15-252

Form 3160-3
(March 2012)

OCD Artesia
NM OIL CONSERVATION
ARTESIA DISTRICT
DEC 22 2016
RECEIVED

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
SHL: NMLC068282B BHL: NMLC068282A

6. If Indian, Allotee or Tribe Name

1a. Type of work: [X] DRILL [ ] REENTER

7. If Unit or CA Agreement, Name and No.

1b. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other [X] Single Zone [ ] Multiple Zone

8. Lease Name and Well No.
STAMPEDE 34 FEDERAL COM 6H W2

2. Name of Operator
CONOCOPHILLIPS COMPANY

9. API Well No.
30-015-44010

3a. Address
P.O. BOX 51810 MIDLAND TX 79710

3b. Phone No. (include area code)
(432) 688-6938

10. Field and Pool, or Exploratory
WOLFCAMP

4. Location of Well (Report location clearly and in accordance with any State requirements.*)
At surface 283 FSL & 1040 FWL 34-26S-31E
At proposed prod. zone 280 FNL & 1040 FWL 27-26S-31E
NORTHODOX LOCATION

11. Sec., T. R. M. or Blk. and Survey or Area
SWSW 34-26S-31E

14. Distance in miles and direction from nearest town or post office*
~49.1 MILES SOUTH/WEST OF JAL, NM

12. County or Parish
EDDY

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any)
250'

16. No. of acres in lease
NMLC 068282B:900.8
NMLC 068282A: 1221.6

17. Spacing Unit dedicated to this well
225.20

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
SHL: 33' (STAMPEDE 5H)
BHL: 2858' (STAMPEDE 27 M 1)

19. Proposed Depth
MD; 18,787
TVD: 11,952

20. BLM/BIA Bond No. on file
ES0085

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3137.8

22. Approximate date work will start*
06/01/2016

23. Estimated duration
30 DAYS

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature Ashley Bergen
Name (Printed/Typed) ASHLEY BERGEN
Date 6/20/16

Title
REGULATORY ASSOCIATE

Approved by (Signature) /s/Cody Layton
Name (Printed/Typed)
Date DEC 19 2016

Title FIELD MANAGER
Office CARLSBAD FIELD OFFICE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

*(Instructions on page 2)

Carlsbad Controlled Water Basin

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Approval Subject to General Requirements
& Special Stipulations Attached

NM OIL CONSERVATION
ARTESIA DISTRICT

DEC 22 2016

RECEIVED

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☐ AMENDED REPORT

015-

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name	
30-025 44010	98012	WC WOLFCAMP	
[4] Property Code	[5] Property Name		[6] Well Number
315004	STAMPEDE 34 FEDERAL COM W2		06H
[7] OGRID No.	[8] Operator Name		[9] Elevation
217817	ConocoPhillips Company		3137.8'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	34	26S	31E	D	283	SOUTH	1040	WEST	EDDY

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	27	26S	31E		280	NORTH	1040	WEST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
225.20			

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

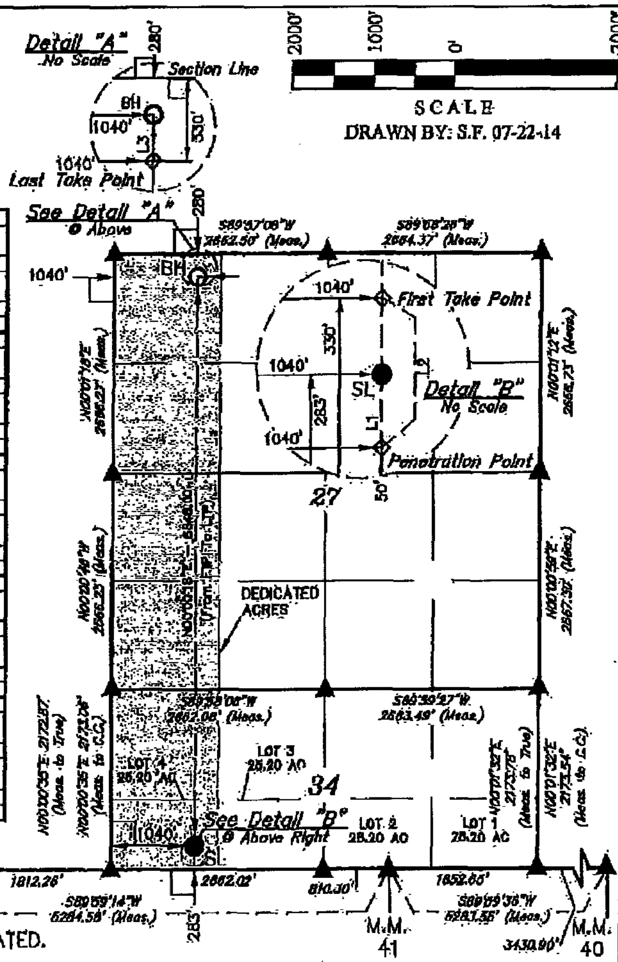
16

LINE TABLE

LINE	DIRECTION	LENGTH
L1	S00°00'47"W	232.81'
L2	N00°00'35"E	280.00'
L3	N00°01'18"E	50.00'

NAD 83 (SURFACE LOCATION)	
LATITUDE = 32°00'03.17" (32.000881) LONGITUDE = 103°46'16.33" (103.771203)	
NAD 27 (SURFACE LOCATION)	
LATITUDE = 32°00'03.02" (32.000839) LONGITUDE = 103°46'14.63" (103.770731)	
STATE PLANE NAD 83	STATE PLANE NAD 27
N: 364343.37 E: 715598.36	N: 364286.35 E: 674403.81
NAD 83 (PENETRATION POINT)	
LATITUDE = 32°00'01.47" (32.000825) LONGITUDE = 103°46'16.33" (103.771203)	
NAD 27 (PENETRATION POINT)	
LATITUDE = 32°00'00.21" (32.000280) LONGITUDE = 103°46'14.63" (103.770731)	
STATE PLANE NAD 83	STATE PLANE NAD 27
N: 364310.82 E: 715592.13	N: 364233.80 E: 674403.88
NAD 83 (FIRST TAKE POINT)	
LATITUDE = 32°00'03.94" (32.001094) LONGITUDE = 103°46'16.33" (103.771203)	
NAD 27 (FIRST TAKE POINT)	
LATITUDE = 32°00'03.49" (32.000969) LONGITUDE = 103°46'14.63" (103.770731)	
STATE PLANE NAD 83	STATE PLANE NAD 27
N: 364390.75 E: 715596.68	N: 364333.73 E: 674403.54
NAD 83 (LAST TAKE POINT)	
LATITUDE = 32°01'11.68" (32.019911) LONGITUDE = 103°46'16.36" (103.771211)	
NAD 27 (LAST TAKE POINT)	
LATITUDE = 32°01'11.22" (32.019783) LONGITUDE = 103°46'14.66" (103.770739)	
STATE PLANE NAD 83	STATE PLANE NAD 27
N: 371135.20 E: 715559.21	N: 371378.01 E: 674363.35
NAD 83 (BOTTOM HOLE LOCATION)	
LATITUDE = 32°01'12.17" (32.020047) LONGITUDE = 103°46'16.36" (103.771211)	
NAD 27 (BOTTOM HOLE LOCATION)	
LATITUDE = 32°01'11.72" (32.019922) LONGITUDE = 103°46'14.66" (103.770739)	
STATE PLANE NAD 83	STATE PLANE NAD 27
N: 371485.19 E: 715558.97	N: 371428.00 E: 674365.09

not readable



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

K. Mickens 12-2-14
Signature Date

KRISTINA MICKENS
Printed Name

kristina.mickens@cop.com
E-mail Address

[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

July 14, 2014
Date of Survey
Signature and Seal of Professional Surveyor:

PROFESSIONAL SURVEYOR
NEW MEXICO
12448
NELSON J. MARSHALL
14

Certificate Number:

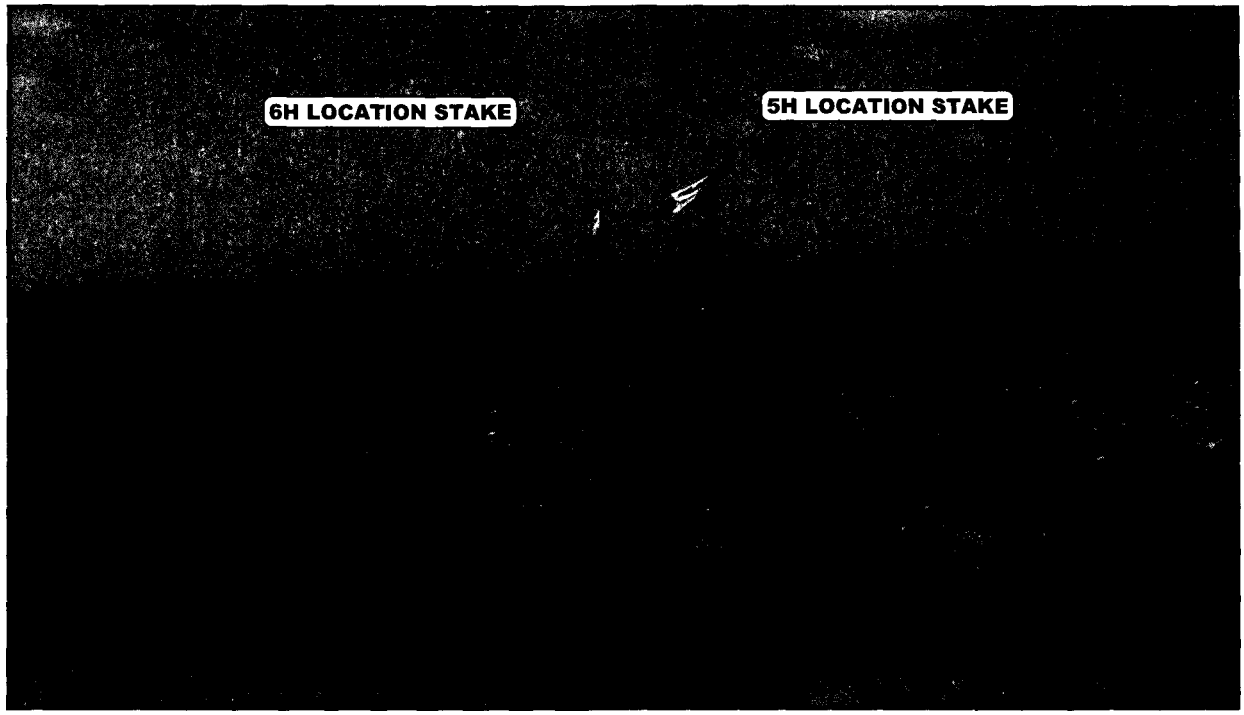


PHOTO: VIEW OF LOCATION STAKES CAMERA ANGLE: NORTHERLY

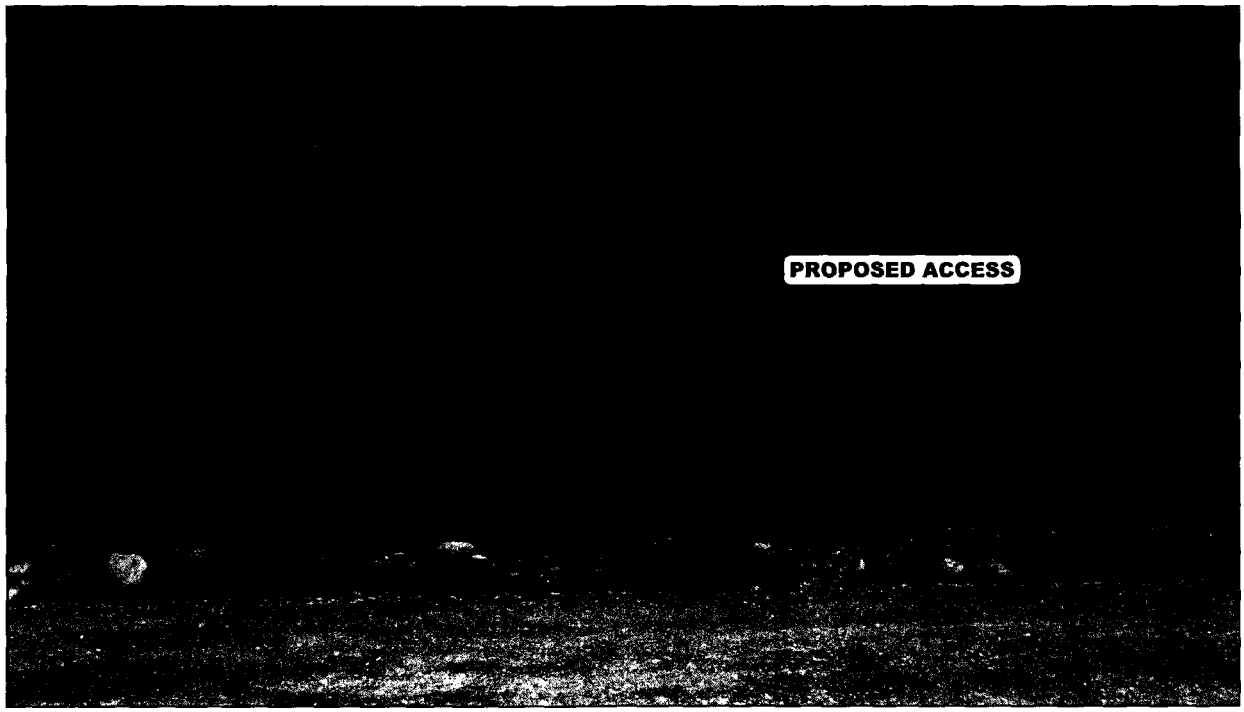


PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS CAMERA ANGLE: EASTERLY

ConocoPhillips Company

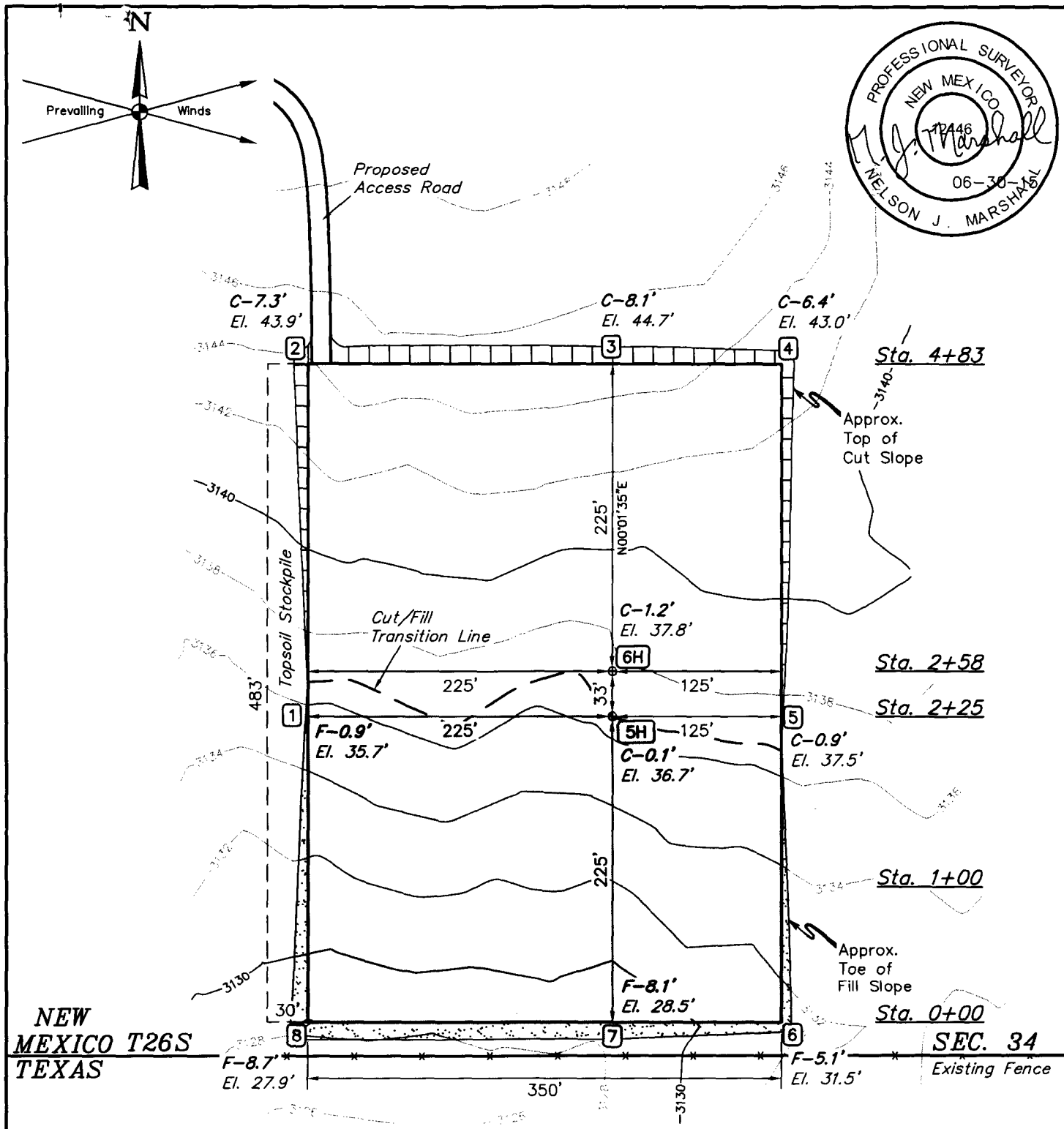
STAMPEDE 34 FEDERAL COM 5H & 6H
LOT 4, SECTION 34, T26S, R31E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

UINTAH ENGINEERING & LAND SURVEYING

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

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

LOCATION PHOTOS PHOTO



FINISHED GRADE ELEVATION = **3136.6'**

NOTES:

- Contours shown at 2' intervals.

ConocoPhillips Company

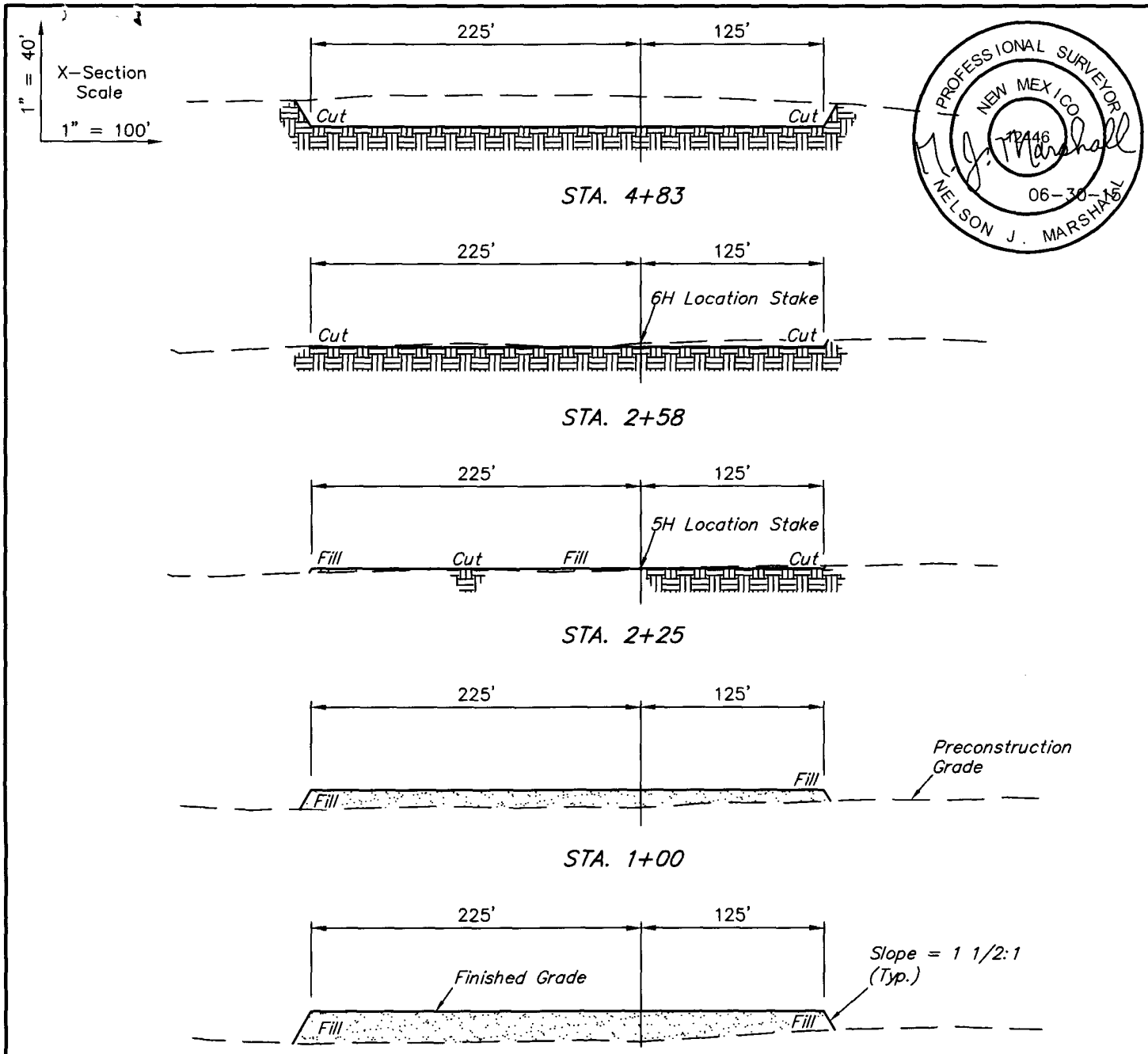
STAMPEDE 34 FEDERAL COM 5H & 6H
LOT 4, SECTION 34, T26S, R31E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

DRAWN BY: S.F.	DATE DRAWN: 07-22-14
SCALE: 1" = 100'	REVISED: 06-25-15

LOCATION LAYOUT **FIGURE #1**

UINTAH ENGINEERING & LAND SURVEYING

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



APPROXIMATE EARTHWORK QUANTITIES	
(2") TOPSOIL STRIPPING	1,130 Cu. Yds.
REMAINING LOCATION	13,500 Cu. Yds.
TOTAL CUT	**14,630 Cu. Yds.**
FILL	**13,500 Cu. Yds.**
EXCESS MATERIAL	1,130 Cu. Yds.
TOPSOIL	1,130 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	**0 Cu. Yds.**

APPROXIMATE SURFACE DISTURBANCE AREAS		
	DISTANCE	**ACRES**
WELL SITE DISTURBANCE	NA	±4.472
ACCESS ROAD R-O-W DISTURBANCE	±257.24'	±0.177
FLOW LINE R-O-W DISTURBANCE	±1,677.07'	±1.155
POWER LINE R-O-W DISTURBANCE	±198.42'	±0.137
TOTAL SURFACE USE AREA	**±2,132.73'**	**±5.941**

NOTES:

- Fill quantity includes 5% for compaction.
- Topsoil should not be stripped below finished grade on substructure area.

