30.1	0.00	672.4	178.8	505.0	466.7	38.24	13.206		
13,100.0	11,988.1	12,481.0	11,484.1	30.0	30.1	0.00	772.4	178.3	504.9	466.0	38,89	12,983		
13,200.0	11,989.3	12,581.0	11,485.4	30.4	30.2	0.00	872.4	177.7	504.9	465.3	39.59	12.752	· .	
13,300.0	11,990.5	12,681.0	11,486.7	30.8	30.2	0.00	972.4	177.2	504.8	464.5	40.34	12.514		
			44.407.0			a aa '		470.0	594.0	(00.0				
13,400.0	11,991.7	12,781.0	11,487.9	31.2	30.4	0.00	1,072.4	176.6	504.8	463.6	41.14	12.271		. •
13,500.0	11,992.9	12,881.0	11,489.2	31.7	30.8	0.00	1,172.4	176.1	504.7	· 462.7	41.97	12.025		
13,600.0	11,994.1	12,981.0	11,490.4	32.1	31.3	0.00	1,272.4	175.5	504.7	461.8	42.85	11.778		
13,700.0	11,995.4	13,081.0	11,491.7	32.6	31.7	0.00	1,372.4	175.0	504.6	460.8	43.76	11.530		
13,800.0	.11,996.6	13,181.0	11,492.9	33.2	32.2	0.00	1,472.4	174.4	504.6	459.8	44.71	11.284		
13,900.0	11,997.8	13,281.0	11,494.2	33.7	32.7	0.00	1,572.4	173.9	504.5	458.8	45.70	11.040		
14,000.0	11,999.0	13,381.0	11,495.5	34.3	33.2	0.00	1,672.3	173.3	504.4	457.7	46.71	10.800		
14,100.0	12,000.2	13,481.0	11,496.7	34.9	33.8	0.00	1,772.3	172.8	504.4	456.6	47.75	10.563	1	
14,200.0	12,0001.4	13,581.0	11,498.0	35.5	34.3	0.00	1,872.3	172.2	504.3	455.5	48.82	10.330	1	
14,300.0	12,002.6	13,681.0	11,499.2	36.1	34.9	0.00	1,972.3	171.7	504.3	454.4	49.92	10.102		
	12,002.07					0.00	10.000							
14,400.0	12,003.8	13,781.0	11,500.5	36.7	35.5	0.00	2,072.3	171.1	504.2	453.2	51.04	9.880	•	
14,500.0	12,005.0	13,881.0	11,501.7	37.4	36.1	໌ 0.00	2,172.3	170.5	504.2	452.0	52.18	9.663		
14,600.0	12,006.2	13,981.0	11,503.0	38.0	36.8	0.00	2,272.3	170.0	504.1	450.8	53.34	9.451		
14,700.0	12,007.4	14,081.0	11,504.2	38.7	. 37.4	0.00	2,372.3	169.4	504.1	~ 449.6	54.52	9.246		
14,800.0	12,008.6	14,181.0	11,505.5	39.4	38.1	0.00	2,472.3	168.9	504.0	448.3	55.72	9.046	. ``	
						1.2.2								
14,900.0	12,009.8	14,281.0	11,506.8	40.1	38.7	0.00	2,572.3	168.3	504.0	447.0	56.94	8.851		
15,000.0	12,011.0	14,381.0	11,508.0	40.8	39.4	0.00	2,672.2	167.8	503.9	445.7	58.17	8.663		
15,100.0	12,012.2	14,481.0	11,509.3	41.5	40.1	0.00	2,772.2	167.2	503.9	444.4	59.41	8.480	· · ·	
15,200.0	12,013.4	14,581.0	11,510.5	42.3	40.9	0.00	2,872.2	166.7	503.8 ·	443.1	60.68	8.303	•	
15,300.0	12,014.6	14,681.0	11 <b>,511.8</b>	43.0	41.6	0.00	2,972.2	166.1	503,8	441.8	61.95	8,132		
45 400 0	13 045 0	14.704 0	44 549 0	. 40.0	43.3	0.00	2 072 2	185 8	509 7	440 E	60.04	7 065	· · ·	
15,400.0	12,015.8	14,781.0	11,513.0	43.8	42.3	0.00	3,072.2	165.6	503.7	440.5 439.1	63.24 64.52	7.965 7.804	•	
15,500.0	12,017.0	14,881.0	11,514.3	44.6	43.1	0.00	3,172.2	165.0	503.6		64.53			
15,600.0	12,018,2	14,981.0	11,515.5	45,3	43,8	0,00	3,272,2	164.5	503.6	437.7	65.84 67.16	7.648		
15,700.0	12,019.4	15,081.0	11,516.8	46.1	44.6	0.00	3,372.2	163,9	503,5	436.4	67.16	7.497		
15,800.0	12,020.6	15,181.0	11,518.1	46.9	45.4	0.00	3,472.2	163.3	503.5	435.0	68.49	7.351		
15,900.0	12,021.8	15,281.0	11,519.3	47.7	46.2	0.00	3,572.2	162.8	503.4	433.6	69.83	7.209		
		15,281.0	11,519.5	47.7	40.2 47.0	0.00	3,672.2	162.8	503.4	433.8	71.18	7.072		
16,000.0	12,023.0	15,381.0	11,520.6			0.00	3,672.2	162.2	503.4	432.2	71.18	6.939		
16,100.0	12,024.2			49.3 50.1	47.8 48.6	0.00	3,772.1	161.7	503.3	430.8	72.53	6.811		
16,200.0 16,300.0	12,025.4	15,581.0	11,523.1	51.0	40.0 49.4	0.00	3,972.1	160.6	503.3 503.2	429.4	75.26	6.686		
10,300.0	12,026.6	15,681.0	11,524.3	centre to cent				100.0						

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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 TRI PAD (13H; 14H;
			15H) - PS
Project:	Permian Delaware Hz New Mexico STAMPEDE 34 FED TRI PAD (13H: 14H)	TVD Reference:	WELL@ 3148.4usft
Reference Site:	(13H; 14H, 15H) - PS	MD Reference:	WELL @ 3148.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	STAMPEDE 34 FEDERAL COM W2 14H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Databâse:	EDM Central Planning
Reference Design:	Design #2	Offset TVD Reference:	Offset Datum

offset Des	ilgn 👾 🖓	STAMP	EDE 34 FEI	D TRI PAD	(13H, 14F	l, 15H) - PS	- STAMPEDE	34 FEDE	RAL COM	N1 15H - (	Drigin		Offset Site Error: 0.0 u
irvey Progr		NO166 + 62 MILL 79 43	5-MWD+IFR1;	State Charge	3 4. AMA 42 18 404	ND+IFR1	Energy Se	$\lambda_{2}(0, t)$		A DE LA COL	C 1955 (2)		Offset Well Error: 49 0.0 u
Refere	The second second	Offse	B . 401 6. 125 18	Semi Major A	12.008. 015				Distanc	5826 209 202 20			e se server server se
easured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference		Highside Toolface	Offset Wellbore ( +N/-S	• YOP 2201, 57 398 145			Alnimum eparation	Separation Factor	Warning*
(usft) 🔾 🐳		(usft)		(usft) 👘		s (°) 👘 🖏	(usft)	William Revealed that the hit	a (usft) 🖓		(usft)	ant is a fill	
16,400.0	12,027.8	15,781.0	11,525.6	51.8	50.2	0.00	4,072.1	160.0	503.2	426.5	76.64	6.565	
16,500,0	12,029,0	15,881,0	11,526,9	52,6	51.0	0.00	4,172.1	159,5	503,1	425,1	78.02	6,448	· · · ·
16,600.0	12,030.2	15,981.0	11,528.1	53.5	51.9	0.00	4,272.1	158.9	503.1	423.6	79.41	6.335	
16,700.0	12,031.4	16,081.0	11,529.4	54.3	52.7	0.00	4,372.1	158.4	503.0	422.2	80.81	6.225	
16,800.0	12,032.6	16,181.0	11,530.6	55.2	53.6	-0.00	4,472.1	157.8	502.9	420.7	82.21	6.118	
16,900.0	12,033.8	16,281.0	11,531.9	56.0	54.4	0.00	4,572.1	157.3	502.9	419.3	83.61	6.015	
17,000.0	12,035.0	16,381.0	11,533.1	56.9	55.3	0.00	4,672,1	156.7	502.8	417.8	85.02	5.914	
17,100.0	12.036.2	16,481.0	11,534.4	57.8	56.1	0.00	4,772.0	156.2	502.8	416.3	86.44	5.817	
17,200.0	12,037.4	16,581.0	11,535.6	58.6	57.0	0.00	4,872.0	155.6	502.7	414.9	87.86	5.722	
17,300.0	12,038.6	16,681.0	11,536.9	59.5	57.8	0.00	4,972.0	155.0	502.7	413.4	89.28	5.630	
17,400.0	12,039.8	16,781.0	11,538.2	60.4	58.7	0.00	5.072.0	154.5	502.6	411.9	90.71	5.541	
17,500.0	12,000.0	16,881.0	11,539.4	61.3	59.6	0.00	5,172.0	153.9	502.6	410.4	92.14	5,454	
17,600.0	12,041.0	16,981.0	11,540.7	62.1	60.5	0.00	5,272.0	153.4	502.5	408.9	93,58	5.370	
17,700.0	12,043.5	17.081.0	11,541.9	63.0	61.3	0.00	5,372.0	152.8	502.5	407.4	95.02	5.288	
17,800.0	12,044.7	17,181.0	11,543.2	63.9	62.2	0.00	5,472.0	152.3	502.4	406.0	96.46	5.209	
17,900,0	12,045,9	17,281,0	11,544,4	64,8	63,1	0.00	5,572.0	151.7	502.4	404.5	97,90	5,131	
18,000(0	12,047.1	17,381.0	11,545.7	65.7	64.0	0.00	5,672.0	151.2	502.3	402.9	99.35	5.056	•
18,100.0	12,048.3	17,481.0	11,547.0	66.6	64.9	0.00	5,772.0	150.6	502.2	401.4	100.81	4.982	
18,200.0	12,049.5	17,581.0	11,548.2	67.5	65.8	0.00	5,871.9	150.1	502.2	399.9	102.26	4.911	
18,300.0	12,050.7	17,681.0	11,549.5	<b>68.4</b>	66.7	0.00	5,971.9	149.5	502.1	398.4	102.20	4.841	
18,400.0	12,051.9	17,781.0	11,550.7	69.3	67.6	0.00	6,071.9	149.0	502.1	396.9	105.18	4.774	
18,500.0	12,053.1	17,881.0	11,552.0	70.2	68.5	0.00	6,171.9	148.4	502.0	395.4	105.18	4.708	
18,600.0	12,055.1	17,981.0	11,553.2	71.1	69.4	0.00	6,271.9	147.8	502.0	393.9	108.11	4.643	
18,700.0	12,055.5	18,081.0	11,554.5	· 72.0	70.3	0.00	6,371.9	147.3	502.0	392.4	109.57	4.581	
18,800.0	12,056.7	18,181.0	11,555.7	73.0	71.2	0.00	6,471.9	147.3	501.9	390.8	111.04	4.520	
18,820.6	12,056,9	18,201,1	11,556,0	83.3	71,4	0.00	6,492,0	146.6	501,9	390,7	111,17	4.515	•
18,826.4	12,058.9	18,201.1	11,556.0	86.2	71.4	0.00	6,492.0	146.6	501.9	390.8	111.17	4.515	