ConocoPhillips Company

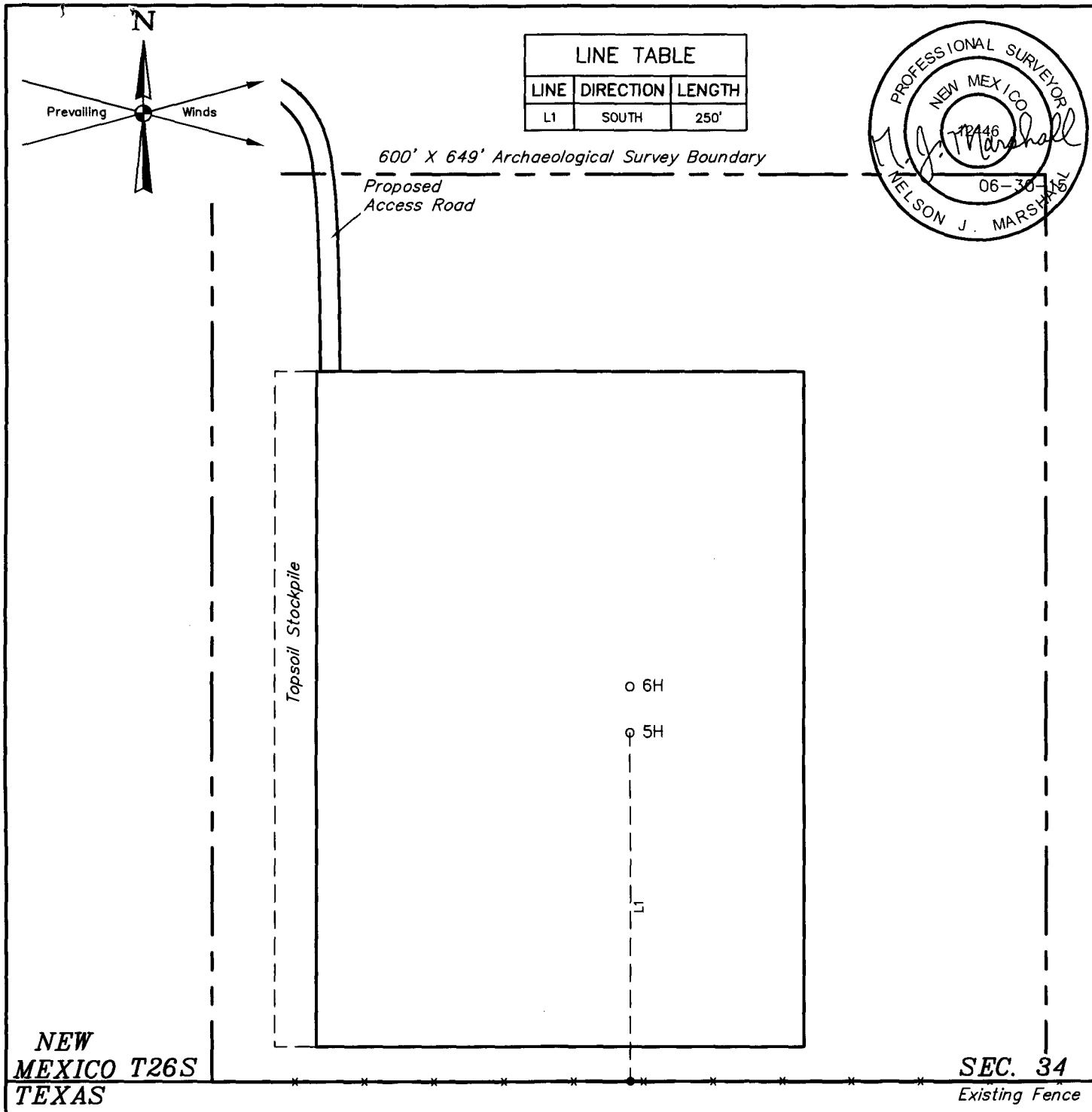
STAMPEDE 34 FEDERAL COM 5H & 6H
LOT 4, SECTION 34, T26S, R31E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

UINTAH ENGINEERING & LAND SURVEYING

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

DRAWN BY: S.F.	DATE DRAWN: 07-22-14
SCALE: AS SHOWN	REVISED: 06-25-15

TYPICAL CROSS SECTIONS FIGURE #2



NOTES:

ConocoPhillips Company

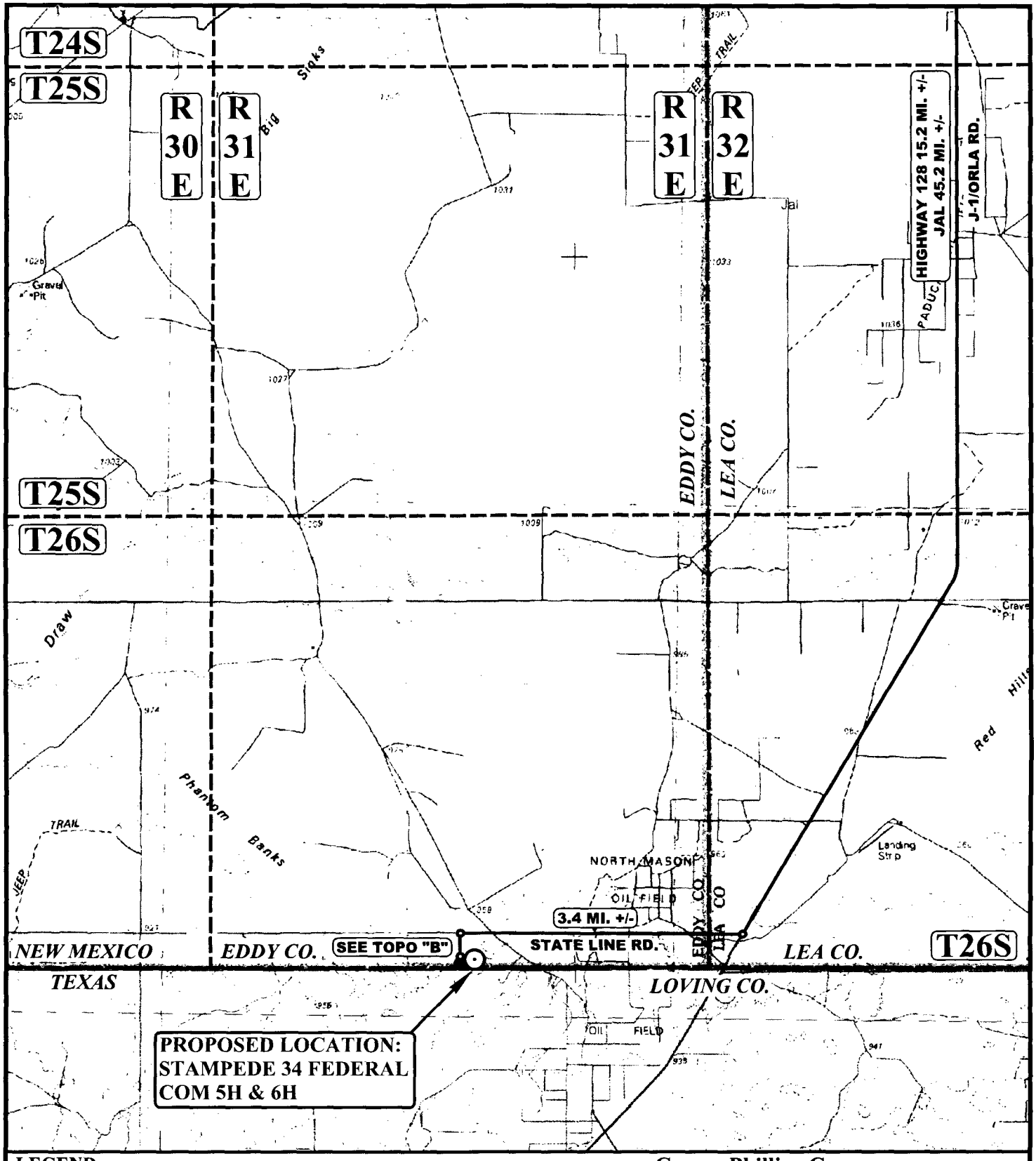
STAMPEDE 34 FEDERAL COM 5H & 6H
LOT 4, SECTION 34, T26S, R31E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

UINTAH ENGINEERING & LAND SURVEYING

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

DRAWN BY: S.F.	DATE DRAWN: 07-22-14
SCALE: 1" = 100'	REVISED: 06-25-15

ARCHAEOLOGICAL SURVEY BOUNDARY **FIGURE #5**



LEGEND:

⊙ PROPOSED LOCATION

N

ConocoPhillips Company

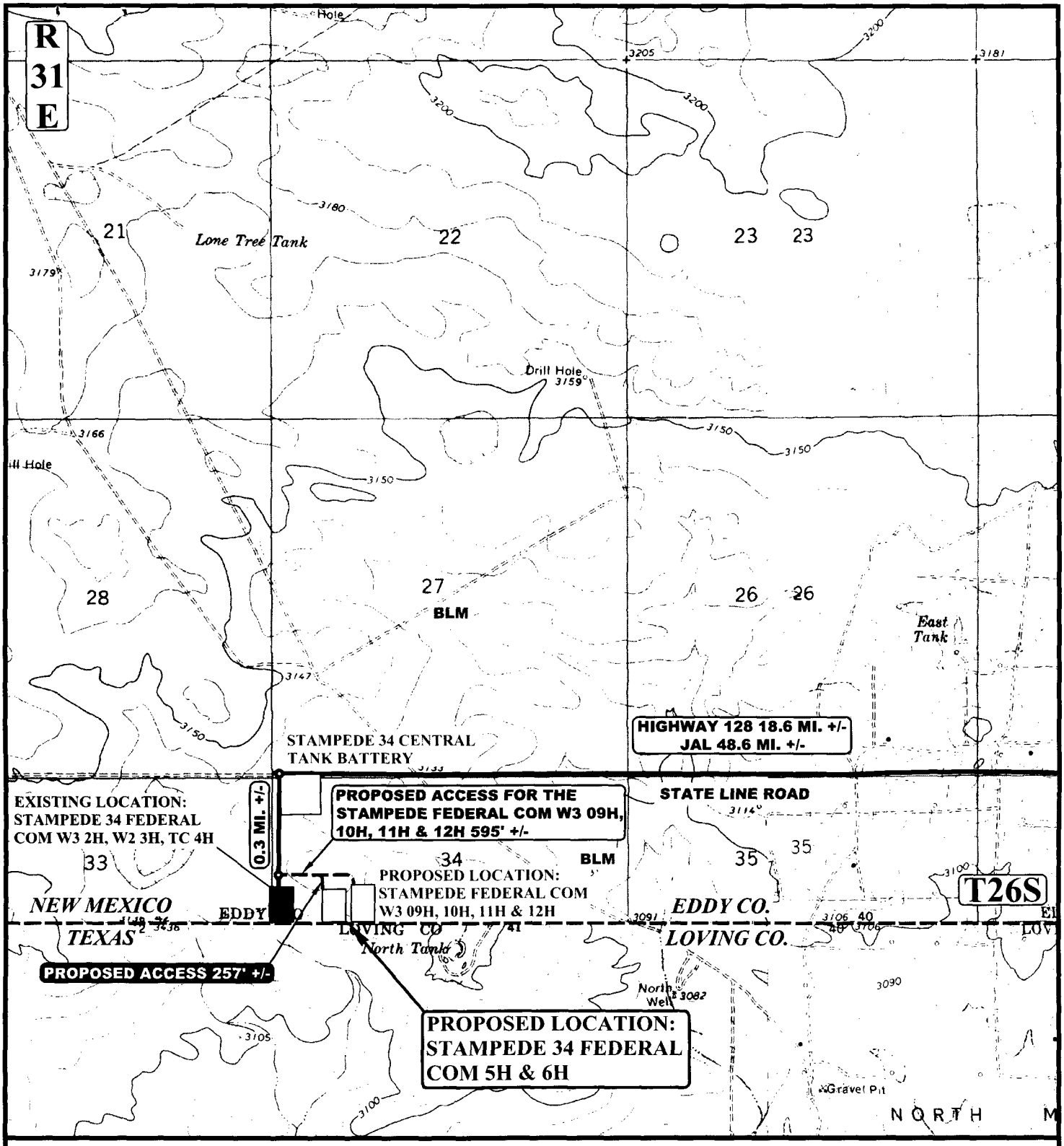
STAMPEDE 34 FEDERAL COM 5H & 6H
LOT 4, SECTION 34, T26S, R31E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

DRAWN BY: M.L.	DATE DRAWN: 06-26-14
SCALE: 1:100,000	REVISED: 06-25-15 Z.H.F.

ACCESS ROAD MAP **TOPO A**

UINTAH ENGINEERING & LAND SURVEYING

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



NOTE: PARCEL DATA SHOWN HAS BEEN OBTAINED FROM VARIOUS SOURCES AND SHOULD BE USED FOR MAPPING, GRAPHIC AND PLANNING PURPOSES ONLY. NO WARRANTY IS MADE BY UINTAH ENGINEERING AND LAND SURVEYING (UELS) FOR ACCURACY OF THE PARCEL DATA.

LEGEND:

- EXISTING ROAD
- PROPOSED ROAD
- PROPOSED ROAD (SERVICING OTHER WELLS)

ConocoPhillips Company

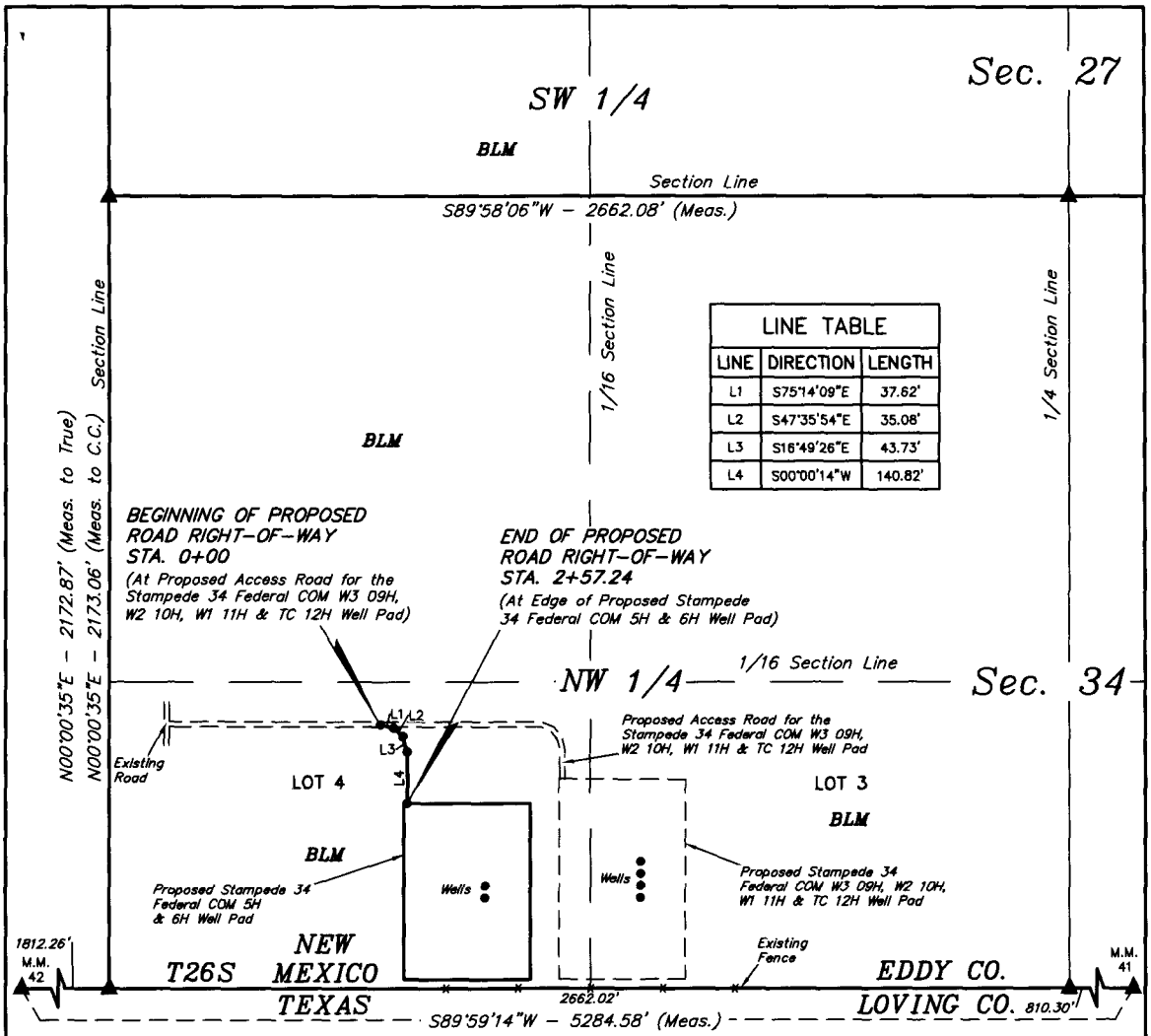
STAMPEDE 34 FEDERAL COM 5H & 6H
LOT 4, SECTION 34, T26S, R31E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

DRAWN BY: M.L.	DATE DRAWN: 06-26-14
SCALE: 1" = 2000'	REVISED: 06-25-15 Z.H.F.

ACCESS ROAD MAP **TOPO B**

UINTAH ENGINEERING & LAND SURVEYING

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



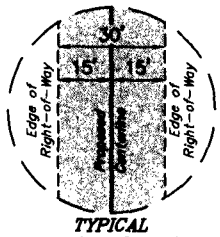
ROAD RIGHT-OF-WAY DESCRIPTION

A 30' WIDE RIGHT-OF-WAY 15' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

BEGINNING AT A POINT IN LOT 4 OF SECTION 34, T26S, R31E, N.M.P.M., WHICH BEARS N46°00'05"E 1042.67' FROM THE SOUTHWEST CLOSING CORNER OF SAID SECTION 34, THENCE S75°14'09"E 37.62'; THENCE S47°35'54"E 35.08'; THENCE S16°49'26"E 43.73'; THENCE S00°00'14"W 140.82' TO A POINT IN LOT 4 OF SAID SECTION 34, WHICH BEARS N58°21'29"E 969.03' FROM THE SOUTHWEST CLOSING CORNER OF SAID SECTION 34. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 0.177 ACRES MORE OR LESS.

BEGINNING OF ROAD STA. 0+00 BEARS N46°00'05"E 1042.67' FROM THE SOUTHWEST CLOSING CORNER OF SECTION 34, T26S, R31E, N.M.P.M.

END OF ROAD STA. 2+57.24 BEARS N58°21'29"E 969.03' FROM THE SOUTHWEST CLOSING CORNER OF SECTION 34, T26S, R31E, N.M.P.M.



TYPICAL RIGHT-OF-WAY DETAIL
NO SCALE

400' 200' 0' 400'

RIGHT-OF-WAY LENGTHS			
PROPERTY OWNER	FEET	ACRES	RODS
BLM NW 1/4 SEC. 34	257.24	0.177	15.59

▲ = SECTION CORNERS LOCATED.

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

NEW MEXICO 12446 PROFESSIONAL SURVEYOR

REGISTERED LAND SURVEYOR
REGISTRATION NO. 12446
STATE OF NEW MEXICO

06-30-15

NOTES:
- The maximum grade of existing ground for the proposed access road is 3.7%.

N

ConocoPhillips Company

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

DRAWN BY: S.F.	DATE DRAWN: 07-22-14
SCALE: 1" = 400'	REVISED: 06-25-15

ACCESS ROAD R-O-W

UINTAH ENGINEERING & LAND SURVEYING

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

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

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

ConocoPhillips Company

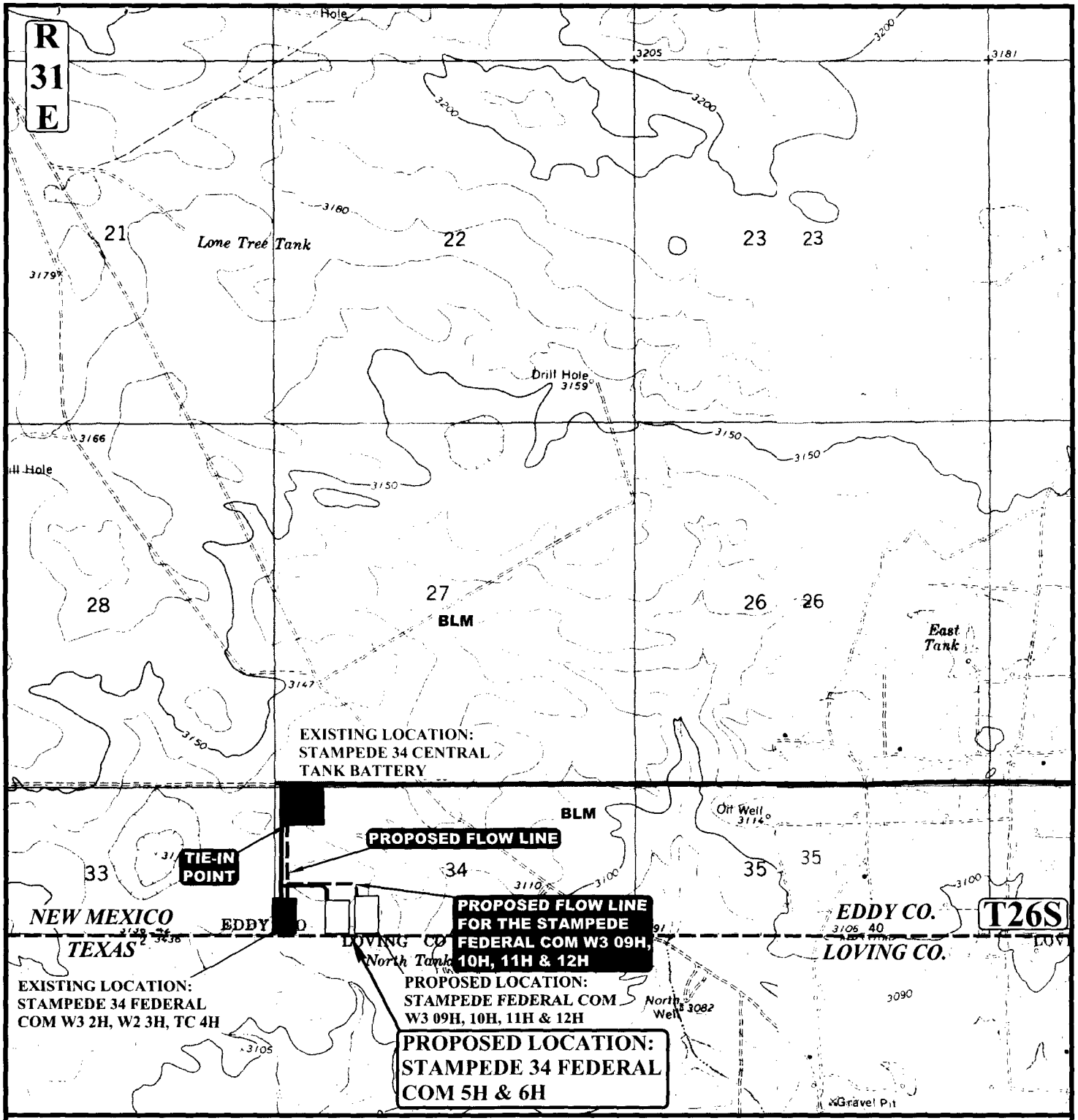
STAMPEDE 34 FEDERAL COM 5H & 6H
LOT 4, SECTION 34, T26S, R31E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

UINTAH ENGINEERING & LAND SURVEYING

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

DRAWN BY: M.L.	DATE DRAWN: 06-26-14
	REVISED: 06-25-15 Z.H.F.

ROAD DESCRIPTION



APPROXIMATE TOTAL FLOW LINE DISTANCE = 1677' +/-

NOTE: PARCEL DATA SHOWN HAS BEEN OBTAINED FROM VARIOUS SOURCES AND SHOULD BE USED FOR MAPPING, GRAPHIC AND PLANNING PURPOSES ONLY. NO WARRANTY IS MADE BY UINTAH ENGINEERING AND LAND SURVEYING (UELS) FOR ACCURACY OF THE PARCEL DATA.

LEGEND:

- PROPOSED ROAD
- EXISTING FLOW LINE
- PROPOSED FLOW LINE
- PROPOSED FLOW LINE (SERVICING OTHER WELLS)

N

ConocoPhillips Company

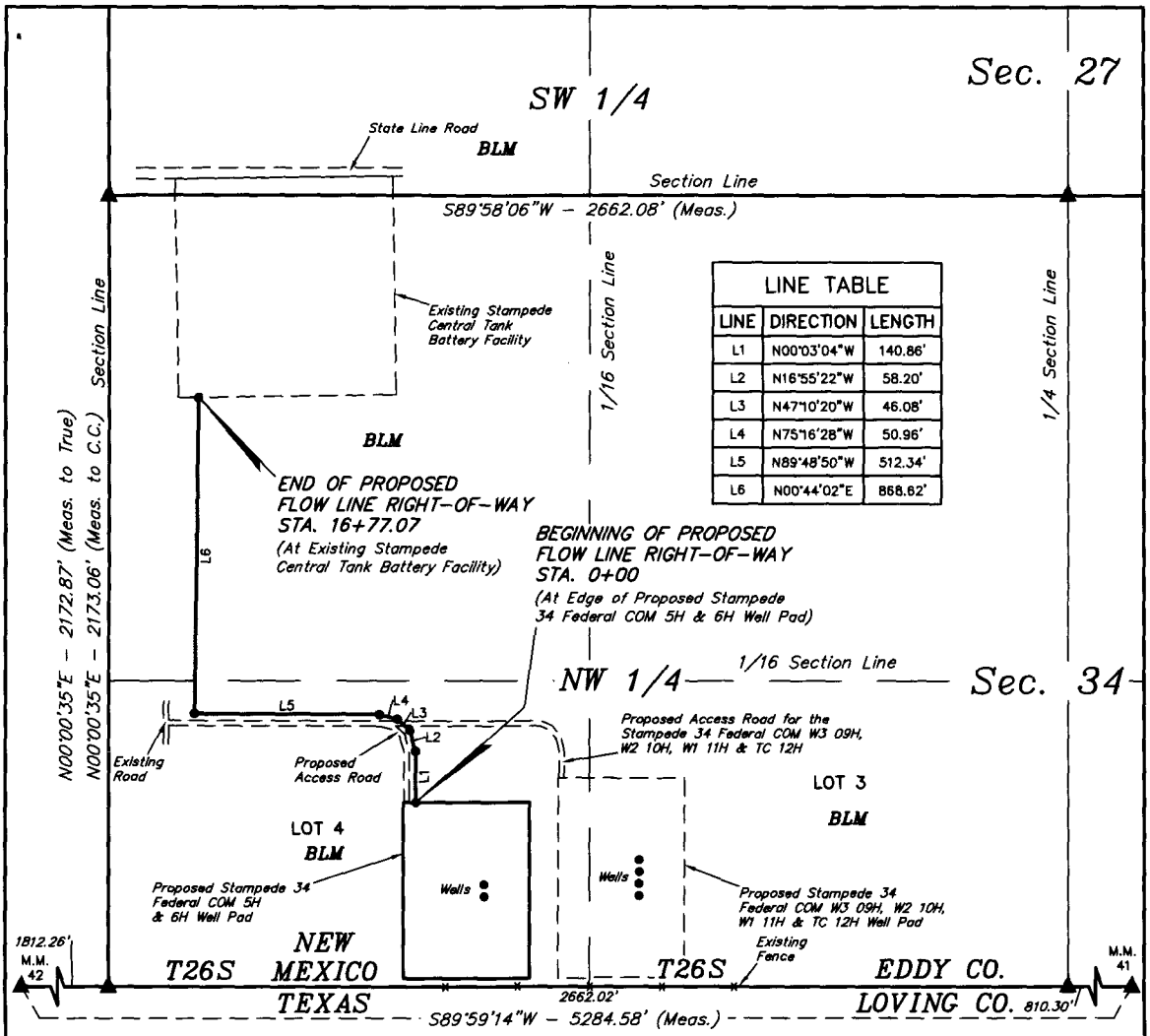
STAMPEDE 34 FEDERAL COM 5H & 6H
LOT 4, SECTION 34, T26S, R31E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

DRAWN BY: M.L.	DATE DRAWN: 06-26-14
SCALE: 1" = 2000'	REVISED: 06-25-15 Z.H.F.

FLOW LINE MAP **TOPO D**

UINTAH ENGINEERING & LAND SURVEYING

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



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	N00°03'04"W	140.86'
L2	N16°55'22"W	58.20'
L3	N47°10'20"W	46.08'
L4	N75°16'28"W	50.96'
L5	N89°48'50"W	512.34'
L6	N00°44'02"E	868.62'

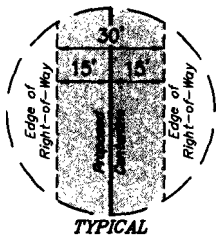
FLOW LINE RIGHT-OF-WAY DESCRIPTION

A 30' WIDE RIGHT-OF-WAY 15' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

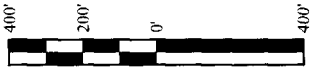
BEGINNING AT A POINT IN LOT 4 OF SECTION 34, T26S, R31E, N.M.P.M., WHICH BEARS N59°07'11"E 990.46' FROM THE SOUTHWEST CLOSING CORNER OF SAID SECTION 34, THENCE N00°03'04"W 140.86'; THENCE N16°55'22"W 58.20'; THENCE N47°10'20"W 46.08'; THENCE N75°16'28"W 50.96'; THENCE N89°48'50"W 512.34'; THENCE N00°44'02"E 868.62' TO A POINT IN THE NW 1/4 NW 1/4 OF SAID SECTION 34, WHICH BEARS S24°09'21"E 606.81' FROM THE NORTHWEST CORNER OF SAID SECTION 34. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 1.155 ACRES MORE OR LESS.

BEGINNING OF FLOW LINE STA. 0+00 BEARS N59°07'11"E 990.46' FROM THE SOUTHWEST CLOSING CORNER OF SECTION 34, T26S, R31E, N.M.P.M.

END OF FLOW LINE STA. 16+77.07 BEARS S24°09'21"E 606.81' FROM THE NORTHWEST CORNER OF SECTION 34, T26S, R31E, N.M.P.M.



TYPICAL RIGHT-OF-WAY DETAIL
NO SCALE



RIGHT-OF-WAY LENGTHS			
PROPERTY OWNER	FEET	ACRES	RODS
BLM NW 1/4 SEC. 34	1677.07	1.155	101.64

▲ = SECTION CORNERS LOCATED.

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

NEW MEXICO 12446 PROFESSIONAL SURVEYOR

Nelson J. Marshall

REGISTERED LAND SURVEYOR
REGISTRATION NO. 12446
STATE OF NEW MEXICO

06-30-15

NOTES:

N

ConocoPhillips Company

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

DRAWN BY: S.F.	DATE DRAWN: 07-22-14
SCALE: 1" = 400'	REVISED: 06-25-15

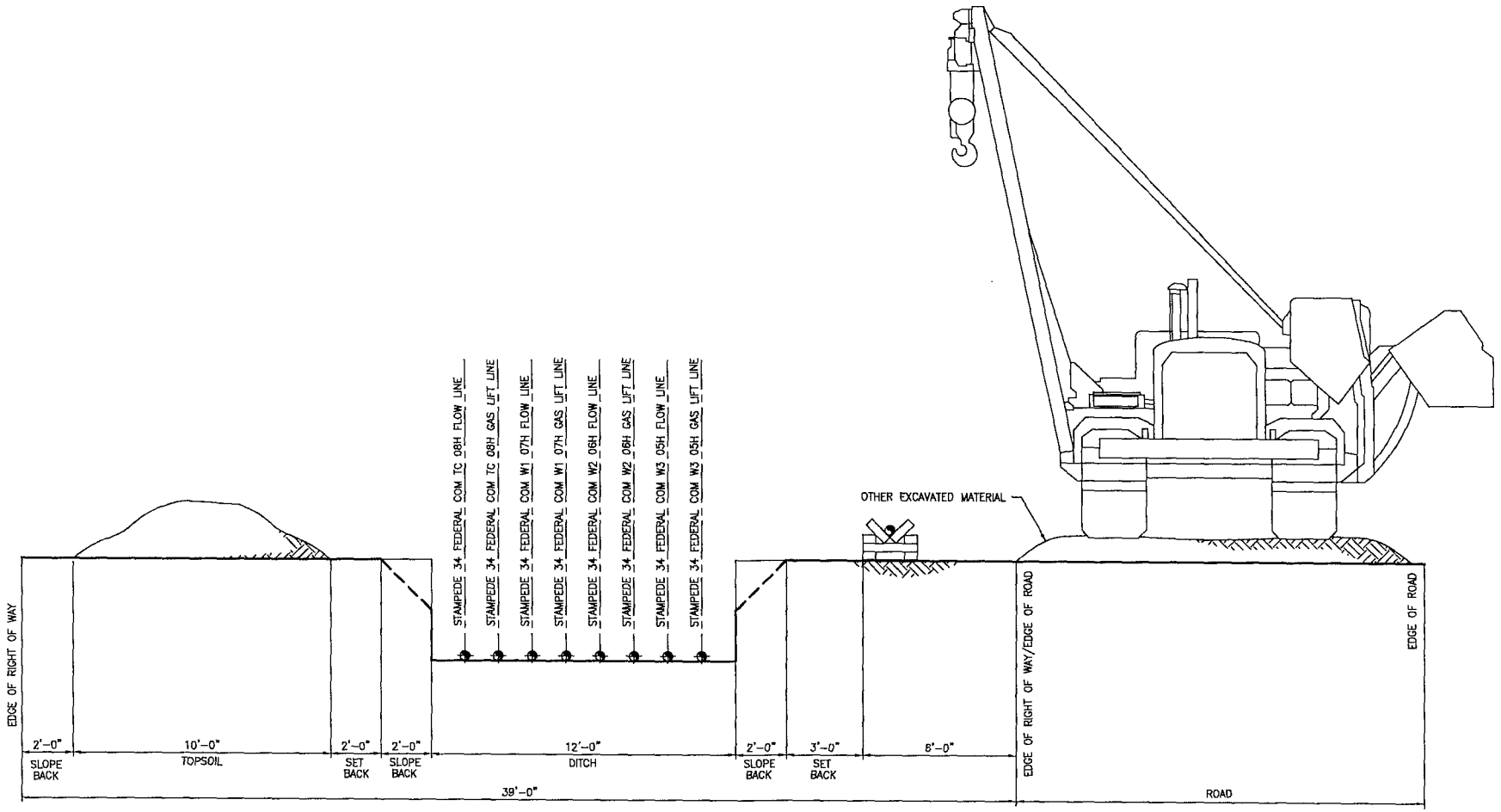
FLOW LINE R-O-W

UINTAH ENGINEERING & LAND SURVEYING

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

FLOW LINE RIGHT OF WAY

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



REFERENCE DWG NO:	REV	DATE	REVISION	BY	CHK	APP	APP
	A	10/06/14	ISSUE FOR APPROVAL	TTM	RAR		

DRAWN: TTM	DESIGN: RAR		
CHECKED: RAR	APPROVAL:	CC NO:	
SCALE: NA	DATE: 05/13/14	CADD FILENAME:	

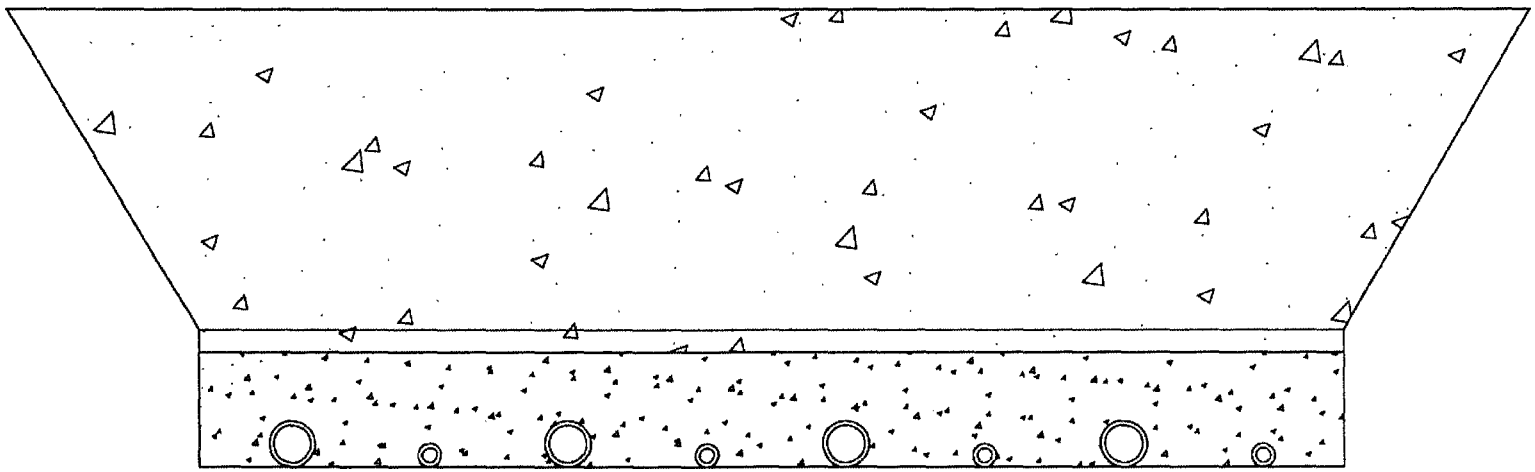
ConocoPhillips
Mid Continent Business Unit

PRMU FLOW LINE R-O-W
STAMPEDE 34 FEDERAL COM
W3 05H, W2 06H, W1 07H, TC 08H

JOB NO:	SUB JOB NO:	DRAWING NO:	SHEET:	REV:
-	-	STAMPEDE_34_COM_W3_5H_W2_6H_W1_7H_TC_8H	1 OF 1	A

BACKFILL AROUND PIPE

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



BACKFILL DIRT TO BE AS FREE OF ROCKS AND LARGE PARTICLES AS POSSIBLE

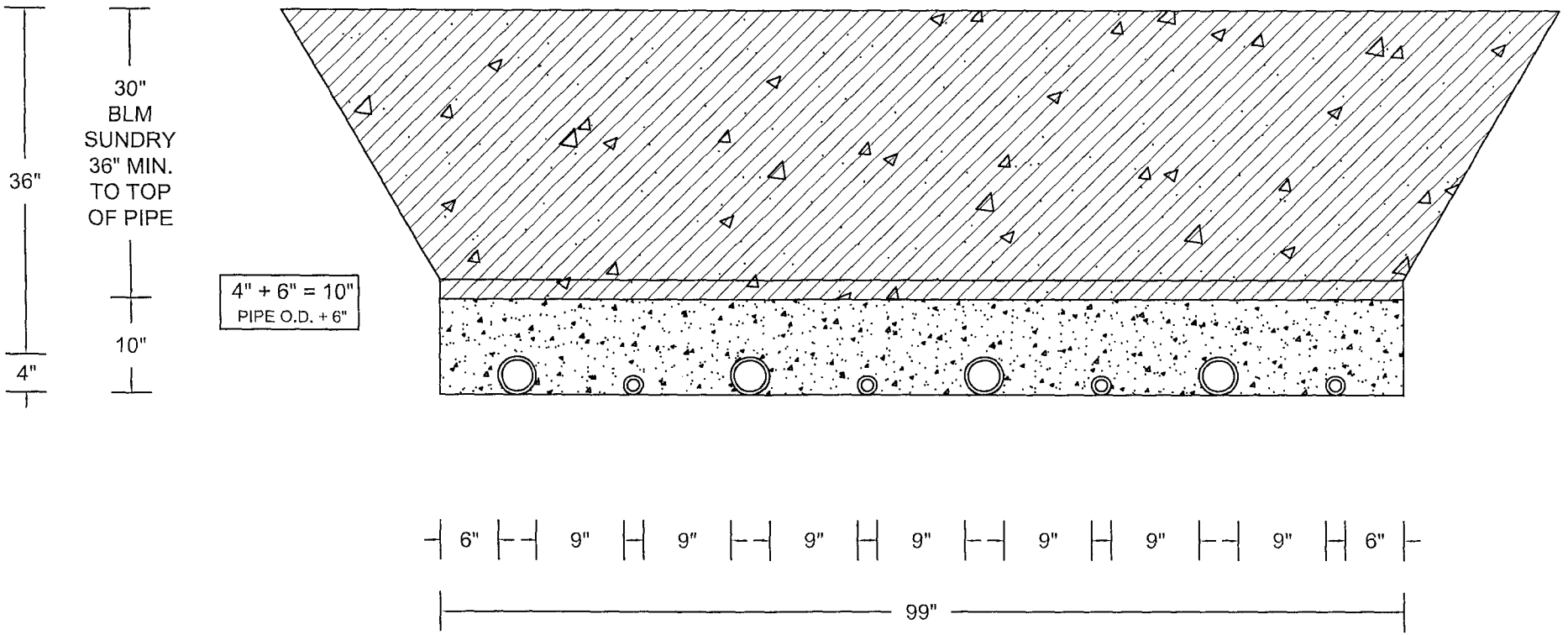
FLOW LINE WILL BE 4" COATED STEEL PIPE w/ AN OPERATING PRESSURE UP TO 1480# PSI.

GAS SUPPLY LINE WILL BE 2" STEEL PIPE w/ AN OPERATING PRESSURE UP TO 1100# PSI.