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

Anticollision Report

ompany:		THE ALL ST. ALL ST.	oPhillips MC	1			Local Co-	ordinate Re	ference:	Site	STAMPF	DE 34 FED	RI PAD	13H. 14H
											l) - PS	63 ( <del>3</del> %)		14 - 19 <b>-</b> 19
roject:		Permia	n Delaware	Hz New M	exico		TVD Refer	елсе:		WE	LL @ 314	8.4usft		
eference S	ite:	STAMF	PEDE 34 FE	D TRI PAD	) (13H, 1	4H,	MD Refere	192 V & Barrow		WE	LL @ 314	8.4usft		
		15H) -	PS		ray anna a'		法任何承担	S 44 9 3	100 M					
ite Error:	u i i i i i i i i i i i i i i i i i i i	0.0 usf	t sin see		en der son er		North Refe	rence:	aran ya aran ya ya Marina aran ya	Grid				
eference V	Vell:	STAMF	PEDE 34 FE	DERAL CO	OM W2 1	4H	Survey Ca	culation M	ethod:	Min	imum Cur	vature		
ell Error:		0.0 usf	t south is				Output err	ors are at		2.00	0 sigma			
eference V	Vellbore <sup>v</sup>	Origina	I Hole				Database:			State EDI	M Central	Planning		Constant (1995) Astabal (1995)
eference D	esign:	Design	#2				Offset TVD	Reference		Offs	set Datum			
	•		alitera francisco da la		de dischederedes	inderstantigeren in					u atan kata kata da			the state of the state of the
)ffset Desi	gn	STAMPE	EDE 34 FED	TRI PAD	(13H, 14I	H, 15H) - PS	S - STAMPEDE	34 FEDER	AL COM V	V3 13H - (	Origin 👋 🦉		Offset Site	Error: 🕺 🍏 0
urvey Program		The second second	FMWD+IFR1, 4	\$************************************	1 × 606 - 2 1805	WD+IFR1	ti a shekari a					- All (A. Self-All), signad All (A. Self-All), signad All (A. Self-All), signad	Offset Well	Error: 🖉 🖉 0
Referen Ieasured V		Offse Veasured	19 11 1 19 19 19 17 X	Semi Major A	the star of	Highside	Offset Weilbore (	an a	Distanc Ietween B	The state of the state	Ainimum	Separation .	2012 (B. 40	
STORE STREET	Depth 4	Depth	- Depth		Surger State	Toolface	LEADE MANY STATE	1 199 GOVE - PO 5/6 7	196 6016 1 - The State "	VINASSING A. TRANSFORM	eparation	Factor	1) - 1 1	/aming
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)" 👾	Si (1) 🖉 🖓	A CARRY A CARL AND A CARL AND A CARL AND A CARL		(usft)	(usft)	(usft)			i i se
0.0	0.0	0.0	0.0	0.0	0.0	129.40	0.0	0.0	33.0	Pak Kina Serie Kang Pa		an an the second se	10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	
100.0	100.0	99.0	99.0	0.1	0.1	129.40	0.0	0.0	. 33,0	31.5	1.55	21,301		
200.0	200.0	199.0	199.0	. 0.5	0.5	129.40	0.0	0.0	33.0	30.8	2.26	14.643		
300.0	300.0	299.0	299.0	0.9	0.8	129.40	0.0	0.0	33.0	30.1	2.96	11.147		
400.0	400.0 500.0	399.0 499.0	399.0	1.2	1.2	129.40	0.0 0.0	0.0	33.0 33.0	29.4 . 28.6	3.67	8.999		
500.0	300.0	499.0	499.0	1.6	1.6	129.40	0.0	0.0	33.0	. 20.0	4.38	. 7.545		
600.0	600.0	599.0	599.0	1.9	1.9	129.40	0.0	0.0	33.0	27.9	5.08	6.496		
700.0	700.0	699.0	699.0	2.3	2.3	129.40	0.0	0.0	33.0	27.2	5.79	5.702		
800.0	800.0	799.0	799.0	2.6	2.6	129.40	0.0	0.0	33.0	26.5	6.50	5.082		
900.0	900.0	899.0	899.0	3.0	3.0	129.40	0.0	0.0	33.0	25.8	7.21	4.583		
1,000.0	1,000.0	999.0	999.0	3.4	3.4	129.40	0.0	0.0	33.0	25.1	7.91	4.173		
1,100.0	1,100.0	1,099.0	1,099.0	3.5	3.5	129.40	0.0	0.0	33.0	25.1	7.90	4.179		
1,200.0	1,200.0	1,199.0	1,199.0	3.6	3.6	129.40	0.0	0.0	33.0	25.0	7.97	4.141	· · ·	
1,300.0	1,300.0	1,299.0	1,299.0	3.7	3.7	129.40	0.0	0.0	33.0	24.9	8.11	4.070		
1,400.0	1,400.0	1,399.0	1,399.0	3.8	3.8	129.40	0.0	0.0	33.0	24.7	8.32	3.969		• •
1,500.0	1,500.0	1,499.0	1,499.0	3.9	3,9	129.40	0.0	0.0	33.0	24.4	8.58	3.847 CC, 1	s	
1,600.0	1,600.0	1,598.3	1,598,3	4.1	4.0	130,63	-1.2	0,3	· 34,1	25,2	8.89	3,831		
1,700.0	1,700.0	1,697.4	1,697.3	4.2	4.2	133.93	-4.9	1.3	37.3	28.1	9.24	4.041		
1,800.0	1,800.0	1,796.3	1,796.0	4.4	4.4	138,30	-11.1	3.0	43.0	33.4	9.62	4.470	:	
1,900.0	1,900.0	1,894.8	1,894.1	4.7	4.6	142.74	-19.7	5.4	51.3	41.2	10.04	5.107		
2,000.0	2,000.0	1,992.8	1,991.4	4.9	4.8	146.69	-30.6	8.4	62.2	51.7	10.48	5.934		
2,100.0	2,100.0	2,091.3	2,089.0	5.2	5.1	-10.25	-43.6	11.9	. 74.1	63.1	10.94	6.767		
2,200.0	2,199.9	2,190.8	2,187.5	5.4	5.4	-8.25	-57.0	15.6	83.7	72.3	11.44	7.321		-
2,300.0	2,299.7	2,290.5	2,286.3	5.7	5.6	-6.86	-70.4	19.3	90.9	78.9	11.95	7.602		•
2,400.0	2,399.3	2,390.4	2,385.2	5.9	5.9	-5.83	-83.8	22.9	95.5	83.0	12.50	7.639		
2,500.0	2,498.6	2,490.4	2,484.2	6.2	6.2	-5.03	-97.2	26.6	97.5	84.4	13.06	7.465		
2,600.0	2,597.6	2,590.4	2,583.2	6.5	6.5	-4.36	-110.6	30.3	97.5	83.9	13.64	7.147		
2,700.0	2,696.6	2,690.4	2,682.2	6.8	6.9	-3.69	-124.1	33.9	97.4	83.1	14.24	6.839		
2,800.0	2,795.7	2,790.4	2,781.3	7.1	7.2/	-3.03	-137.5	37.6	97,3	82.4	14.85	6.551		
2,900.0	2,894.7	2,890.4	2,880.3	7.4	7.5	-2.36	-150.9	41.3	97.2	81.7	15.47	6.282		
3,000.0	2,993.7	2,990.3	2,979.3	7.7	7.8	-1.68	-164.3	45.0	97.1	81.0	16.10	6.031		
3,100.0	3,092.8	3,090.3	3,078.3	8.0	8.2	-1.01	-177.7	48.6	97.0	80.3	16.74	5.796		
3,200.0	3,191.8	3,190.3	3,177.3	8.4	8.5	-0.34	-191.2	52.3	96.9	79,6	17.38	5.577		
3,300.0	3,290.8	3,290.3	3,276.4	8.7	8.9	0.34	-204.6	, 56.0	96.9	78.9	18.04	5.372	•	
3,400.0	3,389.8	3,390.3	3,375.4	9.0	9.2	1.01	-218.0	59.6	96.9	78.2	18.70	5.180		
3,500.0	3,488.9	3,490.3	3,474.4	9.4	9.6	1.69	-231.4	63.3	96.8	77.5	19.36	5.001		
3,595.0	3,582.9	3,585.3	3,568.5	9.7	9.9	2.33	-244.2	66.8	96.8	76.8	20.00	4.842		
3,600.0	3,587.9	3,590.3	3,573.4	9.7	9.9	2.36	-244.9	67.0	96.8	76.8	20.03	4.834		
3,700.0	3,686.9	3,690.3	3,672.4	10.1	10.3	3.04	-258.3	70.7	96.8	76.1	20.71	4.676		
3,800.0	3,785.9	3,790.3	3,771.5	10.4	10.6	3.71	-271.7	74,3	96.9	75.5	21.39	4.529		
3,900.0	3,885.0	3,890,3	3,870.5	10.8	11.0	4.39	-285.1	78.0	96,9	74.8	22.07	4,390		
4,000.0	3,984.0	3,990.3	3,969.5	11.1	11.3	5.06	-298.6	81.7	96.9	74.2	22.76	4.260		
4,000.0	3,984.0 4,083.0	3,990.3 4,090.3	4,068.5	11.5	11.3	5.73	-312.0	85,3	97.0	73.6	23.45	4.230		• •
4,100.0	4,182.0	4,030.3	4,167.5	11.7	11.9	6,41	-325.4	89.0	97.1	73.5	23,58	4,117		• .
4,300.0	4,281.1	4,290,3	4,266.6	11.7	11.9	7.08	-338.8	92.7	97.2	73.5	23.62	4,113		
4,400.0	4,380.1	4,390.3	4,365.6	11.7	12.0	7.75	-352.2	96.4	97.3	73.6	23.67	4.110		
	== .				40 -	a		•	07.4					
4,500.0	4,479.1	4,490.2	4,464.6	11.8	12.0	8.42	-365.7	100.0	97.4	73.6	23.74	4.102		
4,600.0	4,578.2	4,590.2 4,690.2	4,563.6 4,662.6	11.8 11.9	12.1 12.2	9.08 9.75	-379.1 -392.5	103.7 107.4	97.5 97.6	73.7 73.7	23.83 23.95	4.092 4.078		
4,700.0	4,677.2	4,690.2 4,790.2	4,662.6 4,761.7	. 12.0	12.2	9.75 / 10.41	-392.5 -405.9	107.4	97.6 97.8	73.7 `73.7	23.95 24.08	4.078		
4,800.0	4,776.2													

6/9/2016 8:17:48AM

COMPASS 5000.1 Build 74

Anticollision Report

Company:	ConocoPhillips MCBU	Local Co-ordinate Reference:	Site STAMPEDE 34 FED TRI PAD (13H, 14H,
			/ 15H) - PS
Project:	Permian Delaware Hz New Mexico	TVD Reference:	WELL @ 3148.4usft
Reference Site:	STAMPEDE 34 FED TRI PAD (13H; 14H,	MD Reference:	WELL @ 3148 4usft
	( 15H) - PS		
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	STAMPEDE 34 FEDERAL COM W2 14H	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 #2	Offset TVD Reference:	Offset Datum