SOFT FILL DIRT OR SAND WITH NO ROCKS OR SOLID PARTICLES GREATER THAN 1" IN CIRCUMFERENCE

BACKFILL AROUND PIPE

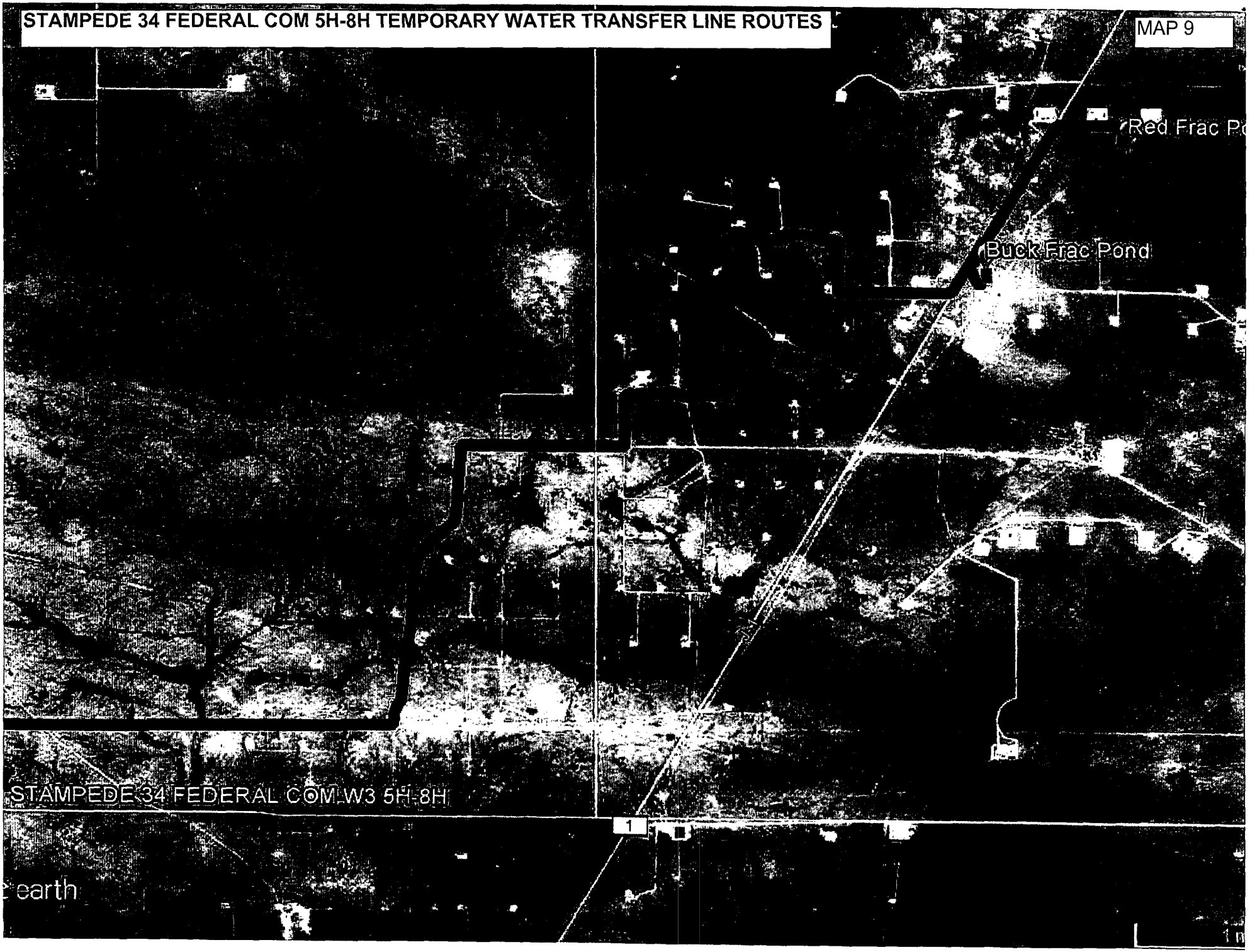
STAMPEDE 34 FEDERAL COM W3 05H, STAMPEDE 34 FEDERAL COM W2 06H, STAMPEDE 34 FEDERAL COM W1 07H, STAMPEDE 34 FEDERAL COM TC 08H



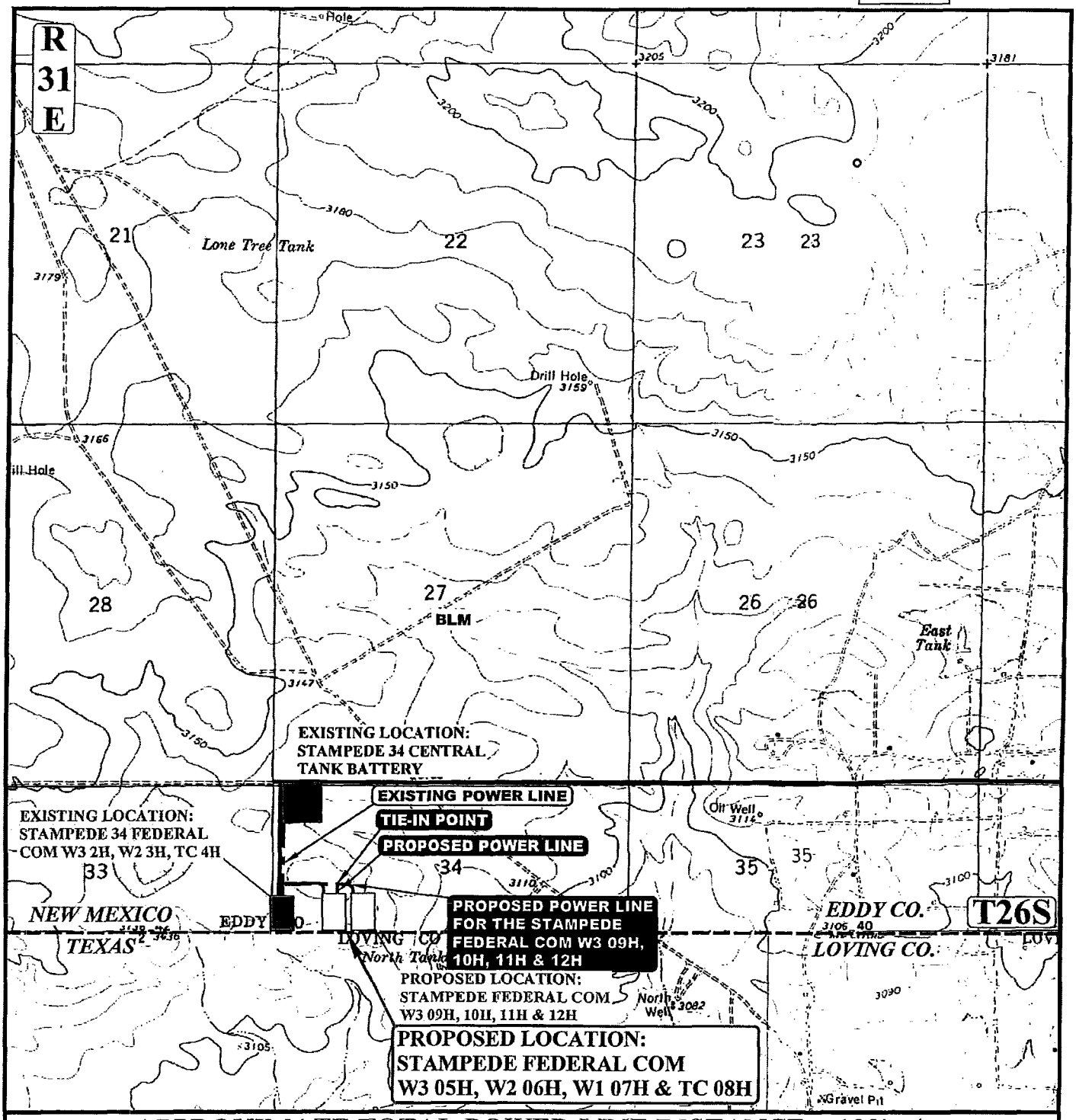
ALTERNATING 4" PIPE (FLOW LINE) + 2" PIPE (GAS LIFT)

6" CLEARANCE AT BOTH ENDS

9" CLEARANCE BETWEEN EACH PIPE


STAMPEDE 34 FEDERAL COM 5H-8H TEMPORARY WATER TRANSFER LINE ROUTES
MAP 9
Red Frac P
Buck Frac Pond
STAMPEDE 34 FEDERAL COM W3 5H-8H
1
earth

MAP 10



APPROXIMATE TOTAL POWER LINE DISTANCE = 132' +/-

NOTE: PARCEL DATA SHOWN HAS BEEN OBTAINED FROM VARIOUS SOURCES AND SHOULD BE USED FOR MAPPING, GRAPHIC AND PLANNING PURPOSES ONLY. NO WARRANTY IS MADE BY UINTAH ENGINEERING AND LAND SURVEYING (UELS) FOR ACCURACY OF THE PARCEL DATA.

LEGEND:

- PROPOSED ROAD
- PROPOSED POWER LINE
- EXISTING POWER LINE
- PROPOSED POWER LINE (SERVICING OTHER WELLS)

N

ConocoPhillips Company

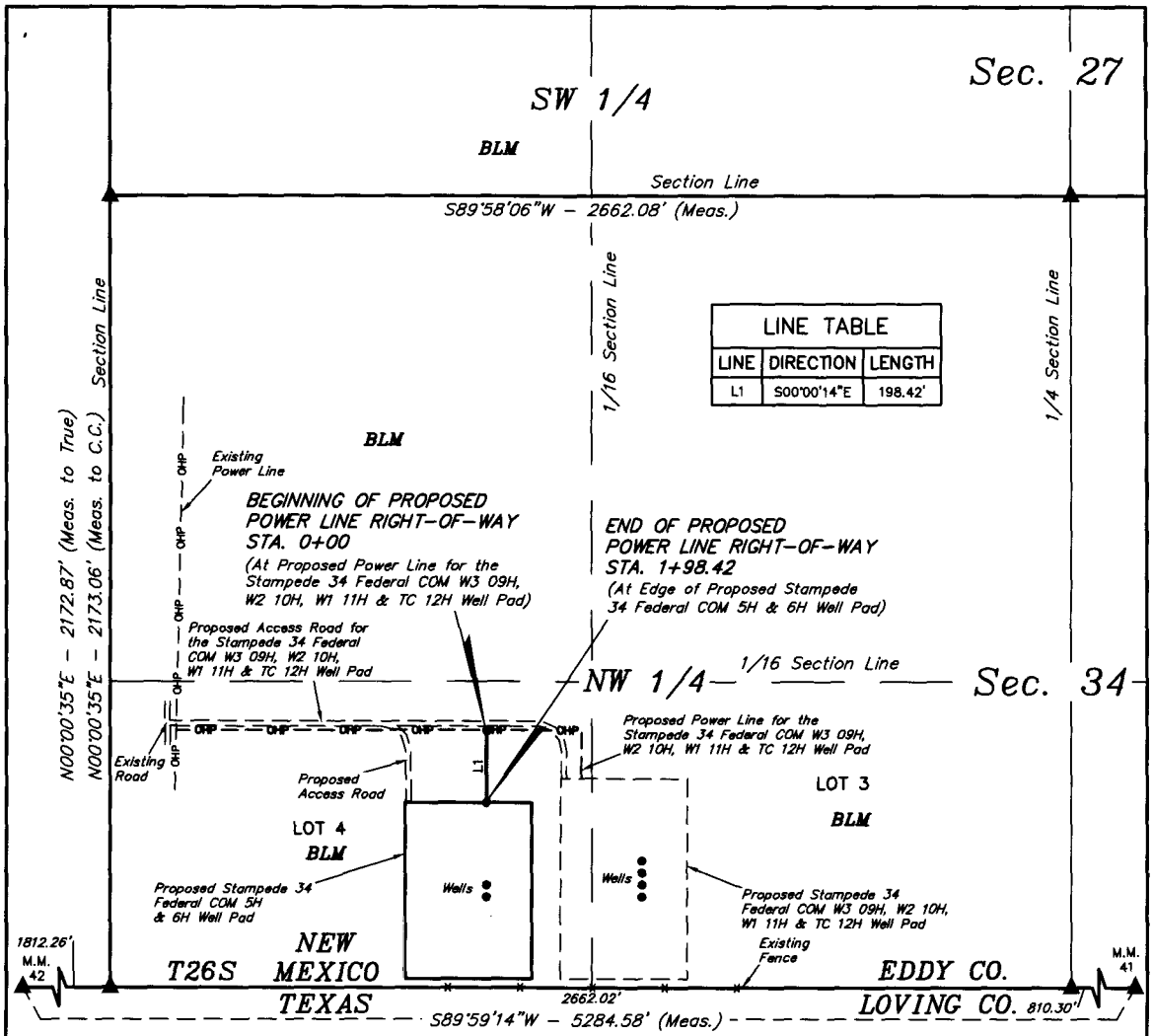
STAMPEDE 34 FEDERAL COM W3 05H, W2 06H, W1 07H & TC 08H
SECTION 34, T26S, R31E, N.M.P.M.
LOT 4
BLM

DRAWN BY: Z.H.F.	DATE DRAWN: 08-12-14
SCALE: 1" = 2000'	REVISED: 10-27-14 Z.H.F.

POWER LINE MAP **TOPO E**

UINTAH ENGINEERING & LAND SURVEYING

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



POWER LINE RIGHT-OF-WAY DESCRIPTION

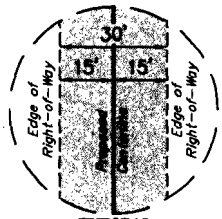
A 30' WIDE RIGHT-OF-WAY 15' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

BEGINNING AT A POINT IN LOT 4 OF SECTION 34, T26S, R31E, N.M.P.M., WHICH BEARS N55°48'20"E 1257.44' FROM THE SOUTHWEST CLOSING CORNER OF SAID SECTION 34, THENCE S00°00'14"E 198.42' TO A POINT IN LOT 4 OF SAID SECTION 34, WHICH BEARS N63°57'24"E 1157.63' FROM THE SOUTHWEST CLOSING CORNER OF SAID SECTION 34. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 0.137 ACRES MORE OR LESS.

BEGINNING OF POWER LINE STA. 0+00 BEARS N55°48'20"E 1257.44' FROM THE SOUTHWEST CLOSING CORNER OF SECTION 34, T26S, R31E, N.M.P.M.

END OF POWER LINE STA. 1+98.42 BEARS N63°57'24"E 1157.63' FROM THE SOUTHWEST CLOSING CORNER OF SECTION 34, T26S, R31E, N.M.P.M.

400' 200' 0' 400'



TYPICAL RIGHT-OF-WAY DETAIL
NO SCALE

RIGHT-OF-WAY LENGTHS			
PROPERTY OWNER	FEET	ACRES	RODS
BLM NW 1/4 SEC. 34	198.42	0.137	12.03

▲ = SECTION CORNERS LOCATED.

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS MADE FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

NEW MEXICO PROFESSIONAL SURVEYOR 12446 NELSON J. MARSHALL

REGISTERED LAND SURVEYOR
REGISTRATION NO. 12446
STATE OF NEW MEXICO

06-30-15

NOTES:

N

ConocoPhillips Company

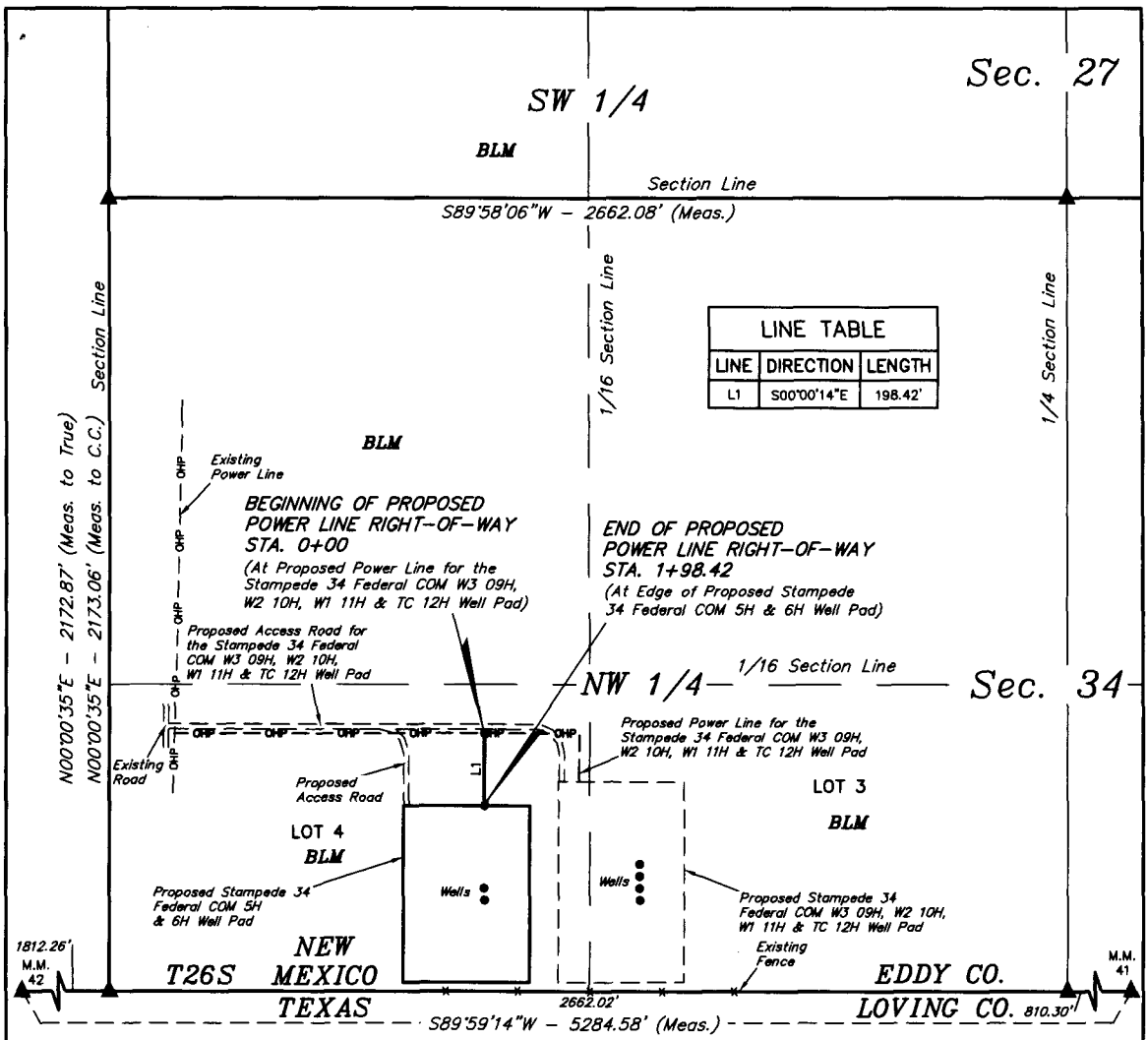
STAMPEDE 34 FEDERAL COM 5H & 6H
SECTION 34, T26S, R31E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

DRAWN BY: S.F.	DATE DRAWN: 07-22-14
SCALE: 1" = 400'	REVISED: 06-25-15

POWER LINE R-O-W

UINTAH ENGINEERING & LAND SURVEYING

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



POWER LINE RIGHT-OF-WAY DESCRIPTION

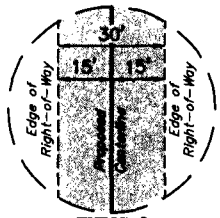
A 20' WIDE RIGHT-OF-WAY 10' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

BEGINNING AT A POINT IN LOT 4 OF SECTION 34, T26S, R31E, N.M.P.M., WHICH BEARS N55°48'20"E 1257.44' FROM THE SOUTHWEST CLOSING CORNER OF SAID SECTION 34, THENCE S00°00'14"E 198.42' TO A POINT IN LOT 4 OF SAID SECTION 34, WHICH BEARS N63°57'24"E 1157.63' FROM THE SOUTHWEST CLOSING CORNER OF SAID SECTION 34. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 0.137 ACRES MORE OR LESS.

BEGINNING OF POWER LINE STA. 0+00 BEARS N55°48'20"E 1257.44' FROM THE SOUTHWEST CLOSING CORNER OF SECTION 34, T26S, R31E, N.M.P.M.

END OF POWER LINE STA. 1+98.42 BEARS N63°57'24"E 1157.63' FROM THE SOUTHWEST CLOSING CORNER OF SECTION 34, T26S, R31E, N.M.P.M.

400' 200' 0' 400'



TYPICAL RIGHT-OF-WAY DETAIL
NO SCALE

RIGHT-OF-WAY LENGTHS			
PROPERTY OWNER	FEET	ACRES	RODS
BLM NW 1/4 SEC. 34	198.42	0.137	12.03

▲ = SECTION CORNERS LOCATED.

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF

STATE OF NEW MEXICO 12446 PROFESSIONAL SURVEYOR MELVIN L. MARSHALL

REGISTERED LAND SURVEYOR
REGISTRATION NO. 12446
STATE OF NEW MEXICO

06-30-15

NOTES:

N

ConocoPhillips Company

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

DRAWN BY: S.F.	DATE DRAWN: 07-22-14
SCALE: 1" = 400'	REVISED: 06-25-15

POWER LINE R-O-W

UINTAH ENGINEERING & LAND SURVEYING

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

MAP 12

Conoco Phillips

STAMPEDE 34 FEDERAL COM W2 6H

1 Mile Radius Map

0 2,389 4,778

FEET

POSTED WELL DATA

Well Name

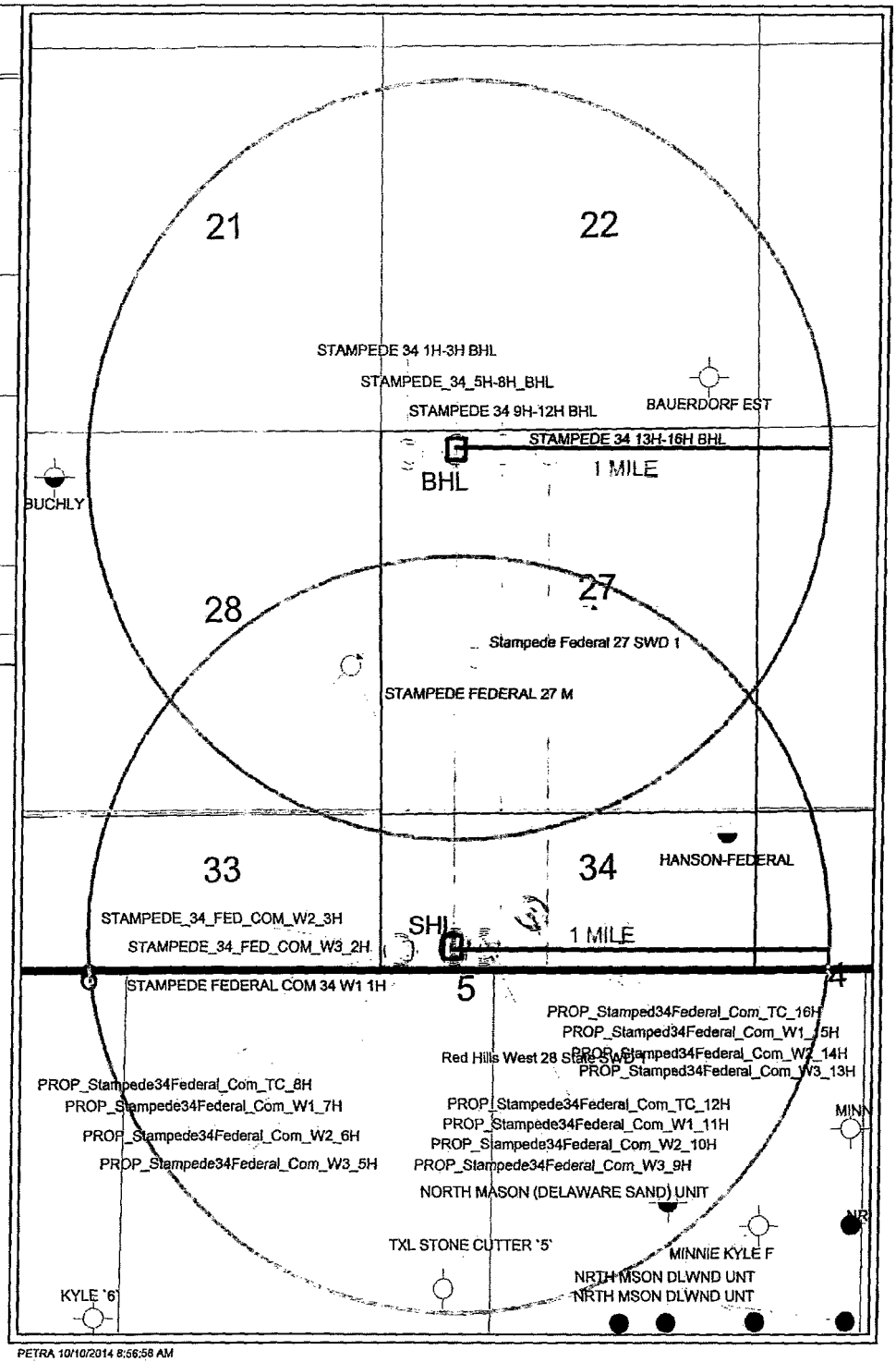
WELL SYMBOLS

- Location Only
- Oil Well
- Dry Hole
- Temporarily Abandoned
- Dry Hole, With Show of Oil
- Injection Well

REMARKS

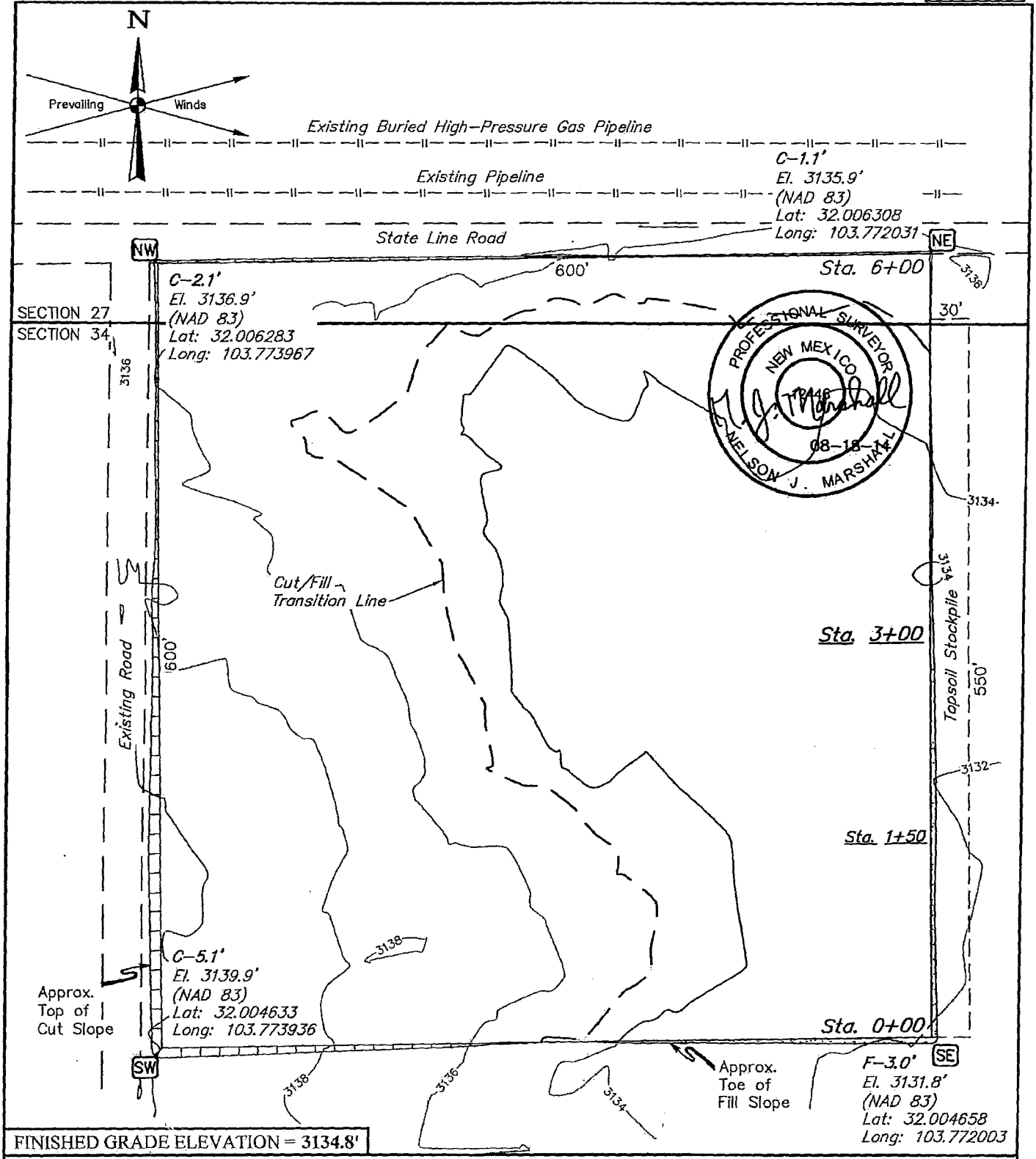
PROP - signifies the proposed well head location.

October 10, 2014



PETRA 10/10/2014 8:56:58 AM

MAP 13



FINISHED GRADE ELEVATION = 3134.8'

NOTES:

- Contours shown at 2' intervals.
- Underground utilities shown on this sheet are for visualization purposes only, actual locations to be determined prior to construction.

ConocoPhillips Company

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

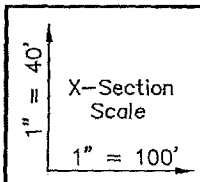
UINTAH ENGINEERING & LAND SURVEYING

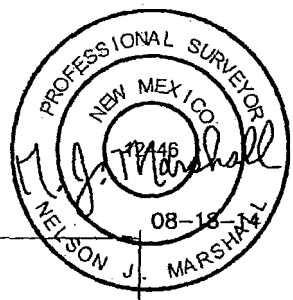
UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

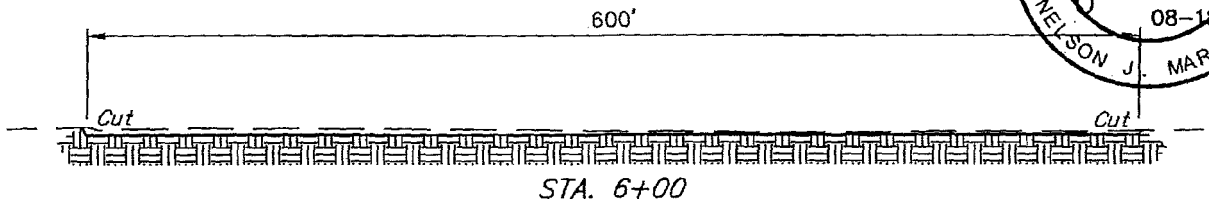
DRAWN BY: S.F.	DATE DRAWN: 04-02-14
SCALE: 1" = 100'	REVISED: 08-18-14 S.F.

LOCATION LAYOUT FIGURE #1

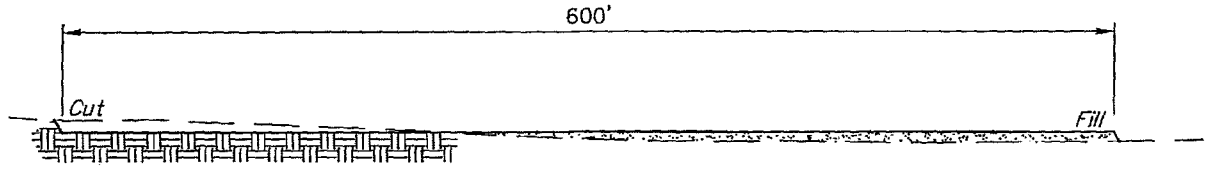
MAP 14



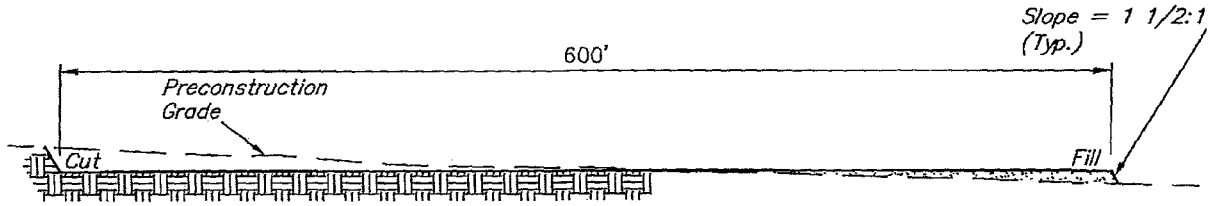




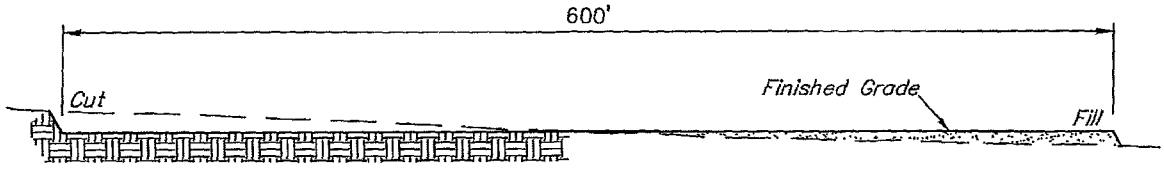
STA. 6+00



STA. 3+00



STA. 1+50



STA. 0+00

APPROXIMATE EARTHWORK QUANTITIES	
(3") TOPSOIL STRIPPING	3,410 Cu. Yds.
REMAINING LOCATION	10,540 Cu. Yds.
TOTAL CUT	**13,950 Cu. Yds.**
FILL	**10,540 Cu. Yds.**
EXCESS MATERIAL	3,410 Cu. Yds.
TOPSOIL	3,410 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	**0 Cu. Yds.**

APPROXIMATE SURFACE DISTURBANCE AREAS		
	DISTANCE	ACRES
WELL SITE DISTURBANCE	NA	±8.441
50' WIDE PIPELINE R-O-W DISTURBANCE	±86.93'	±0.100
TOTAL SURFACE USE AREA	**±86.93'**	**±8.541**

NOTES:
- Fill quantity includes 5% for compaction.

ConocoPhillips Company

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

UINTAH ENGINEERING & LAND SURVEYING

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

DRAWN BY: J.T.	DATE DRAWN: 04-02-14
SCALE: AS SHOWN	REVISED: 08-18-14 S.F.

TYPICAL CROSS SECTIONS FIGURE #2

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.

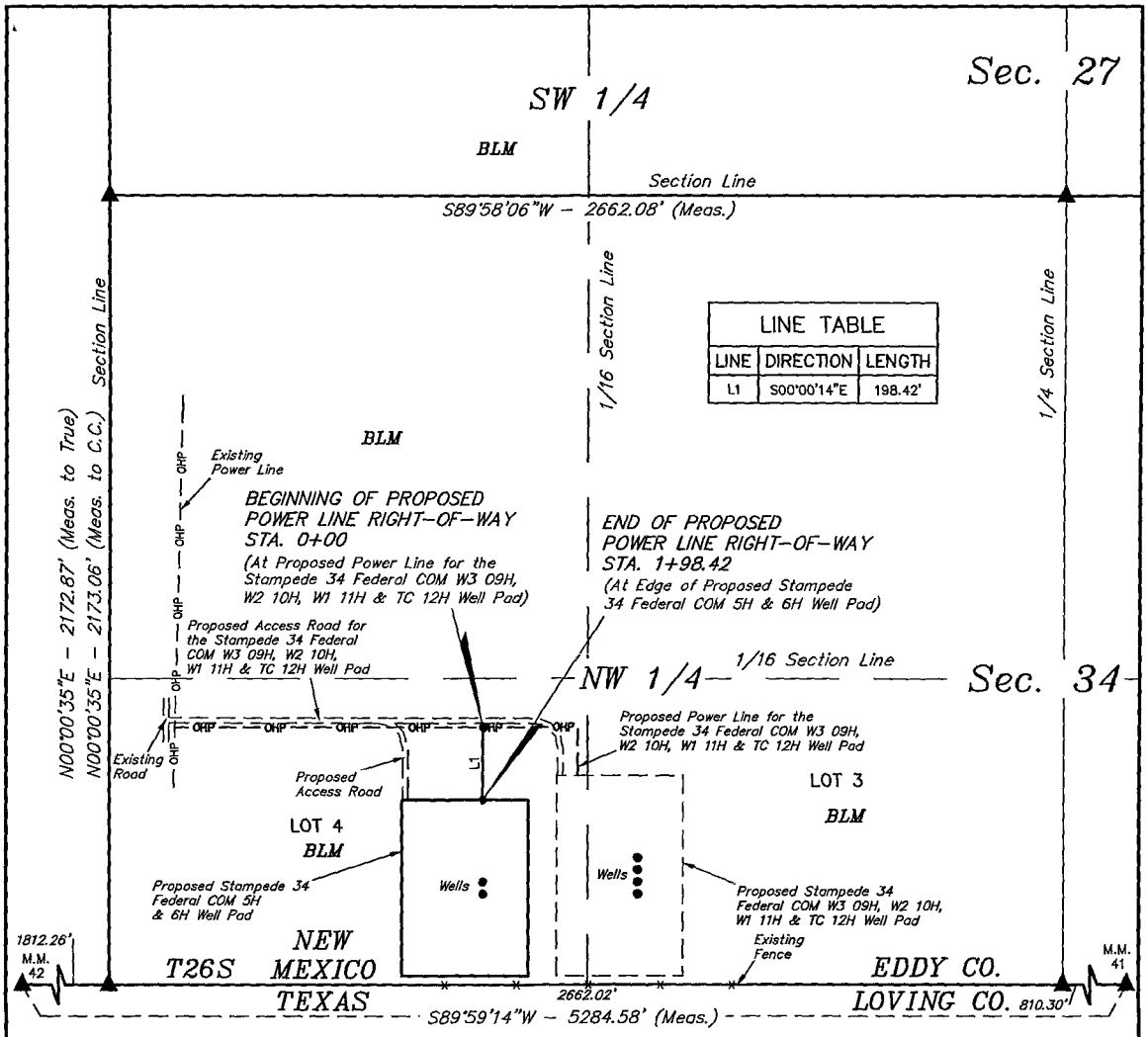
ConocoPhillips Company

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



POWER LINE RIGHT-OF-WAY DESCRIPTION

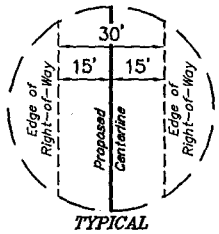
A 20' WIDE RIGHT-OF-WAY 10' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

BEGINNING AT A POINT IN LOT 4 OF SECTION 34, T26S, R31E, N.M.P.M., WHICH BEARS N55°48'20"E 1257.44' FROM THE SOUTHWEST CLOSING CORNER OF SAID SECTION 34, THENCE S00°00'14"E 198.42' TO A POINT IN LOT 4 OF SAID SECTION 34, WHICH BEARS N63°57'24"E 1157.63' FROM THE SOUTHWEST CLOSING CORNER OF SAID SECTION 34. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. BASIS OF BEARINGS IS A G.P.S. OBSERVATION. CONTAINS 0.137 ACRES MORE OR LESS.

BEGINNING OF POWER LINE STA. 0+00 BEARS N55°48'20"E 1257.44' FROM THE SOUTHWEST CLOSING CORNER OF SECTION 34, T26S, R31E, N.M.P.M.

END OF POWER LINE STA. 1+98.42 BEARS N63°57'24"E 1157.63' FROM THE SOUTHWEST CLOSING CORNER OF SECTION 34, T26S, R31E, N.M.P.M.

400' 200' 0 400'



TYPICAL RIGHT-OF-WAY DETAIL
NO SCALE

RIGHT-OF-WAY LENGTHS			
PROPERTY OWNER	FEET	ACRES	RODS
BLM NW 1/4 SEC. 34	198.42	0.137	12.03

▲ = SECTION CORNERS LOCATED.

CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

NEW MEXICO PROFESSIONAL SURVEYOR 12446

REGISTERED LAND SURVEYOR
REGISTRATION NO. 12446
STATE OF NEW MEXICO

06-30-15

NOTES:

N

ConocoPhillips Company

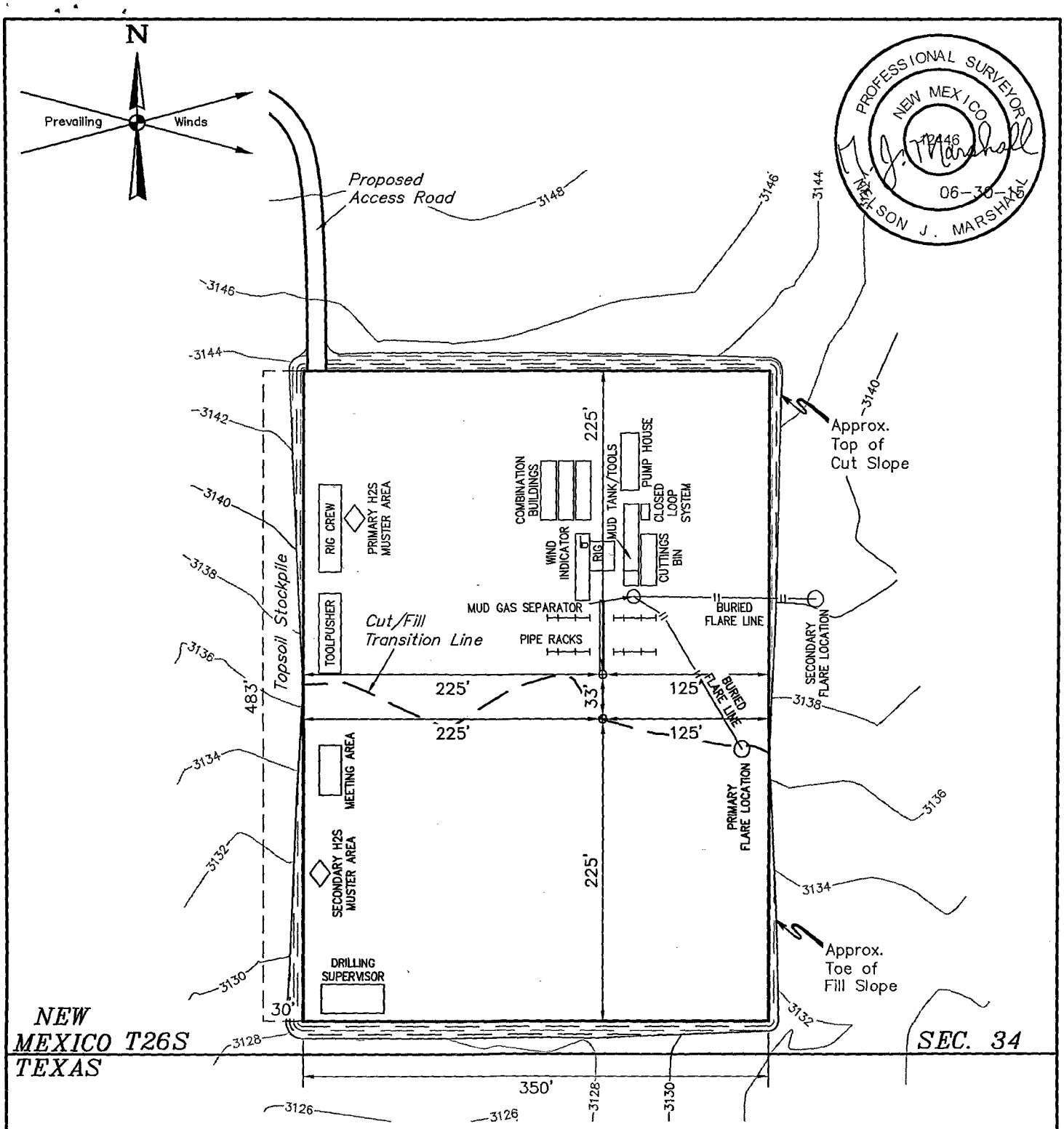
STAMPEDE 34 FEDERAL COM 5H & 6H
SECTION 34, T26S, R31E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

DRAWN BY: S.F.	DATE DRAWN: 07-22-14
SCALE: 1" = 400'	REVISED: 06-25-15

POWER LINE R-O-W

UINTAH ENGINEERING & LAND SURVEYING

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



NOTES:

- Contours shown at 2' intervals.
- May have different number of Pump Houses and Combination Buildings.