Offset De	sign		EDE 34 FE	d tri pad (	13H, 14	H, 15H) - P	S - STAMPEDE	34 FEDE	RAL COM W	/3 13H - C	Drigin 🖉	2 64 J	Offset Site	Error: 5.0.0	usft
Survey Prog	Con a Contra St	Service and the service of the servi	Section	4137-MWD+IFF	bedreves a second		كارك ومقرفة كالايد تركاع	٩٢	چې مېرونه کې ده بلو کړ کړ . د مړينه کې ده بلو کړ کړ کړ	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		A CAR AND A	Offset Well	Error: 0.0	usft
Refer		Offse	取らい あかい ツ	Semi Major A		کی اور کی دانلور و دو میں اندو روسہ کی دروال کی دور کی دو			Distance						1. A. A.
Measured		Measured	51 Sec. 1 54	Reference	Offset .	Highside	• Offset Wellbore C	entre		25 6 164	THE STREET WAR	eparation	N. S. S. S.	/aming	1. A. A.
	Depth		. Depth -		<b>And</b>	Toolface		El-Wark			eparation	Factor			
e (usft)	(usfi)	(usft)	e (ust)	(usft)	(usit)	() <b>* (</b> )	(usft) (= (= (= (= (= (= (= (= (= (= (= (= (=	usft)	≨(usft)÷ ( ⊭(	usit) se a s	e (usit) a real		1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -	States of the second	
5,000.0	4,974.3	4,990.2	4,959.7	12,2	12,4	11,73	-432.8	118.4	98.2	73,7	24,43	4.018			
5,100.0	5,073.3	5,090.2	5,058,7	12.3	12.6	12.39	-446.2	122.1	98.3	73.7	24,63	3,992		•	
5,200.0	5,172.3	5,190.2	5,157.7	12.4	12.7	13.04	-459.6	125.7	98.5	73.7	24.86	3.965			
5,300.0	5,271.3	5,290.2	5,256.8	12.6	12.8	13.69	-473.1	129.4	98.8	73.7	25.10	3.934			$\sim$
5,400.0	5,370.4	5,390.2	5,355.8	12,7	13.0	14.34	-486.5	133.1	. 99.0	73.6	25.37	3.902			
5,500.0	5,469.4	5,490.2	5,454.8	12.9	13.1	14.98	-499.9	136.8	99.2	73.6	25.65	3.869			
5,600.0	5,568.4	5,590.2	5,553.8	13.0	13.3	15.62	-513.3	140.4	99.5	73.5	25.96	3.833			
5,700.0	5,667.5	5,690.2	5,652.8	13.2	13.5	16.26	-526.8	144.1	99.8	73.5	26.28	3.797			
5,800.0	5,766.5	5,790.2	5,751.9	13.4	13.6	16.89	-540.2	147.8	100.0	73.4	26.61	3.759			
5,900.0	5,865.5	5,890.2	5,850.9	13.6	13.8	17.53	-553.6	151.4	100.3	73.4	26.97	3.721			
6,000.0	5,964.5	5,990.1	5,949.9	13.8	14.0	18.15	-567.0	155.1	100.6	73.3	27.34	3.681	Ń		
6,100.0	6,063.6	6,090.1	6,048.9	14.0	14.2	18.78	-580.4	158.8	101.0	73.2	27.73	3.642		•	
6,200.0	6,162.6	6,190.1	6,148.0	14.2	14.4	19.39	-593.9	162.5	. 101.3	73.2	28.13	3.601			
6,300.0	6,261.6	6,290.1	6,247.0	14.4	14.7	20.01	-607.3	166.1	101.6	73.1	28.54	3.561			
6,400.0	6,360.6	6,390.1	6,346.0	14.7	14.9	20.62	-620.7	169.8	102.0	73.0	28.97	3.520			
6,500,0	6,459,7	6,490,1	6,445,0	14,9	15,1	21,12	-634,1	173.5	102,9	73,4	29,41	3,497			. 1
6,600.0	6,559.1	6,590.5	6,544.4	15.1	15.4	21.15	-647.6	177.2	106.0	76.1	29.86	3.549			•
6,700.0	6,658.8	6,693.2	6,646.4	15.4	15.6	20.93	-659.6	180.4	109.8	79.5	30.32	3.622		. ,	
6,800.0	6,758.6	6,796.0	6,748.7	15.6	15.9	20.64	-669.0	183.0	113.6	82.8	30,78	3.691			
6,900.0	6,858.6	6,899.0	6,851.4	15.8	16.1	20.28	-675.7	184.9	117.2	86.0	31.21	3.755			. !
								•							
7,000.0	6,958.6	7,002.0	6,954.4	16.0	16.3	179.86	-679.8	186.0	120.6	88.9	31.62	3.813			
7,100.0	7,058.6	7,105.2	7,057.5	16.2	16.6	179.68	-681.2	186.3	121.9	89.9	31.99	3.810			
7,200.0	7,158.6	7,205.2	7,157.6	16.4	16.8	179.68	-681.2	186.3	121.9	89.5	32.42	3.760			
7,300.0	7,258.6	7,305.2	7,257.6	16.7	17.0	179.68	-681.2	186.3	121.9	89.0	32.85	3.710			
7,400.0	7,358.6	7,405.2	7,357.6	16.9	17.2	179.68	-681.2	186.3	121.9	88.6	33.30	3.661			
7,500.0	7,458.6	7,505.2	7,457.6	17.1	17.4	179.68	·. -681.2	186.3	121.9	88.1	33,75	3.612			
7,600.0	7,558.6	7,605.2	7,557.6	17.3	17.6	179.68	-681.2	186.3	121.9	87.7	34.21	3.563			
7,700.0	7,658.6	7,705.2	7,657.6	17,6	17.9	179.68	-681.2	186.3	121.9	87.2	34.68	3.515		· .	
7,800.0	7,758.6	7,805.2	7,757.6	17.8	18,1	179.68	-681.2	186.3	121.9	86.7	35.16	3.467			
7,900.0	7,858.6	7,905.2	7,857.6	18.1	18.3	179.68	-681.2	186.3	121.9	86.2	35.65	3.419			
8,000.0 8,100.0	7,958.6 8,058.6	8,005.2 8,105.2	7,957.6 8,057.6	18.3 18.5	18,6 18,8	179.68 179.68	-681.2 -681.2	186.3 186.3	121.9 121.9	85.8 85.3	36.14 36.64	3,373 3.327			.
8,200.0	8,158.6	8,205.2	8,157.6	18.8	19.1	179.68	-681.2	186.3	121.9	84.7	37.15	3.281			
8,300.0	8,258.6	8,305.2	8,257.6	19.1	19.3	179.68	-681.2	186.3	121.9	84.2	37.66	3.236			
8,400.0	8,358.6	8,405.2	8,357.6	19.3	19.6	179.68	-681.2	186.3	121.9	83.7	38.18	3.192			
-•••	-1		-,												
8,500.0	8,458.6	8,505.2	8,457.6	19.6	19.8	179.68	-681.2	186.3	_ 121.9	83.2	38.71	3.149			
8,600.0	8,558.6	8,605.2	8,557.6	19.8	20.1	179.68	-681.2	186.3	121.9	82.6	39.24	3.106	÷		
8,700.0	8,658.6	8,705.2	8,657.6	20.1	20.4	179.68	-681.2	186.3	121.9	82.1	39.78 ·	3.064			
8,800.0	8,758.6	8,805.2	8,757.6	20.4	20.6	179.68	-681.2	186.3	121.9	81.6	40.32	3.023			
8,900.0	8,858.6	8,905.2	8,857.6	20.7	20.9	179.68	-681.2	186.3	121. <del>9</del>	81.0	40.87	2,982			
9,000.0	8,958.6	9,005.2	8,957.6	20.9	21.2	179.68	-681.2	186.3	121.9	80.5	41.43	2.942		•	
9,000.0	9,058.6	9,105.2	9,057.6	20.9	21.2	179.68	-681.2	186.3	121.9 121.9	79.9	41.43	2.942			
9,100.0	9,058.6 9,158.6	9,105.2	9,057.6 9,157.6	21.2	21.4	179.68	-681.2	186.3	121.9	79.3	41.98	2.903			
9,200.0 9,300.0	9,158.6	9,205.2 9,305.2	9,157.6 9,257,6	21.5	21.7	179.68	-681,2	186,3	121.9	79.3 78.8	42.55 43.11	2.805			
9,400.0	9,358.6	9,405.2	9,257.6	21,3	22.3	179,68	-681.2	186,3	121.9	78.2	43,69	2,790			
0,400.0	0,000.0	0,400.2	0,007.0	<b></b>	····	110,00	-001,2 '	100,0	121.0	,	-0,00	2,100			
9,500.0	9,458.6	9,505.2	9,457.6	22.4	22.6	179.68	-681.2	186.3	121.9	77.6	44.26	2.754			
9,600.0	9,558.6	9,605.2	9,557.6	22.6	22.9	179.68	-681.2	186.3	121.9	77,1	44,84	2,718			
9,700.0	9,658.6	9,705.2	9,657.6	22.9	23.1	179.68	-681.2	186.3	121.9	76.5	45.42	2.684	•		
9,800.0	9,758.6	9,805.2	9,757.6	23.2	23.4	179.68	-681.2	186.3	121.9	75.9	46.01	2.649			
9,900.0	9,858.6	9,905.2	9,857.6	23.5	23.7	179.68	-681.2	186.3	121.9	75.3	46.60	2.616			

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CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation Page 8

Anticollision Report

Company:	ConocoPhillips MCBU	Local Co-ordinate Reference:	Site STAMPEDE 34 FED TRI PAD (13H, 14H,
			15H) - PS
Project:	Permian Delaware Hz New Mexico	TVD Reference:	WELL @ 3148.4usft
Reference Site:	STAMPEDE 34 FED TRI PAD (13H; 14H,	MD Reference:	WELL @ 3148.4usft
	(15H) - PS		
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	STAMPEDE 34 FEDERAL COM W2 14H	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 #2	Offset TVD Reference:	Offset Datum

Progra	1. S. C. S.	VD+IFR1, 100 Offs	5-MWD+IFR1, 4	137-MWD+IF Semi Malor A	12 10 12 Start	IWD+IFR1			Distanc			i si	Offset Well Error:
ired	Vertical	Measured	3	Charles and State	Offset	Highside	Offset Wellbore (	Centre	State of Carabas	to Strategy -	Ainimum S	eparation	Warning
th t)	Depth	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface		and the set that the set	STRUCTURE CONTRACTOR STRUCT	Press and the second second	eparation (usft)	Factor	
1. A.					e.c. Satella di			(usft)	13 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			0.500	
000.0 100.0	9,958.6 10,058.6	10,005.2 10,105.2	9,957.6 10,057.6	23.8 24.1	24.0 24.3	179.68 179.68	-681.2 -681.2	186.3 186.3	. 121,9 121,9	74.7 74.1	47.19 47.79	2.583 2.551	
200.0	10,058.6	10,205.2	10,157.6	24.1	24.5	179.68	-681.2	186.3	121.9	73.5	48.38	2.519	
300.0	10,258.6	10,305.2	10,257.6	24.7	24.9	179.68	-681.2	186.3	121.9	72.9	48.99		on - Monitor Closely
400.0	10,358.6	10,405.2	10,357.6	25.0	25.2	179.68	-681.2	186.3	121.9	72.3	49.59		on - Monitor Closely
500.0	10,458.6	10,505.2	10,457.6	25.3	25.5	179,68	-681.2	186,3	121.9	71,7	50,20	2,428 Caut	on - Monitor Closely
600.0	10,558.6	10,605.2	10,557.6	25.6	25.8	179.68	-681.2	186.3	121.9	71.1	50.81	2.399 Cauti	on - Monitor Closely
700.0	10,658.6	10,705.2	10,657.6	25.9	26.1	179.68	-681.2	186.3	121.9	70.5	51.42	2.370 Cauti	on - Monitor Closely
300.0	10,758.6	10,805.2	10,757.6	26.3	26.4	179.68	-681.2	186.3	121.9	69.9	52.04	2.342 Cauti	on - Monitor Closely
900.0	10,858.6	10,905.2	10,857.6	26.6	26.7	179.68	-681.2	186.3	121.9	69.2	52.65	2.315 Cauti	on - Monitor Closely
0.000	10,958.6	11,005.2	10,957.6	26.9	27.0	179.68	-681.2	186.3	121.9	68.6	53.27	2.288 Cauti	on - Monitor Closely
100.0	11,058.6	11,105.2	11,057.6	27.2	27.4	179.68	-681.2	186.3	121.9	68.0	53.90	2.262 Cauti	on - Monitor Closely
200.0	11,158.6	11,205.2	11,157.6	27.5	27.7	179.68	-681.2	186.3	121.9	67.4	54.52	2.236 Cauti	on - Monitor Closely
300.0	11,258.6	11,305.2	11,257.6	27.8	28.0	179.68	-681.2	186.3	121.9	66.7	55.14		on - Monitor Closely
400.0	11,358.6	11,405.2	11,357.6	. 28.0	28.3	179.68	-681.2	186.3	121.9	66.5	55.39		on - Monitor Closely, Sl
24.4	11,382.9	11,429.6	11,381.9	28.0	28.3	180.00	-681.2	186.3	122.2	66.7	55.43	2.204 Cauti	on - Monitor Closely
500.0	11,458.5	11,505,1	11,457.5	28.0	28.4	180.00	-681.2	186.3	124.3	68.7	55.55		on - Monitor Closely
500.0	11,556.8	11,603.4	11,555.8	28.0	28.4	180.00	-681.2	186.3	142.1	86.5	55.57	2.557	
00.0	11,650.5	11,697.1	11,649.5	28.0	28.4	180.00	-681.2	186.3	176.6	121.0	55,60	3,177	2
300.0	11,736.7	11,824.6	11,776.3	28.0	28.5	180.00	-671.4	186.3	221.0	166.3	54.63	4.045	·
0.00	11,813.0	11,984.6	11,927.5	28.0	28.5	180.00	-620.6	186.0	258.2	206.9	51.34	5.029	
0.00	11,876.8	12,168.8	12,076.3	28.0	28.4	180.00	-513.3	185.4	283.4	237.5	45.90	6.175	
00.0	11,926.4	12,369.8	12,190.8	28.0	28.5	180.00	-349.4	184.5	292.6	252.2	40.42	7.239	
200.0	11,960.2	12,571.1	12,242.1	28.1	28.6	180.00	-155.8	183.4	283.9	245.2	38.75	7.327	
800.0	11,977.1	12,689.5	12,245.1	28.1	28.7	180.00	-37.5	182.8	269.0	229.8	39.29	6.848	
58.5	11,980.7	12,747.9	12,245.9	28.2	28.8	180.00	20.9	182.5	266.2	226.7	39.47	6.744	
0.004	11,979.7	12,789.5	12,246.5	28.2	28.9	180.00	62.5	182.2	267.8	228.2	39.61	6.761	
0.00	11,980.9	12,889.5	12,247.8	28.4	29.0	180.00	162.5	181.7	267.9	227.9	39.98	6.701	
600.0	11,982.1	12,989.5	12,249,2	28.6	29.2	180.00	262.5	181.1	268.1	227.7	40.41	6.633	
00.0	11,983.3	13,089.5	12,250.5	28.8	29.5	180.00	362.5	180.6	268,2	227.3	40.90	6.558	
300.0	11,984.5	13,189.5	12,251,9	29,1	29,8	180.00	462.5	180.0	268.4	227.0	41.44	6,477	
0.00	11,985.7	13,289.5	12,253.3	29.3	30.1	180.00	562.4	179,5	268.6	226.5	42.03	6.390	
0.00	11,986.9	13,389.5	12,254.6	29.7	30.4	180.00	662.4	178.9	268.7	226.0	42.67	6.298	
00.0	11,988.1	13,489.5	12,256.0	30.0	30.8	180.00	762.4	178.4	268.9	225.5	43.35	( 6.202	
00.0	11,989.3	13,589.5	12,257.3	30.4	31.2	180.00	862.4	177.8	269.0	225.0	44.08	6.103	
00.0	11,990.5	13,689.5	12,258.7	. 30.8	.31.6	180.00	962.4	177.2	269.2	224.3	44.85	6.002	
00.0	11,991.7	13,789.5	12,260.1	31.2	32.0	180.00	1,062.4	176.7	269.4	223.7	45.66	5.899	
00.0	11,992.9	13,889.5	12,261.4	31.7	32.5	180.00	1,162.4	176.1	269.5	223.0	46.51	5.794	
00.0	11,994.1	13,989.5	12,262.8	32.1	33.0	180.00	1,262.4	175.6	269.7	222.3	47.40	5.689	
00.00	11,995.4	14,089.5	12,264.2	32.6	33.5	180.00	1,362.4	175.0	269,8	221.5	48.32	5.585	
00.0	11,996.6	14,189.5	12,265.5	33.2	34.0	180.00	1,462.3	174.5	270.0	220,7	49,27	5.480	
00.0	11,997.8	14,289.5	12,266.9	33.7	34.6	180.00	1,562.3	173.9	270.1	219.9	50.25	5.376	
00.0	11,999.0	14,389.5	12,268.2	34.3	35.2	180.00	1,662.3	173.4	270.3	219.1	51.26	5.274	
00.0	12,000.2	14,489.5	12,269.6	34,9	35,7	180.00	1,762.3	172,8	270.5	218.2	52.29	5,172	
00.0	12,001.4	14,589.5	12,271.0	35.5	36.4	180.00	1,862.3	172.3	270.6	217.3	53.35	5.073	
0.00	12,002.6	14,689.5	12,272.3	36.1	37.0	180.00	1,962.3	171.7	270.8	216.3	54.43	4.974	
00.0	12,003.8	14,789.5	12,273.7	36.7	37.6	180.00	2,062.3	171.2	270.9	215.4	55.54	4.878	
00.0	12,005.0	14,889.5	12,275.0	37.4	38.3	180.00	2,162.3	170.6	271.1	214.4	56.67	4.784	
0.00	12,006.2	14,989.5	12,276.4	38.0	38.9	180.00	2,262.3	170.0	271.3	213.4	57.81	4.692	J
00.0	12,007.4	15,089.5	12,277.8	38.7	39.6	180.00	2,362.2	169.5	271.4	212.4	58.98	4.602	
800.0	12,008.6	15,189.5	12,279.1	39.4	40.3	180.00	2,462.2	168. <del>9</del>	271.6	211.4	60.16	4.514	