ConocoPhillips Company

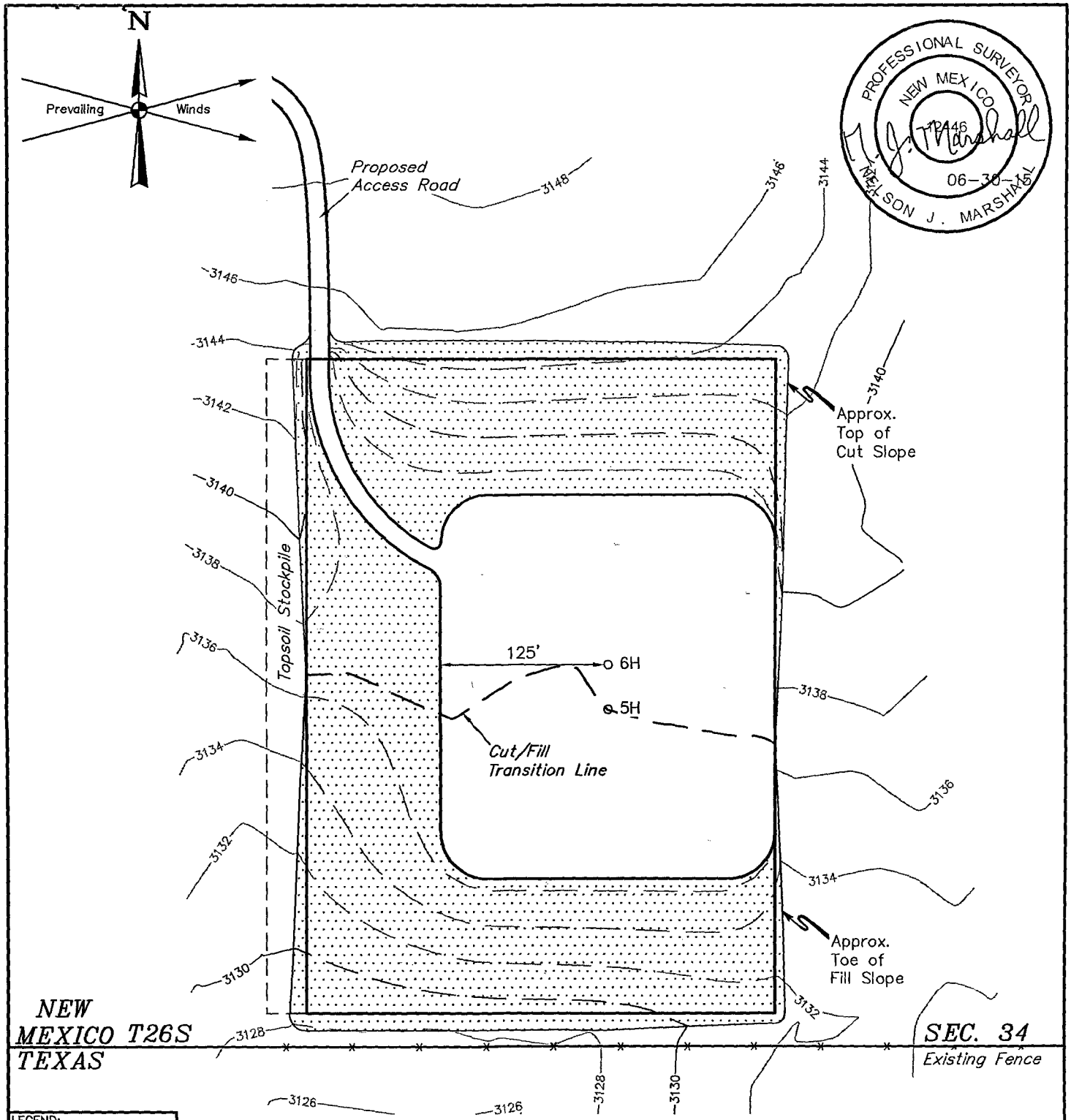
STAMPEDE 34 FEDERAL COM 5H & 6H
LOT 4, SECTION 34, T26S, R31E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

UINTAH ENGINEERING & LAND SURVEYING

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

DRAWN BY: S.F.	DATE DRAWN: 07-22-14
SCALE: 1" = 100'	REVISED: 06-25-15

TYPICAL RIG LAYOUT FIGURE #3



APPROXIMATE UN-RECLAIMED ACREAGE = ±1.661 ACRES

NOTES:

- Contours shown at 2' intervals.

ConocoPhillips Company

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

UINTAH ENGINEERING & LAND SURVEYING

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

DRAWN BY: S.F.	DATE DRAWN: 07-22-14
SCALE: 1" = 100'	REVISED: 06-25-15

RECLAMATION DIAGRAM FIGURE #4

Sundry Notice Request
ConocoPhillips Company
Red Hills West; Wolfcamp
Stampede 34 Federal COM 6H

Lea County, New Mexico

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

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

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

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

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

DEPTH (FT)	TYPE	Density (ppg)	FV (sec/qt)	API Fluid Loss (cc/30 min)	pH	Vol (bbl)
0 – 1,010	Fresh Water or Fresh Water Native Mud in Steel Pits	8.5 – 9.0	28 – 40	N.C.	N.C.	700
1010 – 4,075	Oil Base Mud or Brine (Saturated $NaCl_2$) in Steel Pits	8.9 – 10.5	28 – 40	N.C.	10 – 11	700 – 1500
4,075 – 11,400	Oil Base Mud or Brine (Saturated NaCl2) in Steel Pits with Wellbore Strengthening Material (25 – 30 ppb SureSeal)	8.9 – 10.5	28 – 40	5 – 10	10 – 11	1500 – 2300
11,400 – TD	Oil Base Mud (O:W 80/20) in Steel Pits	13.5 – 15.0	18 – 30	1 – 3	N.C.	1500 – 2000

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

All Tubulars used for this design will be new. A multi-bowl system will be utilized. **Option Not to Run 9-5/8" will be as follows:**

Hole Size (in)	Casing (in)	Wt/Ft	Grade	Connection	Thread & Cplg OD	Depth (ft)	Depth (ftTVD)	Depth (ftMD)	BOPE System
17 1/2	13 3/8	54.5	J-55	BTC	14.375	0-1010	1010	1010	N/A
12 1/4	***9 5/8***	***40***	***L-80***	***BTC***	***10.625***	***0-4075***	***4075***	***4075***	***5M***
9-7/8 or 8-3/4	7 5/8	29.7	P-110	BTC or Tenaris W523	7.752	0-11400	11322	11400	5M
6 3/4	5	18	P-110	Tenaris Blue/TXP	5.720	0-18650	11322	18650	10M

Minimum casing design factors: Burst 1.0, Collapse 1.125, Tensile Strength 1.6 Dry / 1.0 Buoyant

Hole Size (in)	Casing (in)	Burst	Collapse	Tension	Minimum Clearance
17 1/2	13 3/8	5.59	2.31	18.1	1.5625
12 1/4	***9 5/8***	***2.58***	***1.39***	***6.69***	***0.8125***
9-7/8 or 8 3/4	7-5/8	1.53	**1.7	3.40	0.4990
6 3/4	5	1.67	1.61	3.57	0.515

***COP Collapse Design*

1/3 Partial Evacuation to Next Csg

		Volume (sx)	Type	Weight (ppg)	Yield (ft3/sx)	Water (Gal/sx)	Excess	Cement Top
	Lead	530	Class C	13.6	1.73	10.88	>100%	Surface
Surface	*Tail*	310	Class C	14.8	1.35	6.39	>100%	710 ft
Additives (BWOB): 4% Extender, 2% CaCl2, 0.125 lb/sx LCM, 0.2% Anti-Foam								
	Lead	***1430***	***Tuned Light***	***11.9***	***1.91***	***11.85***	***>100%***	***Surface***
Intermediate 1	***Tail***	***380***	***Class C***	***14.8***	***1.33***	***8.23***	***>100%***	***3475ft***
Additives (BWOB): 4% Extender, 2% CaCl2, 0.125 lb/sx LCM, 0.2% Anti-Foam								
	Lead	900	Tuned Light	9.7	2.44	9.116	>30%	Surface
Intermediate 2	*Tail*	140	TXI	13.2	1.53	7.474	>30%	10800ft
Additives (BWOB): 0.4% Dispersant, 1 lb/sx Salt, 0.1% Retarder, 0.5% Fluid Loss, 3 lb/sx LCM								
	Lead							
Production	*Tail*	750	Class H	15	1.14	3.216	>35%	10900ft
Additives (BWOB): 0.4% Retarder, 0.2% Anti-foam, 0.7 Anti-gelling, 0.4% Fluid Loss, 2% Expanding Agent, 5.0% Silica								

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

Attachments:

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

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

ConocoPhillips, STAMPEDE 34 FEDERAL COM W2 06H

1. Geologic Formations

TVD of target	11,952	Pilot hole depth	N/A
MD at TD:	18,787	Deepest expected fresh water:	300

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Base of Fresh Water	300	Water	
Rustler	985	Water	
Top of Salt / Salado	1,455	Salt	
Castile	1,650	Salt	
Delaware Top / Base Salt	3,930	Oil/Gas	Loss of Circulation
Ford Shale	4,075	Oil/Gas	
Cherry Canyon	4,875	Oil/Gas	Loss of Circulation
Brushy Canyon	6,255	Oil/Gas	Loss of Circulation
Bone Springs	7,650	Oil/Gas	
Bone Springs 3rd Carb	9,915	Oil/Gas	
WolfCamp	11,120	Oil/Gas	
WolfCamp 1	11,280	Oil/Gas	
WolfCamp 2	11,685	Target Zone	

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

2. Casing Program

See COA's

Hole Size	Casing Interval From	Casing Interval To	Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
17.50"	0	~~1,010~~ 960'	13.375"	54.5	J55	BTC	2.36	5.71	18.0
12.25"	0	~~4,095~~ 3925'	9.625"	40.0	L80	BTC	1.44	2.68	6.62
8.75"	0	11,345	7.625"	33.7	P110	TenW523	1.44	1.98	3.26
6.625"	0	11,345	5.0"	21.4	P110	TenBlue	2.13	2.13	3.61
	11,345	18,787	4.5"	15.1	P110	TXPBTC	1.64	1.64	3.39
				BLM Minimum Safety Factor			1.125	1	1.6 Dry 1.8 Wet

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

Must have table for contingency casing

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	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 justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	Y
If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing?	Y
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

3. Cementing Program

Casing	# Sks	Wt. lb/ Gal	Yld ft3/ sack	H_20 gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	590	13.7	1.68	8.684	7	Lead: Class C + 4.0% Bentonite + 0.2% Anti-Foam + 2.0% CaCl2 +0.125lb/sk LCM + 0.1% Dispersant.
	310	14.8	1.35	6.349	7	Tail: Class C + 0.2% Anti-Foam + 0.1% Lost Circ Control + 2 lbs/bbl CemNET (losses Control)
Inter. 1	1,010	11.9	2.58	15.392	10	Lead: Class C + 8.0% Bentonite + 0.2% Anti-Foam + 0.125lb/sk LCM + 0.2% Dispersant + 0.2% Retarder + 2 lbs/bbl CemNET (losses Control).
	420	14.8	1.35	6.199	5	Tail: Class C + 0.2% Anti-Foam + 0.3% Retarder + 0.5% Extender + 2 lbs/bbl CemNET (losses Control).
	DV/ECP Tool: NO					
Inter. 2	670	9.7	2.44	9.116	17	Lead: LiteCRETE + 22.0 lb/sk Extender + 0.2% Anti-Foam + 0.3% Retarder + 0.3% Fluid Loss + 0.3% Dispersant + 2 lbs/bbl CemNET (losses Control).
	140	13.2	1.53	7.474	8	Tail: TXI + 0.9% Gas Control + 9.0% Extender + 0.5% Dispersant + 0.5% Retarder + 0.2% Anti-Foam 0.25 lb/sk Lost Circ Control + 3.0% Expanding Agent + 2 lbs/bbl CemNET (losses Control).
	DV/ECP Tool 8,000' (OPTIONAL)					
See COA	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).
Prod.	1,470	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/ECP Tool NO'					

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	TOC	% Excess
Surface	0'	100%
Intermediate 1	0'	120%
Intermediate 2	~~3,495'~~ See COA's	100%
Production	10,345'	35%

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

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

4. Pressure Control Equipment

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?	Size?	Min. Required WP	Type	✓	Tested to:
12-1/4"	13-5/8"	5M	Annular	x	50% of working pressure
			Blind Ram	x	5M
			Pipe Ram	x	
			Double Ram	x	
			Other*		
See COA's 8-3/4"	13-5/8"	5M	Annular	x	50% testing pressure
			Blind Ram	x	5M
			Pipe Ram	x	
			Double Ram	x	
			Other *		
6-5/8"	13-5/8"	10M	Annular	x	50% testing pressure
			Blind Ram	x	10M
			Pipe Ram	x	
			Double Ram	x	
			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.
X	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
	Y /N | Are anchors required by manufacturer?
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. • Provide description here See attached schematic.

See COA

See COA

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	~~1,010~~ 960'	Spud Mud	8.6-9.3	32-36	N/C
~~1,010~~	~~4,095~~ 3925'	Brine	9.3-10.2	28-30	≤5
~~4,095~~	11,345	Cut Brine	8.6-9.2	30-40	≤5
11,345	18,787	Oil Base Mud	12.0-14.5	30-40	≤5

See COA

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

6. Logging and Testing Procedures

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

Additional logs planned		Interval
	Resistivity	
	Density	
	CBL	
	Mud log	
	PEX	

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	6,693 psi
Abnormal Temperature	No

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

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

8. Other facets of operation

Is this a walking operation? If yes, describe. Yes, please see below.
Will be pre-setting casing? If yes, describe. Yes, please see below.

Spudder Rig and Skid Operations: Depending on rir availability, ConocoPhillips may pre-set 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.

See COA's

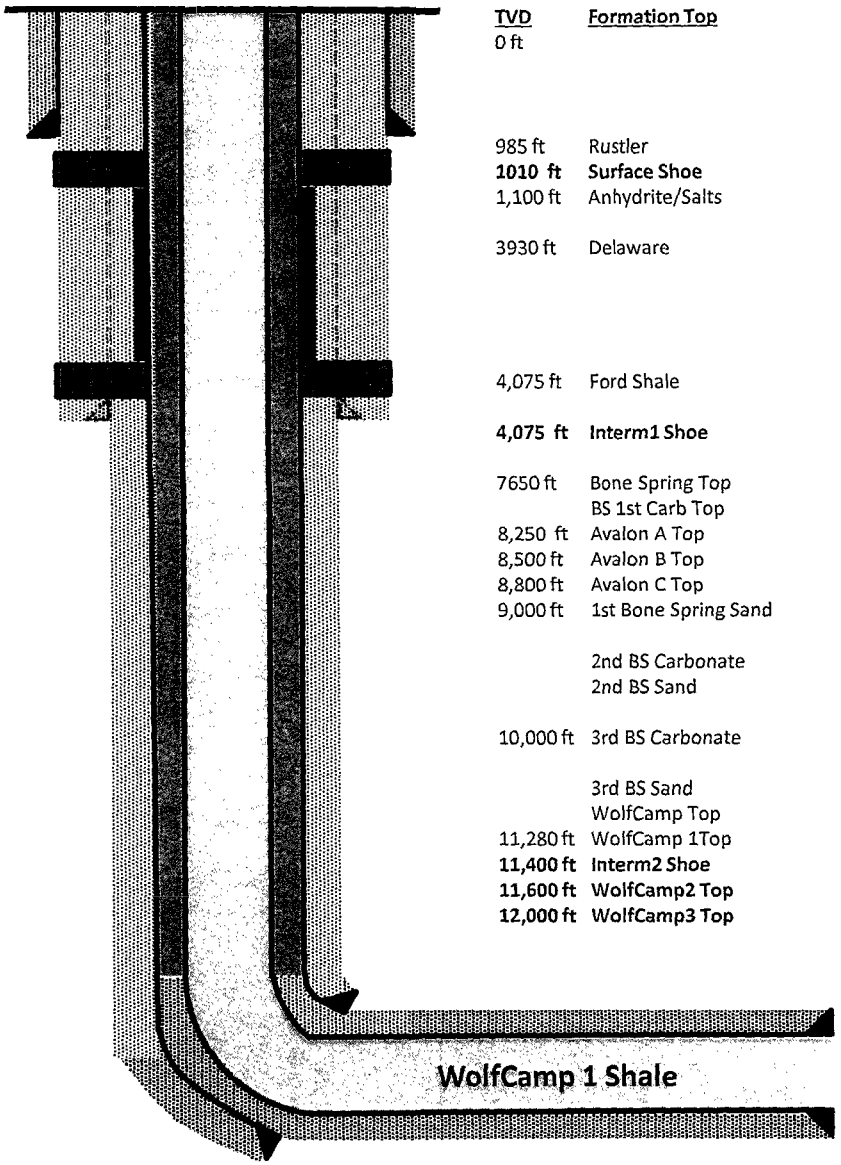
Drilling operation will start with a big Drilling Rig (H&P Flex 3 rig type) and an approved BOP stack will be nippled up and tested on the wellhead before drilling operations resumes on each well. The rig will skid between the wells until each well's section has been drilled as planned (see Attachment #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 #2 – Option not to run 9-5/8" Csg



TVD	Formation Top
0 ft	
985 ft	Rustler
1010 ft	**Surface Shoe**
1,100 ft	Anhydrite/Salts
3930 ft	Delaware
4,075 ft	Ford Shale
4,075 ft	**Interm1 Shoe**
7650 ft	Bone Spring Top
	BS 1st Carb Top
8,250 ft	Avalon A Top
8,500 ft	Avalon B Top
8,800 ft	Avalon C Top
9,000 ft	1st Bone Spring Sand
	2nd BS Carbonate
	2nd BS Sand
10,000 ft	3rd BS Carbonate
	3rd BS Sand
	WolfCamp Top
11,280 ft	WolfCamp 1Top
11,400 ft	**Interm2 Shoe**
11,600 ft	**WolfCamp2 Top**
12,000 ft	**WolfCamp3 Top**

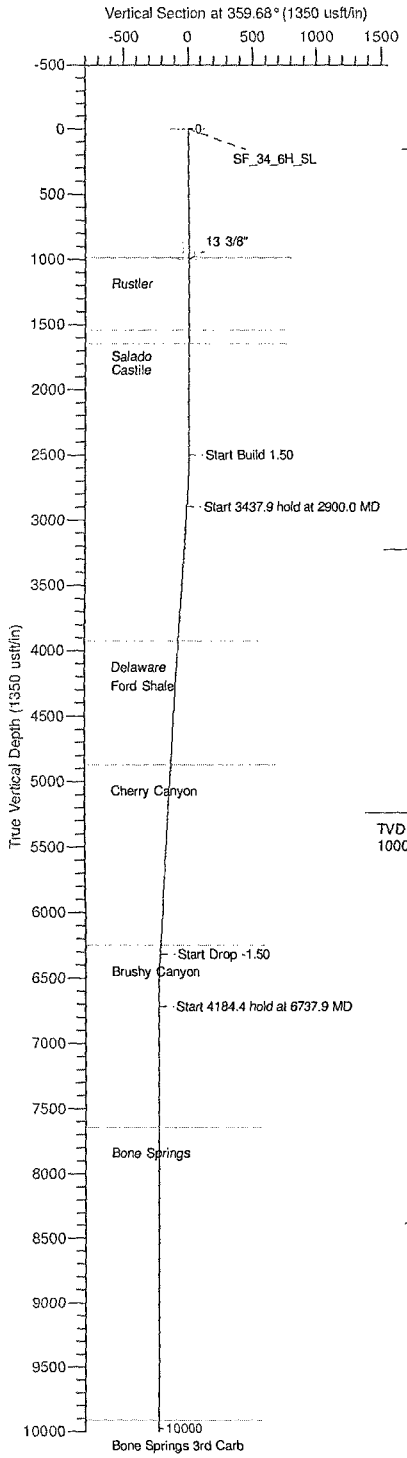
18,650 ft TD
~6,500 ft Lateral

- Surface Section:
  - Objective: Protect fresh water horizons.
  - Drill 17-1/2" hole to +/- 1010 ft. "Rustler"
  - Mud weight: 8.6 – 9.1 ppg FW-Native Mud
  - **Set 13-3/8" 54.5# J-55 BTC casing.**
  - Cement to surface.
- ***Intermediate1 Section (Only for Contingency):***
  - ***Objective: Isolate the Salado Salt and Delaware Sand interval.***
  - ***Drill 12-1/4" hole to +/- 4,075 ft. "Ford Shale"***
  - ***Mud weight: 10.0 ppg Brine.***
  - ***Set 9-5/8" 40# L-80 BTC casing.***
  - ***Cement to surface.***
- Intermediate2 Section:
  - Objective: Isolate depleted/weak formations above WC1.
  - Drill 8-3/4" hole to +/- 11,400 ft. 50'-120' inside WC1 Top.
  - **Mud weight: 8.9 – 10.5 ppg Brine or OBM w/ 25 ppb WBS**
  - **Set 7-5/8" 29.7# P-110 Tenaris W523 casing.**
  - Cement to surface.
  - 2 or 3-Stage Contingency with 2ea. Packer/Stage Collars
  - Bond Coat ~ 3000' of Csg covering the Delaware Sands
- Production Section:
  - Objective: Provide zonal isolation of production interval and provide medium for stimulation.
  - Drill 6-3/4" hole to +/-18,000ft – 19,000ft. "Production TD"
  - Mud Weight: 12.5 – 15.2 ppg OBM.
  - **Set 5" 18# P-110 TenBlue/TXP casing.**
  - Cement lap 500 ft above previous shoe (near KOP).