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Anticollision Report

Company:	ConocoPhillips MCBU	Local Co-ordinate Reference:	Site STAMPEDE 34 FED TRI PAD (13H, 14H,
			15H) - PS
Project:	Permian Delaware Hz New Mexico	TVD Reference:	WELL @ 3148.4usft
Reference Site:	STAMPEDE 34 FED TRI PAD (13H, 14H,	MD Reference:	WELL @ 3148.4usft
	🛀 15H) - PS		
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	STAMPEDE 34 FEDERAL COM W2 14H	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 #2	Offset TVD Reference:	Offset Datum

Offset De	вign	STAMP	EDE 34 FE	D TRI PAD (	(13H, 14)	H, 15H) - PS	- STAMPEDE	34 FEDER	RAL COM V	V3 13H - (	Drigin	Offset Site Error: 0.0 usft
Survey Progr	12 12 12 13 13 12 1- 8 1 14	1. CA. Lev. 283 - Date 1. C. S.	State of the State of the State	4137-MWD+IFF	State Anna the State	WD+IFR1						Offset Weil Error: 0.0 usft
Refere	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	Offs	TO A SOLL IN CONT	Semi Major A	154 2 2 2 3 3				Distanc	S. 19 19 19 19 19 19	antes a tradición Notes de Carelo	
Measured Depth 2	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset .	Highside	Offset Wellbore				finimum S eparation	eparation Warning Factor
(usft):	(usfi)	c (usft)	(usft)	(usft)	(usft)			(usft)	- (usft)	(ueft)	(usft) —	
14,900.0	12,009.8	15,289,5	12,280.5	40.1	41.0	180.00	2,562.2	168,4	271.7	210,4	61,36	4,429
15,000.0	12,011.0	15,389.5	12,281.9	40.8	41.8	180.00	2,662.2	167.8	271.9	209.3	62.57	4.345
15,100.0	12,012.2	15,489.5	12,283.2	41.5	42.5	180.00	2,762.2	167.3	272.1	208.3	63.80	4.264
15,200.0	12,013.4	15,589.5	12,284.6	42.3	43.2	180.00	2,862:2	166.7	272.2	207.2	65.05	4.185
15,300.0	12,014.6	15,689.5	12,285.9	43.0	44.0	180.00	2,962.2	166.2	272.4	206.1	66.30	4.108
15,400.0	12,015.8	15,789.5	12,287.3	43.8	44.7	180.00	3,062.2	165.6	272.5	205.0	67.57	4.033
15,500.0	12,017.0	15,889.5	12,288.7	44.6	45.5	180.00	3,162.2	165.1	272.7	203.8	68.85	3.961
15,600.0	12,018.2	15,989.5	12,290.0	45.3	46.3	180.00	3,262.1	164.5	272.8	202.7	70.14	3.890
15,700.0	12,019.4	16,089.5	12,291.4	46.1	47.1	180.00	3,362.1	164.0	273.0	201.6	71.44	3.822
15,800.0	12,020.6	16,189.5	12,292.7	46.9	47.9	180.00	3,462.1	163.4	273.2	200.4	72.75	3.755
15,900.0	12,021.8	16,289.5	12,294.1	47.7	48.7	180.00	3,562.1	162.9	273.3	199.3	74.07	3.690
16,000.0	12,023.0	16,389.5	12,295.5	48.5	49.5	180.00	3,662.1	162.3	273.5	198.1	75.40	3.627
16,100.0	12,024.2	16,489.5	12,296.8	49.3	50.3	180.00	3,762.1	161.7	273.6	196.9	76.73	3,566
16,200.0	12,025.4	16,589.5	12,298.2	50.1	51.1	180.00	3,862.1	161.2	273.8	195.7	78.08	3.507
16,300.0	12,026.6	16,689.5	12,299.6	51.0	51.9	180.00	3,962.1	160.6	274.0	194.5	79.43	3.449
16,400,0	12,027,8	16,789,5	12,300,9	51,8	52,8	180,00	4,062,1	160,1	274,1	193,3	80,79	3,393
16,500.0	12,029.0	16,889.5	12,302,3	52.6	53,6	180.00	4,162.1	159,5	274,3	192,1	82.16	3.339
16,600.0	12,030.2	16,989.5	12,303.6	53.5	54.4	180.00	4,262.0	159.0	274.4	190.9	83.53	3.286
16,700.0	12,031.4	17,089.5	12,305.0	54.3	55.3	180.00	4,362.0	158.4	274.6	189.7	84.91	3.234
16,800.0	12,032.6	17,189.5	12,306.4	55.2	56.1	180.00	4,462.0	157.9	274.8	188.5	86.29	3.184
16,900.0	12,033.8	17,289.5	12,307.7	56.0	57.0	180.00	4,562.0	157.3	274.9	187.2	87.68	3.135
17,000.0	12,035.0	17,389.5	12,309.1	56.9	57.9	180.00	4,662.0	156.8	275.1	186.0	89.07	3.088
17,100.0	12,036.2	17,489.5	12,310.4	57.8	58.7	180.00	4,762.0	156.2	275.2	184.8	90.47	3.042
17,200.0	12,037.4	17,589.5	12,311.8	58.6	59.6	180.00	4,862.0	155.7	275.4	183.5	91.88	2.997
17,300.0	12,038.6	17,689.5	12,313.2	59.5	60.5	180.00	4,962.0	155.1	275.5	182.3	93.29	2.954
17,400.0	12,039.8	17,789.5	12,314.5	60.4	61.3	180.00	5,062.0	154.5	275.7	181.0	94.70	2.911
17,500.0	12,041.0	17,889.5	12,315.9	61.3	62.2	180.00	5,161.9	154.0	275.9	179.7	96.12	2.870
17,600.0	12,042.3	17,989.5	12,317.3	62.1	63.1	180.00	5,261.9	153.4	276.0	178.5	97.54	2.830
17,700.0	12,043.5	18,089.5	12,318.6	63.0	64.0	180.00	5,361.9	152.9	276.2	177.2	98.97	2.791
17,800,0	12,044.7	18,189,5	12,320.0	63,9	64.9	180.00	5,461.9	152,3	276,3	175,9	100.40	2.753
17,900.0	12,045.9	18,289.5	12,321.3	64.8	65.8 ,	180.00	5,561.9	151.8	276.5	174.7	101.83	2.715
18,000.0	12,047.1	18,389.5	12,322.7	65.7	66.7	180.00	5,661.9	151.2	276.7	173.4	103.26	2.679
18,100.0	12,048.3	18,489.5	12,324.1	66.6	67.6	180.00	5,761.9	150.7	276.8	172.1	104.70	2.644
18,200.0	12,049.5	18,589.5	12,325.4	67.5	68.5	180.00	5,861.9	150.1	277.0	170.8	106.15	2.609
18,300.0	12,050.7	18,689.5	12,326.8	68.4	69.4	180.00	5,961.9	149.6	277.1	169.5	107.59	2.576
18,400.0	12,051.9	18,789.5	12,328.1	69.3	70.3	180.00	6,061.8	149.0	277.3	168.3	109.04	2.543
18,500.0	12,053.1	18,889.5	12,329.5	70.2	71.2	180.00	6,161.8	148.5	277.5	167.0	110.49	2.511 ,
18,600.0	12,054.3	18,989.5	12,330.9	71.1	72.1	180.00	6,261.8	147.9	277.6	165.7	111.94	2.480 Caution - Monitor Closely
18,700.0	12,055.5	19,089.5	12,332.2	.72.0	73.0	180.00	6,361.8	147.4	277.8	164.4	113.40	2.450 Caution - Monitor Closely
18,800.0	12,056.7	19,189.5	12,333.6	73.0	73.9	180.00	6,461.8	146.8	277.9	163,1	114.86	2.420 Caution - Monitor Closely
18,826.4	12,057.0	19,215.9	12,333.9	86.2	74.1	180.00	6,488.2	146.7	278.0	162,9	115.07	2.416 Caution - Monitor Closely
<b></b>			ſ									۱ ۱

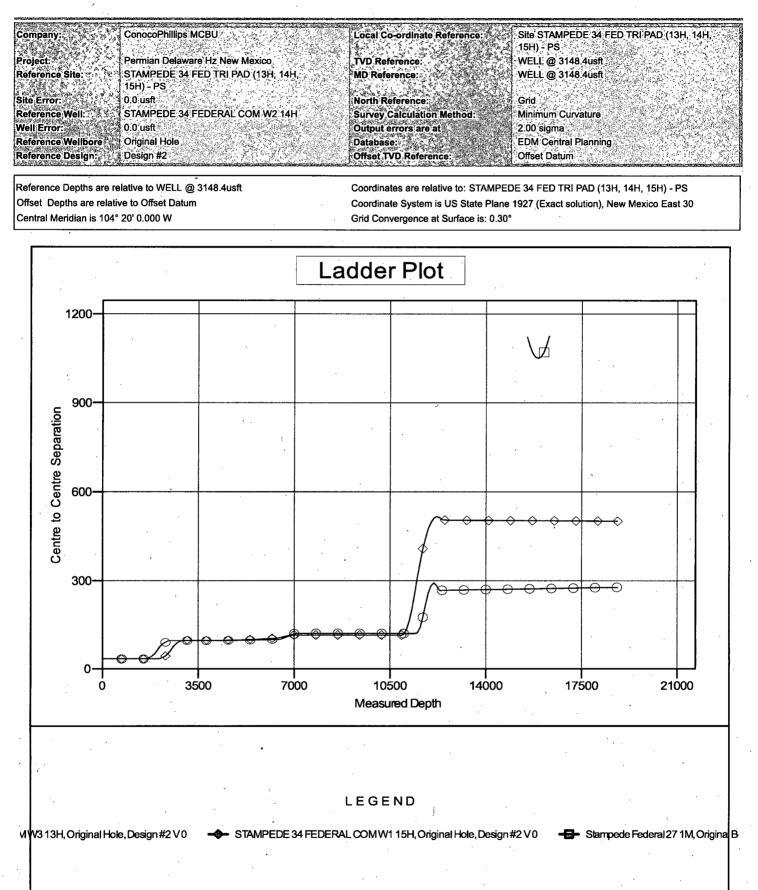
CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	ConocoPhillips MCBU	Local/Co-ordinate Reference:	Site STAMPEDE 34 FED TRI PAD (13H, 14H,
		An and the first state of the second	15H) - PS
Project:	Permian Delaware Hz New Mexico,	TVD Reference:	WELL @ 3148.4usft
Reference Site:	STAMPEDE 34 FED TRI PAD (13H, 14H,	MD Reference:	WELL @ 3148.4usft
	🤮 15H) - PS		
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	STAMPEDE 34 FEDERAL COM W2 14H	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 #2	Offset TVD Reference:	Offset Datum