ConocoPhillips

ConocoPhillips MCBU
Permian Delaware Hz New Mexico
STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS
STAMPEDE 34 FEDERAL COM 06H - PS
Original Hole
Plan: Prelim Design 1 (STAMPEDE 34 FEDERAL COM 06H - PS/Original Hole)
GRND + SKID @ 3164.0usft

Azimuths to Grid North
True North: -0.30°
Magnetic North: 7.06°
Magnetic Field
Strength: 48056.3snT
Dip Angle: 59.89°
Date: 7/13/2015
Model: BGGM2015



FORMATION TOPS ALONG WELLPATH

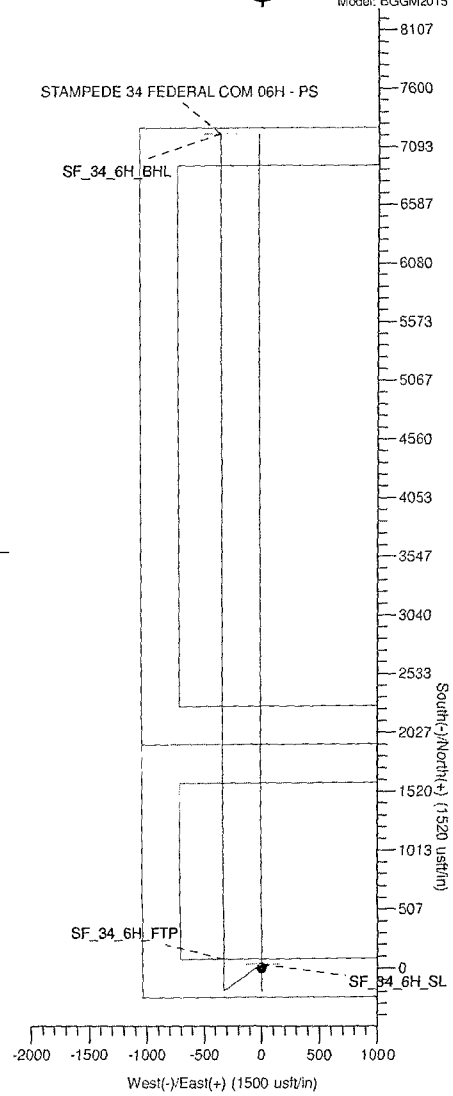
TVDPath	MDPath	Formation
985.0	985.0	Rustler
1544.0	1544.0	Salado
1649.0	1649.0	Castile
3927.0	3933.4	Delaware
4072.0	4079.2	Ford Shale
4872.0	4883.6	Cherry Canyon
6252.0	6271.2	Brushy Canyon
7647.0	7667.3	Bone Springs
9912.0	9932.3	Bone Springs 3rd Carb
11117.0	11142.7	Wolfcamp
11277.0	11331.1	Wolfcamp 1

PROJECT DETAILS: Permian Delaware Hz New Mexico

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
North Reference: Grid
System Datum: Mean Sea Level
To convert a True Direction to a Grid Direction, Subtract 0.30°
To convert a Magnetic Direction to a True Direction, Add 7.36° East
To convert a Magnetic Direction to a Grid Direction, Add 7.06°

CASING DETAILS

TVD	MD	Name	Size
1000.0	1000.0	13 3/8"	13-3/8

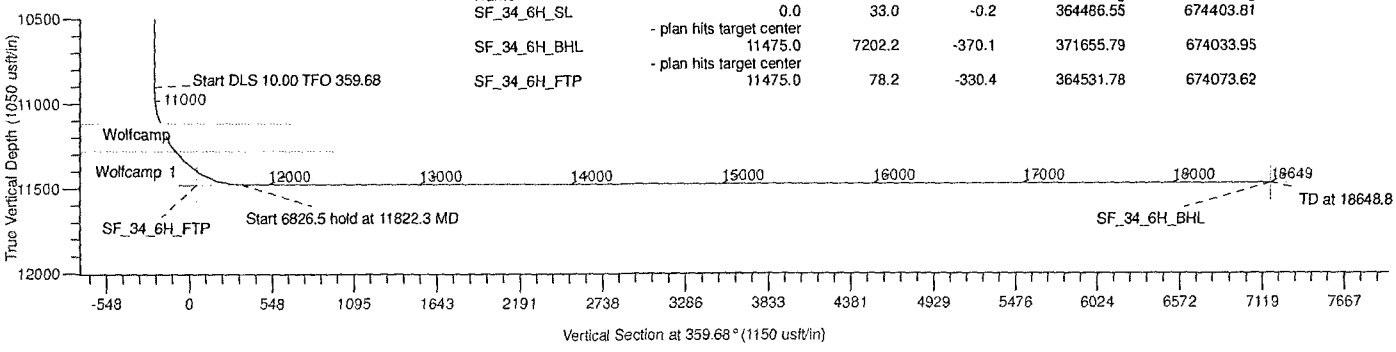


SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
1	0.0	0.00	0.00	0.0	33.0	-0.2	0.00	0.00	0.0	
2	2500.0	0.00	0.00	2500.0	33.0	-0.2	0.00	0.00	0.0	
3	2900.0	6.00	235.00	2899.3	21.0	-17.4	1.50	235.00	-11.9	
4	6337.9	6.00	235.00	6318.3	-185.2	-311.7	0.00	0.00	-216.4	
5	6737.9	0.00	0.00	6717.6	-197.2	-328.9	1.50	180.00	-228.3	
6	10922.3	0.00	0.00	10902.0	-197.2	-328.9	0.00	0.00	-228.3	
7	11822.3	90.00	359.68	11475.0	375.8	-332.1	10.00	359.68	344.7	
8	18648.8	90.00	359.68	11475.0	7202.2	-370.1	0.00	0.00	7171.2	

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting
SF_34_6H_SL	0.0	33.0	-0.2	364486.55	674403.81
SF_34_6H_BHL	- plan hits target center 11475.0	7202.2	-370.1	371655.79	674033.95
SF_34_6H_FTP	- plan hits target center 11475.0	78.2	-330.4	364531.78	674073.62



Created By: P E Strohmeier Date: 6:06, July 14 2015

ConocoPhillips MCBU

Permian Delaware Hz New Mexico
STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS
STAMPEDE 34 FEDERAL COM 06H - PS

Original Hole

Plan: Prelim Design 1

Standard Planning Report

14 July, 2015

Database:	EDM Central Planning	**Local Co-ordinate Reference:**	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H)
Company:	ConocoPhillips MCBU	**TVD Reference:**	GRND + SKID @ 3164.0usft
Project:	Permian Delaware Hz New Mexico	**MD Reference:**	GRND + SKID @ 3164.0usft
Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	**North Reference:**	Grid
Well:	STAMPEDE 34 FEDERAL COM 06H - PS	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Prelim Design 1		

Project	Permian Delaware Hz New Mexico, Mexico		
Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS, Section 34 and 27				
Site Position:		**Northing:**	364,453.59 usft	**Latitude:**	32° 0' 2.696 N
From:	Map	**Easting:**	674,404.02 usft	**Longitude:**	103° 46' 14.626 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16"	**Grid Convergence:**	0.30 °

Well	STAMPEDE 34 FEDERAL COM 06H - PS, Exploration - Horizontal					
Well Position	**+N/-S**	33.0 usft	**Northing:**	364,486.55 usft	**Latitude:**	32° 0' 3.023 N
	+E/-W	-0.2 usft	**Easting:**	674,403.81 usft	**Longitude:**	103° 46' 14.627 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,137.0 usft

Wellbore	Original Hole				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	BGGM2015	7/13/2015	7.36	59.89	48,056

Design	Prelim Design 1				
Audit Notes:					
Version:	1	**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0
Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**	
	0.0	33.0	-0.2	359.68	

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	33.0	-0.2	0.00	0.00	0.00	0.00	
2,500.0	0.00	0.00	2,500.0	33.0	-0.2	0.00	0.00	0.00	0.00	
2,900.0	6.00	235.00	2,899.3	21.0	-17.4	1.50	1.50	0.00	235.00	
6,337.9	6.00	235.00	6,318.3	-185.2	-311.7	0.00	0.00	0.00	0.00	
6,737.9	0.00	0.00	6,717.6	-197.2	-328.9	1.50	-1.50	0.00	180.00	
10,922.3	0.00	0.00	10,902.0	-197.2	-328.9	0.00	0.00	0.00	0.00	
11,822.3	90.00	359.68	11,475.0	375.8	-332.1	10.00	10.00	-0.04	359.68	
18,648.8	90.00	359.68	11,475.0	7,202.2	-370.1	0.00	0.00	0.00	0.00	SF_34_6H_BHL

Database:	EDM Central Planning	**Local Co-ordinate Reference:**	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H)
Company:	ConocoPhillips MCBU	**TVD Reference:**	GRND + SKID @ 3164.0usft
Project:	Permian Delaware Hz New Mexico	**MD Reference:**	GRND + SKID @ 3164.0usft
Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	**North Reference:**	Grid
Well:	STAMPEDE 34 FEDERAL COM 06H - PS	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Prelim Design 1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	33.0	-0.2	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	33.0	-0.2	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	33.0	-0.2	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	33.0	-0.2	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	33.0	-0.2	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	33.0	-0.2	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	33.0	-0.2	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	33.0	-0.2	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	33.0	-0.2	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	33.0	-0.2	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	33.0	-0.2	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	33.0	-0.2	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	33.0	-0.2	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	33.0	-0.2	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	33.0	-0.2	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	33.0	-0.2	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	33.0	-0.2	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	33.0	-0.2	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	33.0	-0.2	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	33.0	-0.2	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	33.0	-0.2	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	33.0	-0.2	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	33.0	-0.2	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	33.0	-0.2	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	33.0	-0.2	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	33.0	-0.2	0.0	0.00	0.00	0.00
2,600.0	1.50	235.00	2,600.0	32.2	-1.3	-0.7	1.50	1.50	0.00
2,700.0	3.00	235.00	2,699.9	30.0	-4.5	-3.0	1.50	1.50	0.00
2,800.0	4.50	235.00	2,799.7	26.2	-9.9	-6.7	1.50	1.50	0.00
2,900.0	6.00	235.00	2,899.3	21.0	-17.4	-11.9	1.50	1.50	0.00
3,000.0	6.00	235.00	2,998.7	15.0	-25.9	-17.9	0.00	0.00	0.00
3,100.0	6.00	235.00	3,098.2	9.0	-34.5	-23.8	0.00	0.00	0.00
3,200.0	6.00	235.00	3,197.6	3.0	-43.0	-29.7	0.00	0.00	0.00
3,300.0	6.00	235.00	3,297.1	-3.0	-51.6	-35.7	0.00	0.00	0.00
3,400.0	6.00	235.00	3,396.5	-9.0	-60.2	-41.6	0.00	0.00	0.00
3,500.0	6.00	235.00	3,496.0	-15.0	-68.7	-47.6	0.00	0.00	0.00
3,600.0	6.00	235.00	3,595.4	-21.0	-77.3	-53.5	0.00	0.00	0.00
3,700.0	6.00	235.00	3,694.9	-27.0	-85.9	-59.5	0.00	0.00	0.00
3,800.0	6.00	235.00	3,794.3	-33.0	-94.4	-65.4	0.00	0.00	0.00
3,900.0	6.00	235.00	3,893.8	-39.0	-103.0	-71.4	0.00	0.00	0.00
4,000.0	6.00	235.00	3,993.2	-45.0	-111.5	-77.3	0.00	0.00	0.00
4,100.0	6.00	235.00	4,092.7	-51.0	-120.1	-83.3	0.00	0.00	0.00
4,200.0	6.00	235.00	4,192.1	-57.0	-128.7	-89.2	0.00	0.00	0.00
4,300.0	6.00	235.00	4,291.6	-63.0	-137.2	-95.2	0.00	0.00	0.00
4,400.0	6.00	235.00	4,391.1	-69.0	-145.8	-101.1	0.00	0.00	0.00
4,500.0	6.00	235.00	4,490.5	-75.0	-154.4	-107.1	0.00	0.00	0.00
4,600.0	6.00	235.00	4,590.0	-81.0	-162.9	-113.0	0.00	0.00	0.00
4,700.0	6.00	235.00	4,689.4	-87.0	-171.5	-119.0	0.00	0.00	0.00
4,800.0	6.00	235.00	4,788.9	-93.0	-180.0	-124.9	0.00	0.00	0.00
4,900.0	6.00	235.00	4,888.3	-99.0	-188.6	-130.9	0.00	0.00	0.00
5,000.0	6.00	235.00	4,987.8	-104.9	-197.2	-136.8	0.00	0.00	0.00
5,100.0	6.00	235.00	5,087.2	-110.9	-205.7	-142.8	0.00	0.00	0.00
5,200.0	6.00	235.00	5,186.7	-116.9	-214.3	-148.7	0.00	0.00	0.00
5,300.0	6.00	235.00	5,286.1	-122.9	-222.8	-154.6	0.00	0.00	0.00

Database:	EDM Central Planning	**Local Co-ordinate Reference:**	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H)
Company:	ConocoPhillips MCBU	**TVD Reference:**	GRND + SKID @ 3164.0usft
Project:	Permian Delaware Hz New Mexico	**MD Reference:**	GRND + SKID @ 3164.0usft
Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	**North Reference:**	Grid
Well:	STAMPEDE 34 FEDERAL COM 06H - PS	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Prelim Design 1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,400.0	6.00	235.00	5,385.6	-128.9	-231.4	-160.6	0.00	0.00	0.00
5,500.0	6.00	235.00	5,485.0	-134.9	-240.0	-166.5	0.00	0.00	0.00
5,600.0	6.00	235.00	5,584.5	-140.9	-248.5	-172.5	0.00	0.00	0.00
5,700.0	6.00	235.00	5,683.9	-146.9	-257.1	-178.4	0.00	0.00	0.00
5,800.0	6.00	235.00	5,783.4	-152.9	-265.7	-184.4	0.00	0.00	0.00
5,900.0	6.00	235.00	5,882.8	-158.9	-274.2	-190.3	0.00	0.00	0.00
6,000.0	6.00	235.00	5,982.3	-164.9	-282.8	-196.3	0.00	0.00	0.00
6,100.0	6.00	235.00	6,081.7	-170.9	-291.3	-202.2	0.00	0.00	0.00
6,200.0	6.00	235.00	6,181.2	-176.9	-299.9	-208.2	0.00	0.00	0.00
6,300.0	6.00	235.00	6,280.6	-182.9	-308.5	-214.1	0.00	0.00	0.00
6,337.9	6.00	235.00	6,318.3	-185.2	-311.7	-216.4	0.00	0.00	0.00
6,400.0	5.07	235.00	6,380.1	-188.6	-316.6	-219.8	1.50	-1.50	0.00
6,500.0	3.57	235.00	6,479.9	-192.9	-322.8	-224.1	1.50	-1.50	0.00
6,600.0	2.07	235.00	6,579.7	-195.7	-326.8	-226.9	1.50	-1.50	0.00
6,700.0	0.57	235.00	6,679.7	-197.1	-328.7	-228.2	1.50	-1.50	0.00
6,737.9	0.00	0.00	6,717.6	-197.2	-328.9	-228.3	1.50	-1.50	0.00
6,800.0	0.00	0.00	6,779.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
6,900.0	0.00	0.00	6,879.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
7,000.0	0.00	0.00	6,979.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
7,100.0	0.00	0.00	7,079.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
7,200.0	0.00	0.00	7,179.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
7,300.0	0.00	0.00	7,279.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
7,400.0	0.00	0.00	7,379.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
7,500.0	0.00	0.00	7,479.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
7,600.0	0.00	0.00	7,579.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
7,700.0	0.00	0.00	7,679.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
7,800.0	0.00	0.00	7,779.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
7,900.0	0.00	0.00	7,879.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
8,000.0	0.00	0.00	7,979.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
8,100.0	0.00	0.00	8,079.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
8,200.0	0.00	0.00	8,179.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
8,300.0	0.00	0.00	8,279.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
8,400.0	0.00	0.00	8,379.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
8,500.0	0.00	0.00	8,479.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
8,600.0	0.00	0.00	8,579.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
8,700.0	0.00	0.00	8,679.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
8,800.0	0.00	0.00	8,779.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
8,900.0	0.00	0.00	8,879.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
9,000.0	0.00	0.00	8,979.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
9,100.0	0.00	0.00	9,079.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
9,200.0	0.00	0.00	9,179.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
9,300.0	0.00	0.00	9,279.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
9,400.0	0.00	0.00	9,379.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
9,500.0	0.00	0.00	9,479.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
9,600.0	0.00	0.00	9,579.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
9,700.0	0.00	0.00	9,679.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
9,800.0	0.00	0.00	9,779.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
9,900.0	0.00	0.00	9,879.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
10,000.0	0.00	0.00	9,979.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
10,100.0	0.00	0.00	10,079.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
10,200.0	0.00	0.00	10,179.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
10,300.0	0.00	0.00	10,279.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
10,400.0	0.00	0.00	10,379.7	-197.2	-328.9	-228.3	0.00	0.00	0.00

Database:	EDM Central Planning	**Local Co-ordinate Reference:**	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H)
Company:	ConocoPhillips MCBU	**TVD Reference:**	GRND + SKID @ 3164.0usft
Project:	Permian Delaware Hz New Mexico	**MD Reference:**	GRND + SKID @ 3164.0usft
Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	**North Reference:**	Grid
Well:	STAMPEDE 34 FEDERAL COM 06H - PS	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Prelim Design 1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,500.0	0.00	0.00	10,479.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
10,600.0	0.00	0.00	10,579.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
10,700.0	0.00	0.00	10,679.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
10,800.0	0.00	0.00	10,779.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
10,900.0	0.00	0.00	10,879.7	-197.2	-328.9	-228.3	0.00	0.00	0.00
10,922.3	0.00	0.00	10,902.0	-197.2	-328.9	-228.3	0.00	0.00	0.00
11,000.0	7.77	359.68	10,979.5	-191.9	-328.9	-223.0	10.00	10.00	0.00
11,100.0	17.77	359.68	11,076.9	-169.8	-329.0	-200.9	10.00	10.00	0.00
11,200.0	27.77	359.68	11,169.0	-131.2	-329.2	-162.3	10.00	10.00	0.00
11,300.0	37.77	359.68	11,252.9	-77.1	-329.5	-108.2	10.00	10.00	0.00
11,400.0	47.77	359.68	11,326.3	-9.3	-329.9	-40.4	10.00	10.00	0.00
11,500.0	57.77	359.68	11,386.7	70.2	-330.3	39.1	10.00	10.00	0.00
11,600.0	67.77	359.68	11,432.4	159.0	-330.8	127.9	10.00	10.00	0.00
11,700.0	77.77	359.68	11,462.0	254.4	-331.4	223.3	10.00	10.00	0.00
11,800.0	87.77	359.68	11,474.5	353.5	-331.9	322.4	10.00	10.00	0.00
11,822.3	90.00	359.68	11,475.0	375.8	-332.1	344.7	10.00	10.00	0.00
11,900.0	90.00	359.68	11,475.0	453.5	-332.5	422.4	0.00	0.00	0.00
12,000.0	90.00	359.68	11,475.0	553.5	-333.0	522.4	0.00	0.00	0.00
12,100.0	90.00	359.68	11,475.0	653.5	-333.6	622.4	0.00	0.00	0.00
12,200.0	90.00	359.68	11,475.0	753.5	-334.2	722.4	0.00	0.00	0.00
12,300.0	90.00	359.68	11,475.0	853.5	-334.7	822.4	0.00	0.00	0.00
12,400.0	90.00	359.68	11,475.0	953.5	-335.3	922.4	0.00	0.00	0.00
12,500.0	90.00	359.68	11,475.0	1,053.5	-335.8	1,022.4	0.00	0.00	0.00
12,600.0	90.00	359.68	11,475.0	1,153.5	-336.4	1,122.4	0.00	0.00	0.00
12,700.0	90.00	359.68	11,475.0	1,253.5	-336.9	1,222.4	0.00	0.00	0.00
12,800.0	90.00	359.68	11,475.0	1,353.5	-337.5	1,322.4	0.00	0.00	0.00
12,900.0	90.00	359.68	11,475.0	1,453.5	-338.1	1,422.4	0.00	0.00	0.00
13,000.0	90.00	359.68	11,475.0	1,553.5	-338.6	1,522.4	0.00	0.00	0.00
13,100.0	90.00	359.68	11,475.0	1,653.5	-339.2	1,622.4	0.00	0.00	0.00
13,200.0	90.00	359.68	11,475.0	1,753.5	-339.7	1,722.4	0.00	0.00	0.00
13,300.0	90.00	359.68	11,475.0	1,853.5	-340.3	1,822.4	0.00	0.00	0.00
13,400.0	90.00	359.68	11,475.0	1,953.5	-340.8	1,922.4	0.00	0.00	0.00
13,500.0	90.00	359.68	11,475.0	2,053.5	-341.4	2,022.4	0.00	0.00	0.00
13,600.0	90.00	359.68	11,475.0	2,153.5	-342.0	2,122.4	0.00	0.00	0.00
13,700.0	90.00	359.68	11,475.0	2,253.5	-342.5	2,222.4	0.00	0.00	0.00
13,800.0	90.00	359.68	11,475.0	2,353.5	-343.1	2,322.4	0.00	0.00	0.00
13,900.0	90.00	359.68	11,475.0	2,453.5	-343.6	2,422.4	0.00	0.00	0.00
14,000.0	90.00	359.68	11,475.0	2,553.5	-344.2	2,522.4	0.00	0.00	0.00
14,100.0	90.00	359.68	11,475.0	2,653.5	-344.7	2,622.4	0.00	0.00	0.00
14,200.0	90.00	359.68	11,475.0	2,753.4	-345.3	2,722.4	0.00	0.00	0.00
14,300.0	90.00	359.68	11,475.0	2,853.4	-345.9	2,822.4	0.00	0.00	0.00
14,400.0	90.00	359.68	11,475.0	2,953.4	-346.4	2,922.4	0.00	0.00	0.00
14,500.0	90.00	359.68	11,475.0	3,053.4	-347.0	3,022.4	0.00	0.00	0.00
14,600.0	90.00	359.68	11,475.0	3,153.4	-347.5	3,122.4	0.00	0.00	0.00
14,700.0	90.00	359.68	11,475.0	3,253.4	-348.1	3,222.4	0.00	0.00	0.00
14,800.0	90.00	359.68	11,475.0	3,353.4	-348.6	3,322.4	0.00	0.00	0.00
14,900.0	90.00	359.68	11,475.0	3,453.4	-349.2	3,422.4	0.00	0.00	0.00
15,000.0	90.00	359.68	11,475.0	3,553.4	-349.7	3,522.4	0.00	0.00	0.00
15,100.0	90.00	359.68	11,475.0	3,653.4	-350.3	3,622.4	0.00	0.00	0.00
15,200.0	90.00	359.68	11,475.0	3,753.4	-350.9	3,722.4	0.00	0.00	0.00
15,300.0	90.00	359.68	11,475.0	3,853.4	-351.4	3,822.4	0.00	0.00	0.00
15,400.0	90.00	359.68	11,475.0	3,953.4	-352.0	3,922.4	0.00	0.00	0.00
15,500.0	90.00	359.68	11,475.0	4,053.4	-352.5	4,022.4	0.00	0.00	0.00