Offset Des	sign 😪	Stampe	de Federal	27 1M - Sta	mpede	Federal 27 1	M - Original Bo	orehole - O	riginal Bore	hole <u>.</u> GY	RO	Off	set Site Error: 0.0 usft
Survey Progr Refera	WER SWILL ST	YD-CT-CMS Offse	t ( )	Semi Major Ax	l <b>s</b>				Distan	ce .		Offe	at Well Error: 0.0 usft
Measured Depth	1.64 ST	N.0	Vertical Depth 4	SPE. 195 196 1. 196	Difset	Highside Toolface	Offset Wellbore	1 1 10 10 10 10 10 10 10	A 100 - 7 1.50		323. Setter 20 6.24	Separation Factor	Warning
							(usft)		m (usft)	All and the state of the second state	e (usft)		
15,500.0	12,017.0	12,035.2	12,033.5	44.6	21,2	-89,46	3,554.8	-888.1	1,122.7	1,055.1	67.51	16,630	
15,600.0	12,018.2	12,036.7	12,035.0	45,3	21.2	-89.54	3,554.8	-888.1	1,091.5	1,022.3	69.23	15.766	
15,700.0	12,019.4	12,038.2	12,036.5	46.1	21.2	-89.63	3,554.8	-888.1	1,068.9	998.0	70.83	15.091	
15,800.0	12,020.6	12,039.7	12,038.0	46.9	21.2	-89.71	3,554.8	-888.1	1,055.2	983.0	72.22	14.611	
15,894.7	12,021.7	12,041.2	12,039.4	47.7	21.2	-89.79	3,554.8	-888.1	1,051.0	977.7	73.28	14,342 CC	<b>、</b>
15,900.0	12,021.8	12,041.2	12,039.5	47.7	21.2	-89.79	3,554.8	-888.1	1,051.0	977.7	73.33	14,332 ES	
16,000.0	12,023.0	12,042.8	12,041.0	48.5	21.2	-89.87	3,554.8	-888.1	1,056.2	982.1	74.11	14.253 SF	
16,100.0	12,024.2	12,044.3	12,042.6	49.3	21.2	-89.96	3,554.8	-888.1	1,070.8	996.3	74.54	14.366	
16,200.0	12,025.4	12,045.8	12,044.1	50.1	21.3	-90.04	3,554.8	-888.1	1,094.4	1,019.8	74.63	14.664	•
16,300.0	12,026.6	12,047.3	12,045.6	51.0	21.3	-90.12	3,554.8	-888.1	1,126.4	1,052.0	74.44	15.132	

Anticollision Report

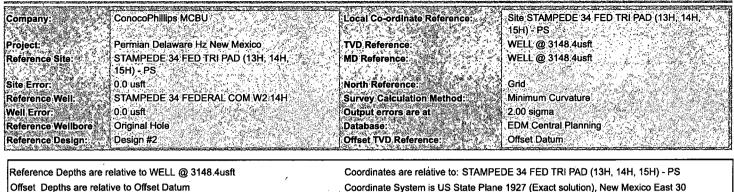


CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Page 12

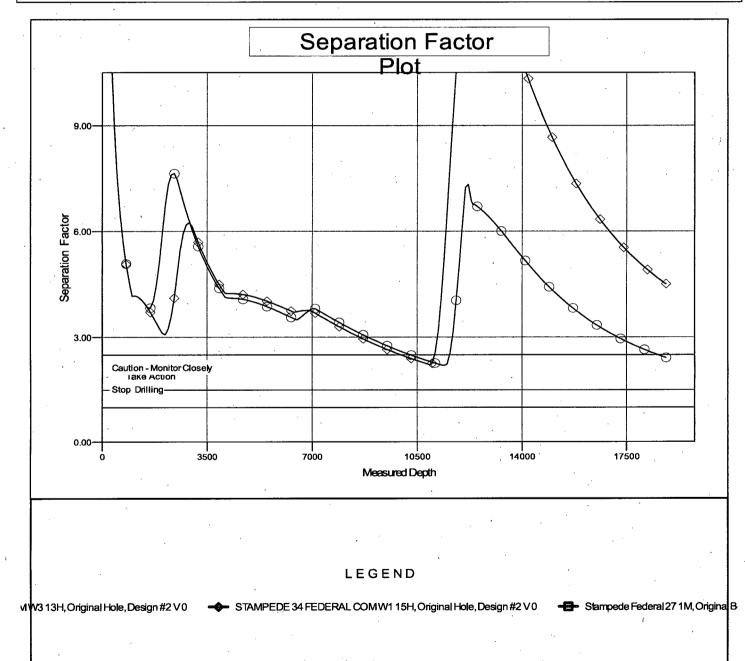
COMPASS 5000.1 Build 74

Anticollision Report



Central Meridian is 104° 20' 0.000 W

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

6/9/2016 8:17:48AM

	Atı	ach		nt	#:	ile".				vcı. Top.				val and provide medium		n XP BTC casing.				<u>(6.5.1) F.(5.2)</u> 14-20, 670) - 53 24-20, 670 - 53
-		lace Secuon: Objective: Protect fresh water horizons. Drill 17-1/2" hole to +/- 1.005 ft. 25' inside "Rustler".	pg FW-Native Mud. BTC casing.	3	on:	Objective: Isolate the Salado Salt and Delaware Sand interval. Drill 12-1/4" hole to +/- 4,137 ft, 15'-20'-TVD inside "Ford Shale".	ppg Brine. C casing.		ermediate2 Section:	Drill 8-3/4" hole to +/- 11,402 ft. 60'-80' inside WC1 Top.	pg Cut Brine. <b>enaris W523 casing.</b>	e previous shoe.		Objective: Provide zonal isolation of production interval and provide medium for stimulation.	Drill 6-5/8" hole to +/-19,219 ft. "Production TD". Mud Weight: 12.0 – 15.0 ppg OBM.	Set 5" 21.4# P-110 TenBlue X 4-1/2" 15.1# P-110 Ten XP BTC casing. Cement lan 1 000 ft above previous shoe			Completion	Type: <u>1083.0.07.05.01.15.82.22</u> Tubing Design: <u>223/02.07.47.15.10.00.25.25</u> Total Stages: <u>227.05.05.05.05.22</u>
ERAL COM W3 13H		<ul> <li>Duillace Section:</li> <li>Objective: Protect fresh water horizons.</li> <li>Drill 17-1/2" hole to +/- 1.005 ft. 25' insi</li> </ul>	<ul> <li>Mud weight: 8.6 – 9.3 ppg FW-Native Mud.</li> <li>Set 13-3/8" 54.5# J-55 BTC casing.</li> </ul>	Cement to surface.	Intermediate1 Section:	<ul> <li>Objective: Isolate the Sa</li> <li>Drill 12-1/4" hole to +/-</li> </ul>	<ul> <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> </ul>	Intermediate2 Section:	<ul> <li>Drill 8-3/4" hole to +/- 1</li> </ul>	<ul> <li>Mud weight: 8.9 – 9.2 ppg Cut Brine.</li> <li>Set 7-5/8" 33# P-110 Tenaris W523 casing.</li> </ul>	<ul> <li>Cement lap 600 ft above previous shoe</li> </ul>	Production Section:	<ul> <li>Objective: Provide zona for stimulation.</li> </ul>	<ul> <li>Drill 6-5/8" hole to +/-19,219 ft. "Pr</li> <li>Mud Weight: 12.0 – 15.0 ppg OBM.</li> </ul>	<ul> <li>Set 5" 21.4# P-110 TenBlue X 4-1/2" 15.1</li> <li>Cement Ian 1 000 ft above previous shoe</li> </ul>				19,219 ft Prod Shoe 19,219 ft TD
ERAL (	do														41				Shallat .	
	Formation To		Rustler Surface Shoe	Anhydrite/Salts	Castile	Delaware	Ford Shale	Interm1 Shoe	Cherry Canyon		Brushy Canyon		Bone Spring Top		3rd BS Carbonate		WolfCamp Top	woilcality ± 10p Interm2 Shoe KOP	12,303 ft WolfCamp 3 Top 12,303 ft WolfCamp 3 Top 17,17 MV 6 (16 5 mm 24 5 h 5 1	
DE 3	Ð	0 tr	980 ft 1,005 ft	1,465 ft	1,710 ft	3,966 ft	4,117 ft	4.137 ft	4,919 ft		6,320 ft		7,708 ft		9,978 ft		11,178 ft	11,718 ft 11,718 ft	12,303 ft	
STAMPEDE 34 FE							REAR				275				124.5C	N.				
STA																			Ζ	
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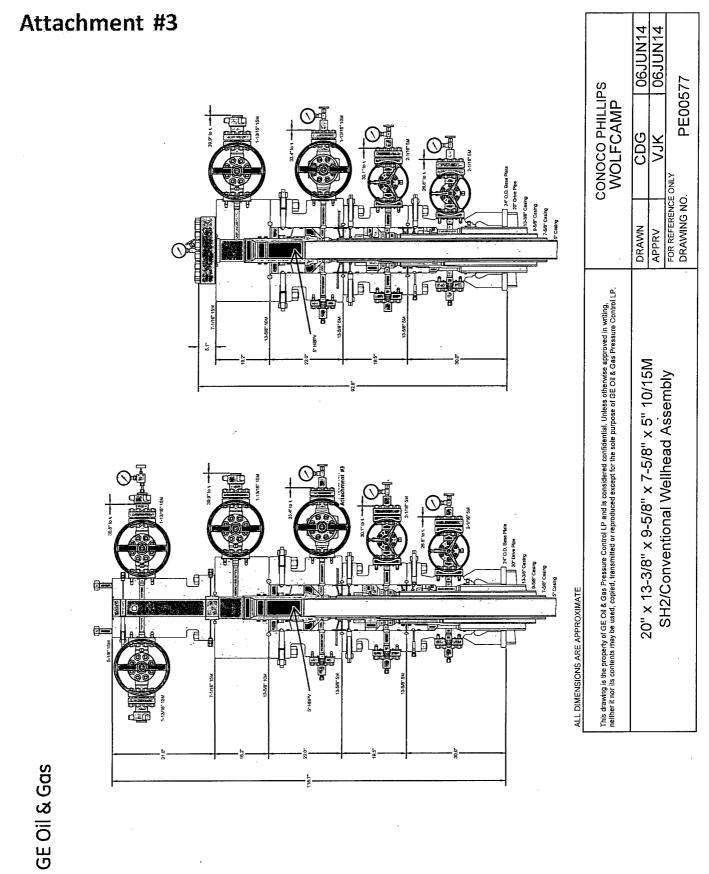
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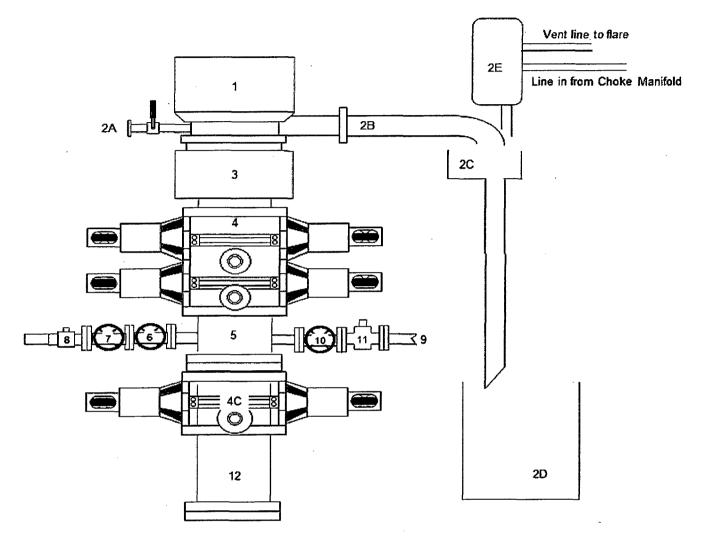
ConocoPhillips



# Attachment #4

### BLOWOUT PREVENTER ARRANGEMENT - H&P486

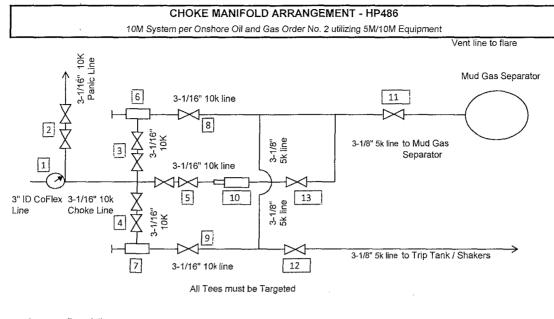
10M System per Onshore Oil and Gas Order No. 2 utilizing 10M Rated Equipment



- 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

# Attachment #5



ltem Description

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

# Attachment #6

February 04 2014



Connection: TenarisXP BTC Casing/Tubing: CAS Coupling Option: REGULAR Size: 4.500 in. Wall: 0.337 in. Weight: 15.10 lbs/ft Grade: P110 Min. Wall Thickness: 87.5 %

		PIPE BODY	/ DATA		
		EIXOED	ĒN 🦾		
Nominal OD	<b>4.500</b> in.	Nominal Weight	<b>15.10</b> lbs/ft	Standard Drift Diameter	<b>3.701</b> in.
Nominal ID	<b>3.826</b> in.	Wall Thickness	<b>0.337</b> in.	Special Drift Diameter	N/A
Plain End Weight	15.00 lbs/ft				
		ARIOFRED,	ANGE .		. A dec
Body Yield Strength	<b>485</b> x 1000 lbs	Internal Yield	<b>14420</b> psi	SMYS	<b>110000</b> psi
Collapse	<b>14350</b> psi				
Connection OD Critical Section Area	5.100 in. 4.407 sq. in.	Coupling Length	9.075 in. 5.00	Connection ID Make-Up Loss	<b>3.814</b> in. <b>4.016</b> in.
		PERFORM	พาตะ		
Tension Efficiency	100 %	Joint Yield Strength	<b>485</b> x 1000	Internal Pressure Capacity <sup>(<u>1</u>)</sup>	14420 psi
Structural Compression Efficiency	<b>100</b> %	Structural Compression Strength	<b>485</b> x 1000 lbs	Structural Bending <sup>(<u>2</u>)</sup>	<b>112 °</b> /100 ft
External Pressure Capacity	<b>14350</b> psi	1			
	E	UERIAL GERAMINE	D TORQUES	<b>D)</b>	
Minimum	<b>7960</b> ft-lbs	Target	<b>8840</b> ft-lbs	Maximum	<b>9720</b> ft-lbs
		ELANIZING DIN	INSIONS		
and the second s		Blanking Dim	ensions		

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

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July 07 2014



### Connection: Blue® Casing/Tubing: CAS Coupling Option: REGULAR

### Size: 5.000 in. Wall: 0.437 in. Weight: 21.40 lbs/ft Grade: P110 Min. Wall Thickness: 87.5 %

		PIPE BODY	/ DATA		
		GEOME	TRY		
Nominal OD	<b>5.000</b> in.	Nominal Weight	<b>21.40</b> lbs/ft	Standard Drift Diameter	<b>4.001</b> in.
Nominal ID	<b>4.126</b> in.	Wall Thickness	<b>0.437</b> in.	Special Drift Diameter	N/A
Plain End Weight	21.32 lbs/ft	and the second sec			
		PERFORM	ANCE		
Body Yield Strength	<b>689</b> x 1000 lbs	Internal Yield	<b>16820</b> psi	SMYS	<b>110000</b> ps
Collapse	17550 psi		1		·
		BLUE® CONNEC			
<u></u>		GEOME	TRY	I	
Connection OD	5.693 in.	Coupling Length	<b>10.551</b> in.	Connection ID	<b>4.185</b> in.
Critical Section Area	<b>6.265</b> sq. in.	Make-Up Loss	<b>4.579</b> in.	Threads per in.	5.00
		PERFORM	ANCE	4	
Tension Efficiency	100 %	Joint Yield Strength	<b>689</b> x 1000 lbs	Internal Pressure Capacity	<b>16820</b> ps
Compression Efficiency	100 %	Compression Strength	<b>689</b> x 1000 Ibs	Bending	<b>101</b> °/100
External Pressure Capacity	<b>17550</b> psi				
	and in a second seco	MAKE-UP TO	RQUES	3	
Minimum	7650 ft-lbs	Target	<b>8500</b> ft-lbs	Maximum	9350 ft-lb
Yield Torque	20810 ft-lbs	Skannan om er for en skinnen om er er skin		• <b>• • • • • • • • • • • • • • • • • • </b>	
· · · · · · · · · · · · · · · · · · ·		SHÓULDER T	<u>ÔR</u> QUÊS		·
Minimum	1280 ft-lbs	Maximum	<b>7230</b> ft-lbs		<u> </u>
	**************************************	BLANKING DIN	(ENSTONS		

http://premiumconnectiondata.tenaris.com/tsh\_print.php?hWall=0.437&hSize=5.000&hGrade=P110&hCo... 7/7/2014



Size: 7.625 in. Wall: 0.430 in. Weight: 33.70 lbs/ft Grade: P110 Min. Wall Thickness: 87.5 %

Connection: Wedge 523™ Casing/Tubing: CAS

		PIPE BODY	DATA		
		GEOMET	RY		
	<b>7.625</b> in.	Nominal Weight	<b>33.70</b> lbs/ft	Standard Drift Diameter	<b>6.640</b> in.
Nominal ID	<b>6.765</b> in.	Wall Thickness	<b>0.430</b> in.	Special Drift Diameter	N/A
Plain End Weight	33.07 lbs/ft			·	<u>,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>
a hannalana kara marata ara a		PERFORM	ANCE	· · · · · · · · · · · · · · · · · · ·	<u> </u>
Body Yield Strength	<b>1069</b> x 1000 lbs	Internal Yield	<b>10860</b> psi	SMYS	<b>110000</b> p
Collapse	<b>7870</b> psi	·			
	v	EDGE 523™ CONN	ECTION DAT	Α	
		GEOMET	ŔY	· · · · ·	· · · · · ·
Connection OD	<b>7.775</b> in.	Connection ID	6.675 in.	Make-Up Loss	4.060 in.
Critical Section Area	<b>7.057</b> sq. in.	Threads per in.	3.06	1 - 142 - 12 - 12 - 12 - 12 - 12 - 12 -	
· · · · · ·		PERFORM	ANCE		
Tension Efficiency	72.6 %	Joint Yield Strength	<b>776</b> x 1000 Ibs	Internal Pressure Capacity	<b>10860</b> ps
Compression Strength	<b>881</b> x 1000 lbś	Compression Efficiency	<b>82.4</b> %	Bending	<b>48 °/</b> 100
External Pressure Capacity	<b>7870</b> psi				
		MAKE-UP TO	RQUES		
Minimum	9900 ft-lbs	Target	11900 ft-lbs	Maximum (≛)	, <b>17300</b> ft-
	and a second	OPERATIONAL LIM	IT TORQUES		
	the second data in the second se	and the second			
Operating Torque	42000 ft-lbs	Yield Torque	<b>63000</b> ft-lbs		

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

#### **Request for Variance**

#### **ConocoPhillips Company**

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

#### Request:

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

#### Entinenial® CONTRECK

#### Hose Data Sheet

CRI Order No.	516273
Customer	ContiTech Beattie Co.
Customer Order No	PD5438 STOCK
item No.	3
Hose Type	Flexible Hose
Standard	API SPEC 16 C
Insida dia in inches	3
Length	35 ft
Type of coupling one end	FLANGE 4 1/16" API SPEC 6A TYPE 6BX FOR 10000 PSIBX 155 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 D00 psi
Salety 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
Safely 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
The second se	

# Gntinenial® CONTITECH

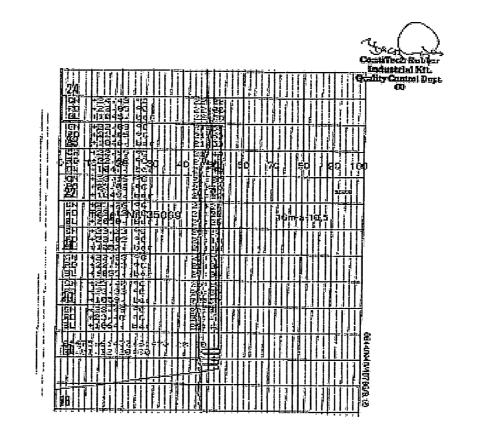
ac-DB-45/2012 7/50

Page:

#### Fluid Technology

Quality Document

	TY CONT		ATE	CERT. N	It:	184				
PURCHASER:	Contil ech B	eattie Co:		P,O. Nº;		005438				
CONTITECH ORDER Nº:	NTTECH ORDER Nº: 516273 HOSE TYPE: 3" ID Chok									
Hose Serial Nº:	ERIAL Nº: 61477 NOMINAL / ACTUAL LENGTH					/ 10,71 m				
W.F. 68,9 MPa 1	0000 psi	T.P. 103,4	MPa 1500	0 psi	Duration:	60	min			
ambient temperature See attachment. ( 1 page )										
10 mm = 10 Mir	I.									
→ 10 mm = 20 MF	a		a.et							
COUPLINGS Type		Serial Nº		Quality		Heat Nº				
3" coupling with	10174	10173	Al	SI 4130		20231				
4 1/16° 10K API Flange e	nd		AI	SI 4130		33051				
NOT DESIGN	ED FOR W	ELL TESTING	3			PI Spec 16 Frature rate				
All metal parts are Bawless WE CERTIFY THAT THE ABOV INSPECTED AND PRESSURE T STATEMENT OF CONFORMS conditions and specifications	ESTED AS ABOU TY: We hereby c of the above Purc	E WITH SATISFAC	TORY RESULT.	t supplied b	by us are in con re fabriceted in	formity with the t specied and test	स्वताइड, इन्द्री इंग			
accordence with the referenced	standards, codes	end epecifications a OUNTRY OF ORIG	nd meet the rela	vant accept	lance criteria el	nd dasign require	menis,			
Date: 30. January 2012.	Inspector		Quality Contro	C	antiTech Rul Industrial K slity Control I (1) (2)	fř. /	) )			
Budgerett úl 10., Szeged H 0730 6. PCI Bas 153 Szeged H 6701 6	hano, +30 62 566 707 14: +06 62 566 709 14: kilotikisi conta Isinal: kilotikisi conta Isinal: waw.confloci-ju	Hapsity Co. Jilma Peparty Co.	Coordinate Coording as an an Prins I No Col-Bio Coordi Abbit I Coloration	C2 Builden	Card. 24.	103				



#### ATTACHMENT OF QUALITY CONTROL INSPECTION AND TEST CERTIFICATE No: 12

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No: 182, 184, 185 Page: 171

#### **Request for Variance**

#### **ConocoPhillips Company**

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

#### **Request:**

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	

#### (Suthrenial S) CONTITECH

#### Hose Data Sheet

CRI Order No. Customer	516273 ContiTech Beattle Co.
	ContiTech Beattle Co.
Customer Order No	PO5438 STOCK
ltern No.	3
Hose Type	Flexible Hose
Standard	API SPEC 16 C
Inside dia in inches	3
Length	35 fi
Type of coupling one end	FLANGE 4 1/15" 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	St.steel outer wrap
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

and the second sec	nal () ITITEC	Fluid Technology Quality Document 453:369-001								
	LITY CONT			ÇERT. Nº:	1098					
PURCHASER.	Contil Tech B	leattie Co.		P.O. №:	004452					
CONTITECH ONDER N":	482598	HOSE TYPE:	<del>ا</del> لت ا	Choke	and Kill Hose	·.				
HOSE SERIAL N	56839	NOLINAL / ACTU	L LENGTH:	7 West, 10, 7 85 1010	67 m / 10,69 n	ĥ				
W.P. 68.9 MPa	10000 péi	T.P. 103,4 M	<sup>2</sup> a 15000	psi Duratio	in: 60	ពារុំ				
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⇒ 10.mm + 25. t	diņ. MPā	Senal N-	ja ja	f 	• Heat N 16837					
→ 10 mm = 25 t COUPLINGS Type	Mīn. VIF2 8436	Senol N-	Als	zality	16837					
→ 10 mm = 25 tr COUPLINGS Type 3*coupling with	Mīm. MFģ 8436 1	Senol N-	Als	u 4130	16837	7 81501 6 C				

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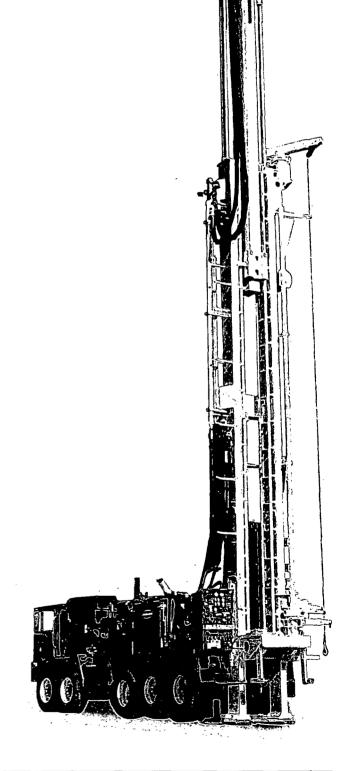
# T130XD

CHRAMM

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

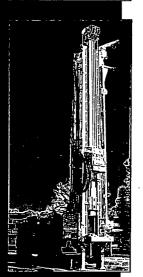
ry hoist carrier The T130XD Telemast tech-Range III pipe pact over the

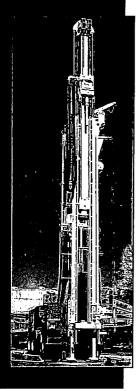


### CARRIER MOUNTED RIG EQUIPPED WITH TELEMAST

#### **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)

 $48^{\prime}$   $10^{\prime\prime}$  (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

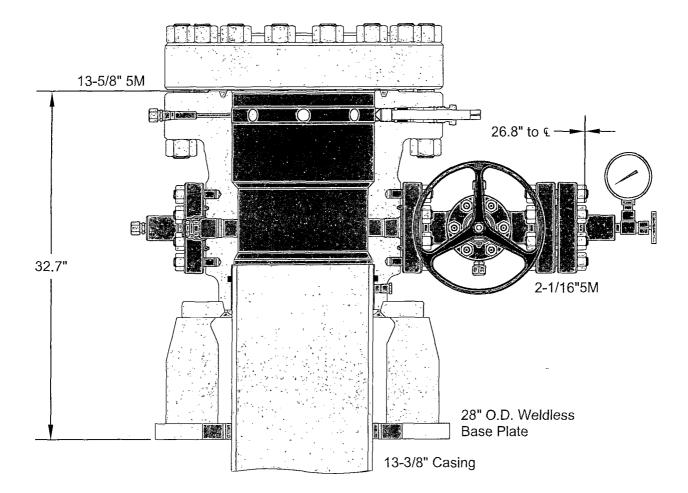
These specifications are based on theoretical calculations and industry standards. Performance will vary according to actual drilling conditions. Schramm, Inc. continuously improves its products and reserves the right to change specifications, design, prices and terms at any time without notification 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

www.schramminc.com





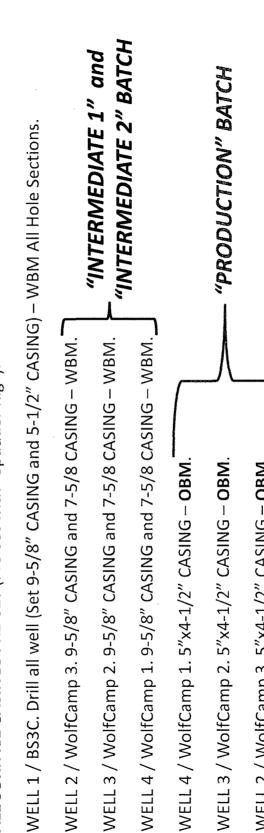
ALL DIMENSIONS ARE APPROXIMATE	<u> </u>								
This drawing is the property of GE Oil & Gas Pressure Control LP and is considered confidential. Unless otherwise approved in writing, neither it nor its contents may be used, copied, transmitted or reproduced except for the sole purpose of GE Oil & Gas 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	D. PE	00624						

SKID / BATCH DRILLING OPERATIONS – "QUAD PAD"

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

- ALL SURFACE CASINGS PRE-SET (Pre-set with "Spudder Rig"). ÷.
- WELL 1 / BS3C. Drill all well (Set 9-5/8" CASING and 5-1/2" CASING) WBM All Hole Sections. 3
- . .
- WELL 3 / WolfCamp 2. 9-5/8" CASING and 7-5/8 CASING WBM. 4
- പ്.
- <del>ن</del>
- 2.
- WELL 2 / WolfCamp 3. 5"x4-1/2" CASING OBM. ø.
- **RIG RELEASE.** <u>о</u>

### Attachment #10



ConocoPhillips

### 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 U P: Standard cable with 2" x 6" x 1/4". rails, quisset al 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 substructur e 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). 9" 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

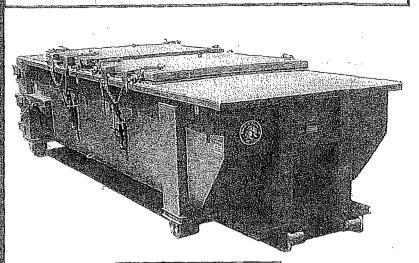
ROLLERS: 4" V-groove rollers with delrin bearings and grease fittings OPENING: (2) 60" × 82" openings with 8" divider centered on

container

LATCH (2) independent ratchet binders with chains ber lid GASKETS: Extruded rubber

seal with metal retainers.

### Heavy Duty Split Metal Rolling Lid



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

31

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

ConocoPhillips Company Well: Stampede 34 Federal Com W3 13H Location: Sec. 34, T26S, R31E Date: 12/18/2014

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

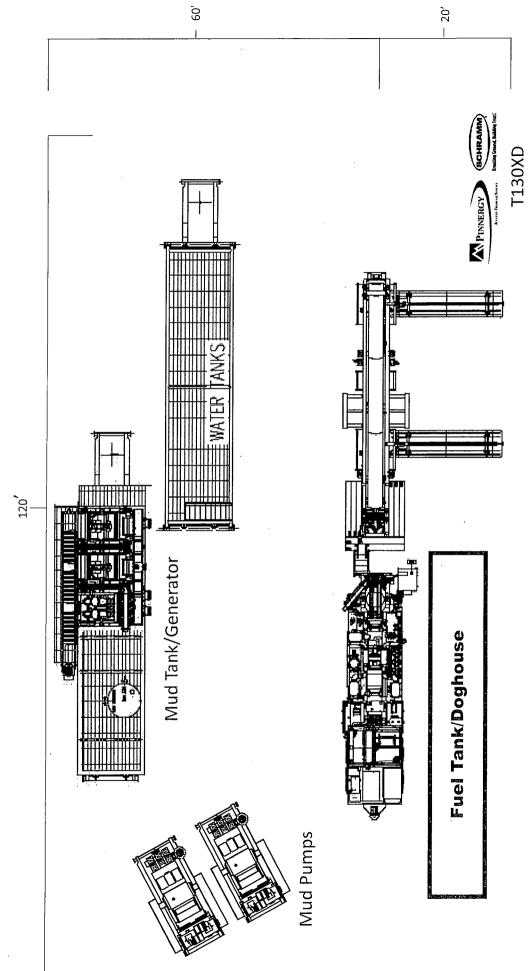
The physical address for the plant where the disposal facility is located is Highway 62/180 at mile marker 66 (33 miles East of Hobbs, NM and 32 miles West of Carlsbad, NM).

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.

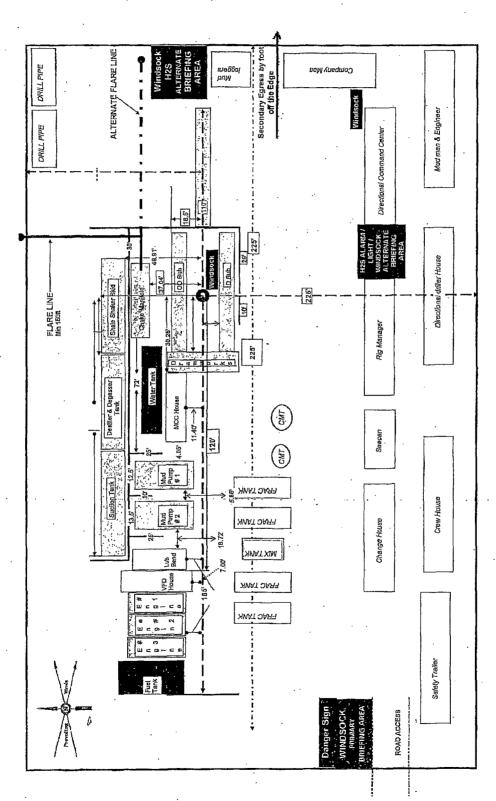
- 3. Mud will be transported by vacuum truck and disposed of at R-360 Inc. at the facility described above.
- 4. Fresh Water and Brine will be hauled off by vacuum truck and disposed of at an authorized salt water disposal well. We propose the following for disposal of fresh water and brine as needed:
  - 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

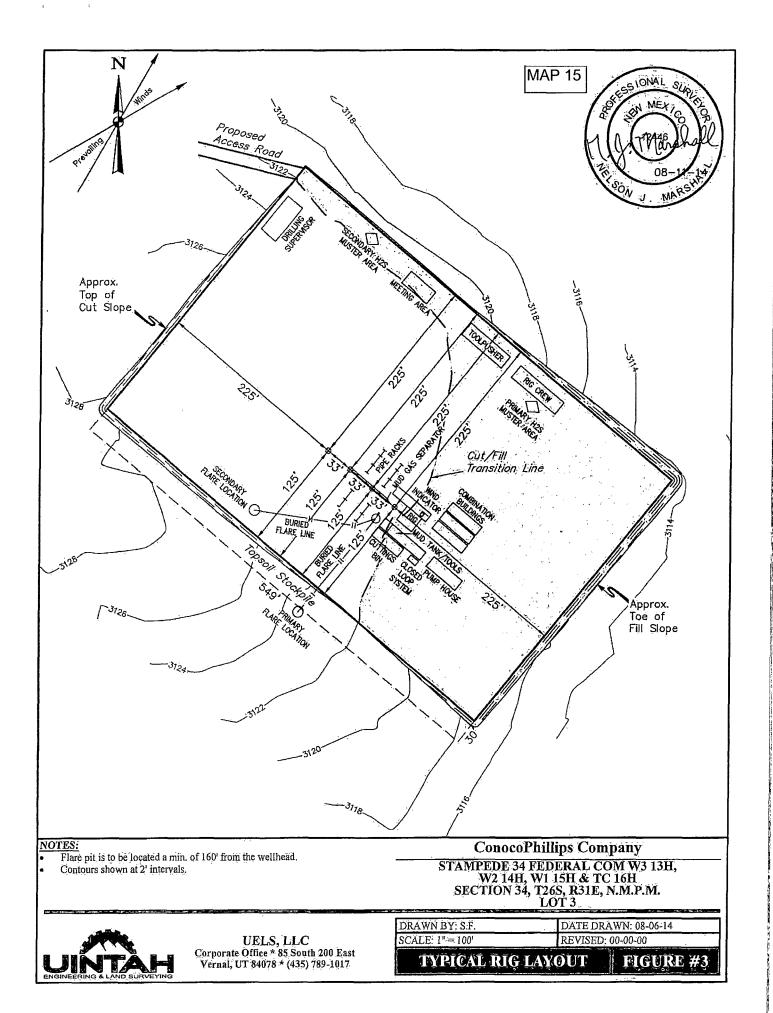


"Pinnergy #1" Spudder Rig Layout

H&P FLEX 3 RIG LAYOUT



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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** 

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

ConocoPhillips

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

Contingency Plan For Permian Drilling Operations

ConocoPhillips Company Mid-Continent Business Unit Permian Asset Area

Page 3 of 15

#### 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.

#### **III. PROCEDURES**

#### First Employee on Scene

——— Assess the incident and <u>ensure your own safety</u>.

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.

---- 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	
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

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<sub>2</sub>S. You should consider closing upstream and downstream valves 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.)

#### <u>AND</u>

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

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 Responsibility

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**.

H2S Contingency Plan

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

#### **Emergency Equipment Suppliers**

#### Safety International - Odessa, Tx.

H<sub>2</sub>S monitors Breathing air includes cascade systems First aid and medical supplies Safety equipment H2S Specialist

#### Total Safety US Odessa, Tx/ Hobs, NM

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

#### 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.

432.561.5049 Odessa, Tx. 575.392.2973 Hobbs, NM

575.393.3093

432.580.3770

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

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- 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
- $2 \underline{\text{Visual}}$  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
<b>R.W. "Cottton" Hair</b> Permian Drilling Supt.	432.368.1302	432.563.9467	432.556.9116
<b>Dennis Paschall</b> Permian Drilling Field Supt.	432.368.1517	432.683.9400	432.238.3150
<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

#### **Bureau of Land Mngt.**

Carlsbad Field Office 620 E. Greene St. Carlsbad, NM 88220 Office: 575.393.6161

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

<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.

**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

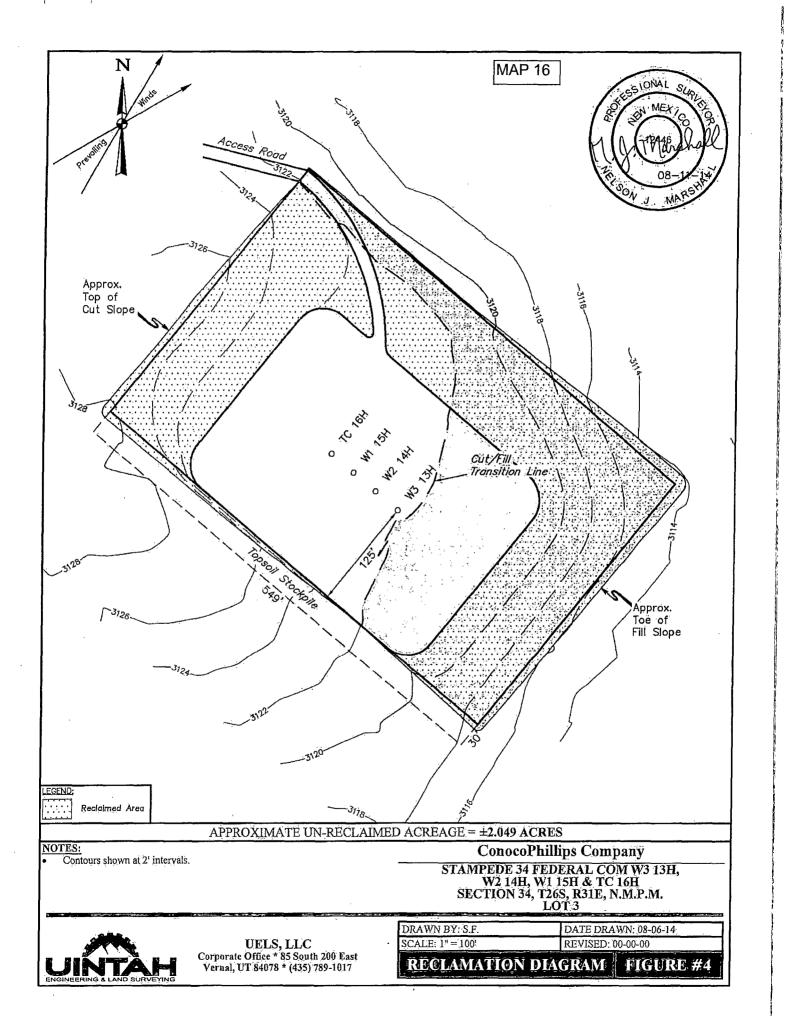
I. Incident Log

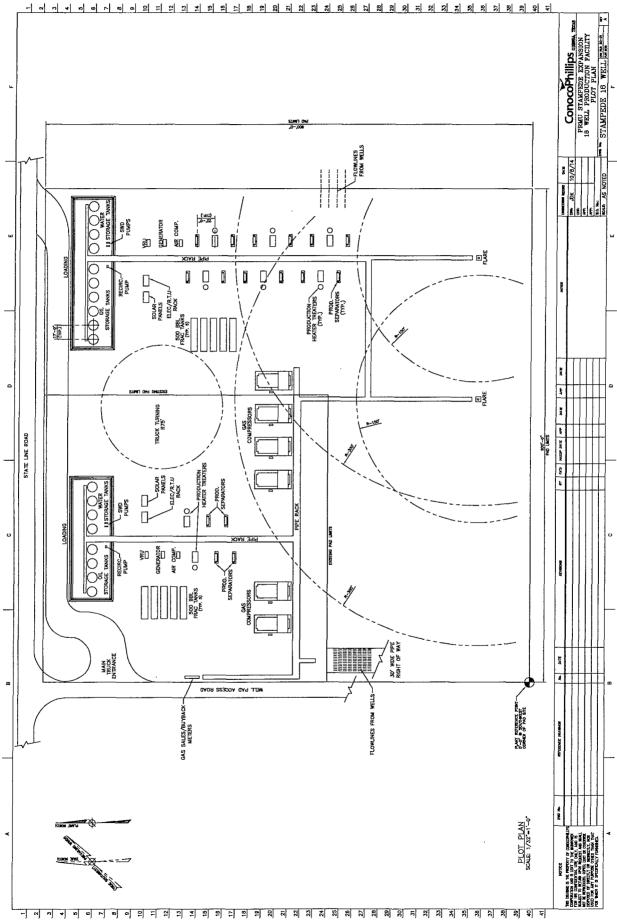
II. Preliminary Emergency Information Sheet

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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### **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. No existing oil and gas road will be utilized because The proposed access road will be 1\_527' off of State Line road This is illustrated on maps entitled "Access Road Map Topo A" & "Access Road Map Topo B".

#### 2. New or Reconstructed Access Roads

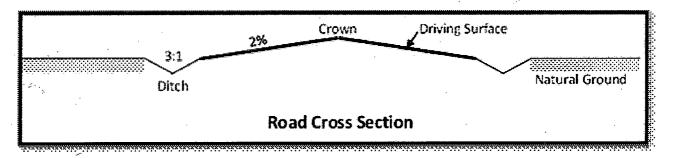
a. An access road will be needed for this proposed project. See the survey plat for the location of the access road.

b. The length of access road needed to be constructed for this proposed project is about 1527 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.

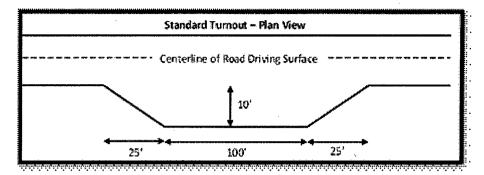


f. The access road will be constructed with a ditch on each side of the road.

g. The maximum grade for the access road will be 2 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.

#### 3. Location of Existing Wells

a. Stampede 34 Federal COM W3 13H, 1 Mile Radius Map 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 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. A production facility is proposed to be installed off the proposed well location. Production from the well will be processed at this production facility. Stampede 34 Federal COM W3 13H, W2 14H, W1 15H Tank Battery, Location Layout, Figure #1 depicts the location of the production facilities.

d. The proposed production facility will have a secondary containment structure that is constructed to hold the capacity of 1-1/2 times the largest tank, plus freeboard to account for percipitation, unless more stringent protective requirements are deemed necessary.

e. Preliminary Plot Plat depicts the production facility as well.

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

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 866 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. Flowline ROW 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.

### 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 1331 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. Since the proposed electric line crossess lease boundaries, a right of way grant will be acquired prior to installation of the proposed electric line.

# 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 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.

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)**

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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 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 BLM. Please review this application with the Stampede 34 Federal W2 14H & Stampede 34 Federal W1 15H. All ROWs and Temporary Water Lines will be filed under separate cover.

## **13. Maps and Diagrams**

Stampede 34 Federal COM W3 13H, 1 Mile Radius Map - Wells Within One Mile

Stampede 34 Federal COM W3 13H, W2 14H, W1 15H Tank Battery, Location Layout, Figure #1 - Production Facilities Diagram

Preliminary Plot Plat - Additional Production Facilities Diagram

Flowline ROW - Production Pipeline

Power Line R-O-W - Electric Line

Reclamation Diagram, Figure #4 - Interim Reclamation

# **PECOS DISTRICT CONDITIONS OF APPROVAL**

<b>OPERATOR'S NAME:</b>	ConocoPhillips Company
LEASE NO.:	NMLC-068282A
WELL NAME & NO.:	Stampede 34 Federal Com W3 13H
SURFACE HOLE FOOTAGE:	0734' FSL & 2177' FWL
<b>BOTTOM HOLE FOOTAGE</b>	0280' FNL & 2360' 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 Avian Protection** Phantom Bank Heronry Cave/Karst Construction Notification Topsoil Closed Loop System Federal Mineral Material Pits Well Pads Roads **Road Section Diagram** Drilling Cement Requirements High Cave/Karst Logging Requirements Waste Material and Fluids **Production (Post Drilling)** Well Structures & Facilities **Pipelines** Electric Lines **Interim Reclamation Final Abandonment & Reclamation** Page 1 of 24

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# **I. GENERAL PROVISIONS**

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)

## **Communitization Agreement**

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.

#### **Phantom Bank Heronry**

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.

### **Avian Protection**

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 power line structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. The holder without liability or expense shall make such modifications and/or additions to the United States.

# **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:

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**

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

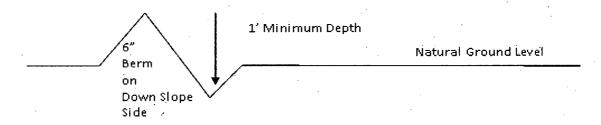
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

#### 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 %);

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#### 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

## Cattleguards

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.

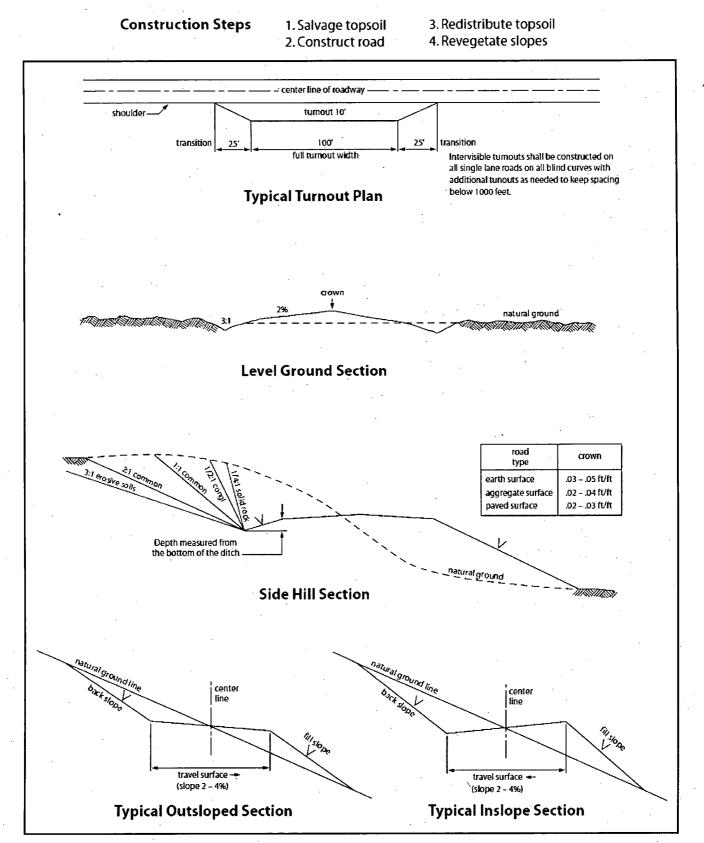
#### Fence Requirement

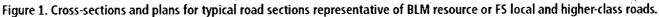
Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

### 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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# VII. DRILLING

### 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**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

- 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.
- 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.

# <u>A MINIMUM OF TWO CASING STRINGS CEMENTED TO SURFACE IS</u> <u>REQUIRED IN HIGH CAVE/KARST AREAS.</u> 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 940 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 3930 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.

- 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:

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.

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# 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.

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 m	ixture	1	·
(X)	seed mi	ixture	2	
( )	good m	vturo	2/T	DC

() seed mixture 3 () 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

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, <u>et seq</u>. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, <u>et seq</u>.) 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.

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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:

- 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

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	ц	l <u>b/acre</u>
Sand dropseed (Sporobolus cryptandrus)		1.0
Sand love grass (Eragrostis trichodes)	<sup></sup>	1.0
Plains bristlegrass (Setaria macrostachya)	et en en en en en en en en en en en en en	2.0
*D	· · · ·	

\*Pounds of pure live seed:

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

### NMOCD CONDITION OF APPROVAL

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.