Database:	EDM Central Planning	**Local Co-ordinate Reference:**	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H)
Company:	ConocoPhillips MCBU	**TVD Reference:**	GRND + SKID @ 3164.0usft
Project:	Permian Delaware Hz New Mexico	**MD Reference:**	GRND + SKID @ 3164.0usft
Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	**North Reference:**	Grid
Well:	STAMPEDE 34 FEDERAL COM 06H - PS	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Prelim Design 1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,600.0	90.00	359.68	11,475.0	4,153.4	-353.1	4,122.4	0.00	0.00	0.00
15,700.0	90.00	359.68	11,475.0	4,253.4	-353.6	4,222.4	0.00	0.00	0.00
15,800.0	90.00	359.68	11,475.0	4,353.4	-354.2	4,322.4	0.00	0.00	0.00
15,900.0	90.00	359.68	11,475.0	4,453.4	-354.8	4,422.4	0.00	0.00	0.00
16,000.0	90.00	359.68	11,475.0	4,553.4	-355.3	4,522.4	0.00	0.00	0.00
16,100.0	90.00	359.68	11,475.0	4,653.4	-355.9	4,622.4	0.00	0.00	0.00
16,200.0	90.00	359.68	11,475.0	4,753.4	-356.4	4,722.4	0.00	0.00	0.00
16,300.0	90.00	359.68	11,475.0	4,853.4	-357.0	4,822.4	0.00	0.00	0.00
16,400.0	90.00	359.68	11,475.0	4,953.4	-357.5	4,922.4	0.00	0.00	0.00
16,500.0	90.00	359.68	11,475.0	5,053.4	-358.1	5,022.4	0.00	0.00	0.00
16,600.0	90.00	359.68	11,475.0	5,153.4	-358.7	5,122.4	0.00	0.00	0.00
16,700.0	90.00	359.68	11,475.0	5,253.4	-359.2	5,222.4	0.00	0.00	0.00
16,800.0	90.00	359.68	11,475.0	5,353.4	-359.8	5,322.4	0.00	0.00	0.00
16,900.0	90.00	359.68	11,475.0	5,453.4	-360.3	5,422.4	0.00	0.00	0.00
17,000.0	90.00	359.68	11,475.0	5,553.4	-360.9	5,522.4	0.00	0.00	0.00
17,100.0	90.00	359.68	11,475.0	5,653.4	-361.4	5,622.4	0.00	0.00	0.00
17,200.0	90.00	359.68	11,475.0	5,753.4	-362.0	5,722.4	0.00	0.00	0.00
17,300.0	90.00	359.68	11,475.0	5,853.4	-362.6	5,822.4	0.00	0.00	0.00
17,400.0	90.00	359.68	11,475.0	5,953.4	-363.1	5,922.4	0.00	0.00	0.00
17,500.0	90.00	359.68	11,475.0	6,053.4	-363.7	6,022.4	0.00	0.00	0.00
17,600.0	90.00	359.68	11,475.0	6,153.4	-364.2	6,122.4	0.00	0.00	0.00
17,700.0	90.00	359.68	11,475.0	6,253.4	-364.8	6,222.4	0.00	0.00	0.00
17,800.0	90.00	359.68	11,475.0	6,353.4	-365.3	6,322.4	0.00	0.00	0.00
17,900.0	90.00	359.68	11,475.0	6,453.4	-365.9	6,422.4	0.00	0.00	0.00
18,000.0	90.00	359.68	11,475.0	6,553.4	-366.5	6,522.4	0.00	0.00	0.00
18,100.0	90.00	359.68	11,475.0	6,653.4	-367.0	6,622.4	0.00	0.00	0.00
18,200.0	90.00	359.68	11,475.0	6,753.4	-367.6	6,722.4	0.00	0.00	0.00
18,300.0	90.00	359.68	11,475.0	6,853.4	-368.1	6,822.4	0.00	0.00	0.00
18,400.0	90.00	359.68	11,475.0	6,953.4	-368.7	6,922.4	0.00	0.00	0.00
18,500.0	90.00	359.68	11,475.0	7,053.4	-369.2	7,022.4	0.00	0.00	0.00
18,600.0	90.00	359.68	11,475.0	7,153.4	-369.8	7,122.4	0.00	0.00	0.00
18,648.8	90.00	359.68	11,475.0	7,202.2	-370.1	7,171.2	0.00	0.00	0.00

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SF_34_6H_SL - plan hits target center - Point	0.00	0.00	0.0	33.0	-0.2	364,486.55	674,403.81	32° 0' 3.023 N	103° 46' 14.627 W
SF_34_6H_FTP - plan misses target center by 72.7usft at 11547.6usft MD (11410.3 TVD, 111.5 N, -330.6 E) - Point	0.00	0.00	11,475.0	78.2	-330.4	364,531.78	674,073.62	32° 0' 3.487 N	103° 46' 18.458 W
SF_34_6H_BHL - plan hits target center - Point	0.00	0.00	11,475.0	7,202.2	-370.1	371,655.79	674,033.95	32° 1' 13.990 N	103° 46' 18.489 W

Database:	EDM Central Planning	**Local Co-ordinate Reference:**	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H)
Company:	ConocoPhillips MCBU	**TVD Reference:**	GRND + SKID @ 3164.0usft
Project:	Permian Delaware Hz New Mexico	**MD Reference:**	GRND + SKID @ 3164.0usft
Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	**North Reference:**	Grid
Well:	STAMPEDE 34 FEDERAL COM 06H - PS	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original Hole		
Design:	Prelim Design 1		

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,000.0	1,000.0	13 3/8"	13-3/8	17-1/2

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,933.4	3,927.0	Delaware		0.00	
1,649.0	1,649.0	Castile		0.00	
985.0	985.0	Rustler		0.00	
7,667.3	7,647.0	Bone Springs		0.00	
4,079.2	4,072.0	Ford Shale		0.00	
6,271.2	6,252.0	Brushy Canyon		0.00	
9,932.3	9,912.0	Bone Springs 3rd Carb		0.00	
11,142.7	11,117.0	Wolfcamp		0.00	
4,883.6	4,872.0	Cherry Canyon		0.00	
11,331.1	11,277.0	Wolfcamp 1		0.00	
1,544.0	1,544.0	Salado		0.00	

ConocoPhillips MCBU

Permian Delaware Hz New Mexico
STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS
STAMPEDE 34 FEDERAL COM 06H - PS

Original Hole
Design 1

Anticollision Report

09 June, 2016

ConocoPhillips

Anticollision Report

Company:	ConocoPhillips MCBU	**Local Co-ordinate Reference:**	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS
Project:	Permian Delaware Hz New Mexico	**TVD Reference:**	GRND + SKID @ 3164.0usft
Reference Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	**MD Reference:**	GRND + SKID @ 3164.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	STAMPEDE 34 FEDERAL COM 06H - PS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Original Hole	**Database:**	EDM Central Planning
Reference Design:	Design 1	**Offset TVD Reference:**	Offset Datum

Reference	Design 1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0usft	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,137.5 usft	**Error Surface:**	Combined Covariances
Warning Levels Evaluated at:	2.79 **Sigma**	**Casing Method:**	Added to Error Values

Survey Tool Program **Date** 6/9/2016

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	4,000.0	Design 1 (Original Hole)	MWD+IFR1	MWD + IFR1
4,000.0	11,000.0	Design 1 (Original Hole)	MWD+IFR1	MWD + IFR1
11,000.0	18,664.3	Design 1 (Original Hole)	MWD+IFR1	MWD + IFR1

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS						
STAMPEDE 34 FEDERAL COM 05H - PS - Original Hole	1,600.0	1,600.0	33.0	20.8	2.713	CC, ES
STAMPEDE 34 FEDERAL COM 05H - PS - Original Hole	18,664.3	18,642.9	329.9	175.2	2.132	Caution - Monitor Closely, SI
Stampede Federal 27 1M						
Stampede Federal 27 1M - Original Borehole - Original B	15,509.3	11,478.0	599.8	523.8	7.892	CC, ES, SF

Offset Design STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS - STAMPEDE 34 FEDERAL COM 05H - PS - Original — **Offset Site Error:** 0.0 usft

Survey Program: 0-MWD+IFR1, 4000-MWD+IFR1, 11000-MWD+IFR1 — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	179.63	0.0	0.0	33.0				
100.0	100.0	100.0	100.0	0.1	0.1	179.63	0.0	0.0	33.0	31.4	1.54	21.349	
200.0	200.0	200.0	200.0	0.5	0.5	179.63	0.0	0.0	33.0	30.7	2.25	14.644	
300.0	300.0	300.0	300.0	0.8	0.8	179.63	0.0	0.0	33.0	30.0	2.96	11.144	
400.0	400.0	400.0	400.0	1.2	1.2	179.63	0.0	0.0	33.0	29.3	3.67	8.994	
500.0	500.0	500.0	500.0	1.6	1.6	179.63	0.0	0.0	33.0	28.6	4.37	7.540	
600.0	600.0	600.0	600.0	1.9	1.9	179.63	0.0	0.0	33.0	27.9	5.08	6.490	
700.0	700.0	700.0	700.0	2.3	2.3	179.63	0.0	0.0	33.0	27.2	5.79	5.697	
800.0	800.0	800.0	800.0	2.6	2.6	179.63	0.0	0.0	33.0	26.5	6.50	5.077	
900.0	900.0	900.0	900.0	3.0	3.0	179.63	0.0	0.0	33.0	25.8	7.20	4.579	
1,000.0	1,000.0	1,000.0	1,000.0	3.4	3.4	179.63	0.0	0.0	33.0	25.1	7.91	4.169	
1,100.0	1,100.0	1,100.0	1,100.0	3.7	3.7	179.63	0.0	0.0	33.0	24.4	8.62	3.827	
1,200.0	1,200.0	1,200.0	1,200.0	4.1	4.1	179.63	0.0	0.0	33.0	23.7	9.32	3.537	
1,300.0	1,300.0	1,300.0	1,300.0	4.4	4.4	179.63	0.0	0.0	33.0	22.9	10.03	3.287	
1,400.0	1,400.0	1,400.0	1,400.0	4.8	4.8	179.63	0.0	0.0	33.0	22.2	10.74	3.071	
1,500.0	1,500.0	1,500.0	1,500.0	5.1	5.1	179.63	0.0	0.0	33.0	21.5	11.45	2.881	
1,600.0	1,600.0	1,600.0	1,600.0	5.5	5.5	179.63	0.0	0.0	33.0	20.8	12.15	2.713	CC, ES
1,700.0	1,700.0	1,699.1	1,699.1	5.9	5.8	179.64	-1.3	0.0	34.3	21.4	12.84	2.670	
1,800.0	1,800.0	1,798.1	1,798.0	6.2	6.2	179.64	-5.2	0.0	38.2	24.7	13.50	2.827	

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

ConocoPhillips

Anticollision Report

Company:	ConocoPhillips MCBU	**Local Co-ordinate Reference:**	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS
Project:	Permian Delaware Hz New Mexico	**TVD Reference:**	GRND + SKID @ 3164.0usft
Reference Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	**MD Reference:**	GRND + SKID @ 3164.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	STAMPEDE 34 FEDERAL COM 06H - PS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Original Hole	**Database:**	EDM Central Planning
Reference Design:	Design 1	**Offset TVD Reference:**	Offset Datum

Offset Design STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS - STAMPEDE 34 FEDERAL COM 05H - PS - Original

Survey Program: 0-MWD+IFR1, 4000-MWD+IFR1, 11000-MWD+IFR1

Offset Site Error: 0.0 usft

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
1,900.0	1,900.0	1,896.8	1,896.5	6.6	6.5	179.65	-11.5	0.1	44.6	30.5	14.15	3.154	
2,000.0	2,000.0	1,995.2	1,994.5	6.9	6.8	179.66	-20.4	0.1	53.7	38.9	14.80	3.627	
2,100.0	2,100.0	2,094.5	2,093.3	7.3	7.2	179.66	-30.8	0.2	64.1	48.7	15.48	4.144	
2,200.0	2,200.0	2,194.0	2,192.2	7.7	7.5	179.67	-41.2	0.2	74.6	58.4	16.16	4.615	
2,300.0	2,300.0	2,293.4	2,291.1	8.0	7.8	179.67	-51.6	0.3	85.0	68.2	16.85	5.048	
2,400.0	2,400.0	2,392.9	2,390.0	8.4	8.2	179.67	-62.0	0.3	95.5	78.0	17.53	5.446	
2,500.0	2,500.0	2,492.4	2,488.9	8.7	8.5	179.67	-72.4	0.4	105.9	87.7	18.22	5.814	
2,600.0	2,600.0	2,591.9	2,587.9	9.1	8.9	-55.42	-82.8	0.4	115.7	96.8	18.90	6.120	
2,700.0	2,699.9	2,691.5	2,687.0	9.4	9.2	-56.77	-93.2	0.5	123.9	104.4	19.57	6.334	
2,800.0	2,799.7	2,791.1	2,786.0	9.7	9.6	-58.93	-103.6	0.6	130.9	110.7	20.24	6.469	
2,900.0	2,899.3	2,890.7	2,885.1	10.1	9.9	-61.82	-114.0	0.6	136.8	115.9	20.91	6.543	
3,000.0	2,998.7	2,990.2	2,984.1	10.4	10.3	-65.01	-124.4	0.7	142.5	120.9	21.59	6.600	
3,100.0	3,098.2	3,089.8	3,083.1	10.8	10.6	-67.94	-134.8	0.7	148.6	126.3	22.27	6.672	
3,200.0	3,197.6	3,189.3	3,182.0	11.1	11.0	-70.64	-145.3	0.8	155.1	132.1	22.96	6.754	
3,300.0	3,297.1	3,288.8	3,281.0	11.4	11.3	-73.12	-155.7	0.8	161.9	138.2	23.65	6.844	
3,400.0	3,396.5	3,388.4	3,380.0	11.8	11.7	-75.40	-166.1	0.9	168.9	144.6	24.34	6.939	
3,500.0	3,496.0	3,487.9	3,479.0	12.1	12.0	-77.49	-176.5	1.0	176.2	151.2	25.03	7.039	
3,600.0	3,595.4	3,590.9	3,581.5	12.5	12.4	-79.59	-186.4	1.0	183.0	157.2	25.77	7.103	
3,700.0	3,694.9	3,695.0	3,685.4	12.8	12.8	-81.93	-193.7	1.0	187.7	161.2	26.50	7.082	
3,800.0	3,794.3	3,799.2	3,789.5	13.2	13.2	-84.56	-198.2	1.1	190.3	163.0	27.22	6.990	
3,900.0	3,893.8	3,903.2	3,893.4	13.5	13.5	-87.56	-199.9	1.1	190.9	163.0	27.92	6.837	
3,979.1	3,972.4	3,982.2	3,972.4	13.8	13.8	-90.04	-199.9	1.1	190.8	162.3	28.47	6.700	
4,000.0	3,993.2	4,003.0	3,993.2	13.9	13.9	-90.70	-199.9	1.1	190.8	162.2	28.61	6.668	
4,100.0	4,092.7	4,102.4	4,092.7	14.1	14.0	-93.81	-199.9	1.1	191.2	162.2	28.95	6.603	
4,200.0	4,192.1	4,201.9	4,192.1	14.1	14.0	-96.91	-199.9	1.1	192.2	163.2	28.98	6.631	
4,300.0	4,291.6	4,301.3	4,291.6	14.1	14.0	-99.96	-199.9	1.1	193.7	164.7	29.02	6.675	
4,400.0	4,391.1	4,400.8	4,391.1	14.1	14.1	-102.96	-199.9	1.1	195.8	166.7	29.08	6.733	
4,500.0	4,490.5	4,500.2	4,490.5	14.2	14.1	-105.89	-199.9	1.1	198.4	169.3	29.16	6.804	
4,600.0	4,590.0	4,599.7	4,590.0	14.2	14.2	-108.73	-199.9	1.1	201.5	172.3	29.26	6.889	
4,700.0	4,689.4	4,699.2	4,689.4	14.3	14.2	-111.49	-199.9	1.1	205.2	175.8	29.37	6.985	
4,800.0	4,788.9	4,798.6	4,788.9	14.4	14.3	-114.14	-199.9	1.1	209.2	179.7	29.50	7.092	
4,900.0	4,888.3	4,898.1	4,888.3	14.4	14.3	-116.69	-199.9	1.1	213.7	184.1	29.65	7.209	
5,000.0	4,987.8	4,997.5	4,987.8	14.5	14.4	-119.12	-199.9	1.1	218.6	188.8	29.81	7.334	
5,100.0	5,087.2	5,097.0	5,087.2	14.6	14.5	-121.45	-199.9	1.1	223.9	193.9	29.99	7.466	
5,200.0	5,186.7	5,196.4	5,186.7	14.7	14.6	-123.67	-199.9	1.1	229.6	199.4	30.19	7.604	
5,300.0	5,286.1	5,295.9	5,286.1	14.9	14.7	-125.78	-199.9	1.1	235.6	205.2	30.40	7.748	
5,400.0	5,385.6	5,395.3	5,385.6	15.0	14.8	-127.78	-199.9	1.1	241.8	211.2	30.63	7.895	
5,500.0	5,485.0	5,494.8	5,485.0	15.1	14.9	-129.68	-199.9	1.1	248.4	217.5	30.88	8.045	
5,600.0	5,584.5	5,594.2	5,584.5	15.3	15.1	-131.48	-199.9	1.1	255.2	224.1	31.13	8.198	
5,700.0	5,683.9	5,693.7	5,683.9	15.4	15.2	-133.19	-199.9	1.1	262.3	230.9	31.41	8.352	
5,800.0	5,783.4	5,793.1	5,783.4	15.6	15.3	-134.80	-199.9	1.1	269.6	237.9	31.69	8.506	
5,900.0	5,882.8	5,892.6	5,882.8	15.7	15.5	-136.33	-199.9	1.1	277.1	245.1	31.99	8.660	
6,000.0	5,982.3	5,992.0	5,982.3	15.9	15.7	-137.78	-199.9	1.1	284.7	252.4	32.31	8.813	
6,100.0	6,081.7	6,091.5	6,081.7	16.1	15.8	-139.15	-199.9	1.1	292.6	259.9	32.63	8.966	
6,200.0	6,181.2	6,190.9	6,181.2	16.2	16.0	-140.45	-199.9	1.1	300.6	267.6	32.97	9.116	
6,300.0	6,280.6	6,290.4	6,280.6	16.4	16.2	-141.69	-199.9	1.1	308.7	275.4	33.32	9.265	
6,400.0	6,380.1	6,389.9	6,380.1	16.6	16.3	-142.86	-199.9	1.1	316.8	283.1	33.68	9.404	
6,500.0	6,479.8	6,489.6	6,479.8	16.8	16.5	-143.76	-199.9	1.1	323.1	289.1	34.06	9.488	
6,600.0	6,579.7	6,589.4	6,579.7	17.0	16.7	-144.35	-199.9	1.1	327.4	293.0	34.44	9.508	
6,700.0	6,679.6	6,689.4	6,679.6	17.2	16.9	-144.64	-199.9	1.1	329.6	294.8	34.83	9.464	
6,800.0	6,779.6	6,789.4	6,779.6	17.4	17.1	90.00	-199.9	1.1	329.9	294.7	35.22	9.369	

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

ConocoPhillips

Anticollision Report

Company:	ConocoPhillips MCBU	**Local Co-ordinate Reference:**	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS
Project:	Permian Delaware Hz New Mexico	**TVD Reference:**	GRND + SKID @ 3164.0usft
Reference Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	**MD Reference:**	GRND + SKID @ 3164.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	STAMPEDE 34 FEDERAL COM 06H - PS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Original Hole	**Database:**	EDM Central Planning
Reference Design:	Design 1	**Offset TVD Reference:**	Offset Datum

Offset Design STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS - STAMPEDE 34 FEDERAL COM 05H - PS - Original

Offset Site Error: 0.0 usft

Survey Program: 0-MWD+IFR1, 4000-MWD+IFR1, 11000-MWD+IFR1

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,900.0	6,879.6	6,889.4	6,879.6	17.6	17.3	90.00	-199.9	1.1	329.9	294.3	35.61	9.266	
7,000.0	6,979.6	6,989.4	6,979.6	17.8	17.5	90.00	-199.9	1.1	329.9	293.9	36.01	9.163	
7,100.0	7,079.6	7,089.4	7,079.6	18.0	17.8	90.00	-199.9	1.1	329.9	293.5	36.42	9.060	
7,200.0	7,179.6	7,189.4	7,179.6	18.2	18.0	90.00	-199.9	1.1	329.9	293.1	36.84	8.956	
7,300.0	7,279.6	7,289.4	7,279.6	18.4	18.2	90.00	-199.9	1.1	329.9	292.7	37.27	8.853	
7,400.0	7,379.6	7,389.4	7,379.6	18.6	18.4	90.00	-199.9	1.1	329.9	292.2	37.71	8.750	
7,500.0	7,479.6	7,489.4	7,479.6	18.8	18.7	90.00	-199.9	1.1	329.9	291.8	38.15	8.648	
7,600.0	7,579.6	7,589.4	7,579.6	19.1	18.9	90.00	-199.9	1.1	329.9	291.3	38.61	8.546	
7,700.0	7,679.6	7,689.4	7,679.6	19.3	19.1	90.00	-199.9	1.1	329.9	290.9	39.07	8.445	
7,800.0	7,779.6	7,789.4	7,779.6	19.5	19.4	90.00	-199.9	1.1	329.9	290.4	39.54	8.345	
7,900.0	7,879.6	7,889.4	7,879.6	19.8	19.6	90.00	-199.9	1.1	329.9	289.9	40.02	8.245	
8,000.0	7,979.6	7,989.4	7,979.6	20.0	19.9	90.00	-199.9	1.1	329.9	289.4	40.50	8.147	
8,100.0	8,079.6	8,089.4	8,079.6	20.2	20.2	90.00	-199.9	1.1	329.9	288.9	40.99	8.049	
8,200.0	8,179.6	8,189.4	8,179.6	20.5	20.4	90.00	-199.9	1.1	329.9	288.5	41.49	7.953	
8,300.0	8,279.6	8,289.4	8,279.6	20.7	20.7	90.00	-199.9	1.1	329.9	287.9	41.99	7.857	
8,400.0	8,379.6	8,389.4	8,379.6	21.0	20.9	90.00	-199.9	1.1	329.9	287.4	42.50	7.763	
8,500.0	8,479.6	8,489.4	8,479.6	21.2	21.2	90.00	-199.9	1.1	329.9	286.9	43.02	7.670	
8,600.0	8,579.6	8,589.4	8,579.6	21.5	21.5	90.00	-199.9	1.1	329.9	286.4	43.54	7.579	
8,700.0	8,679.6	8,689.4	8,679.6	21.7	21.8	90.00	-199.9	1.1	329.9	285.9	44.06	7.488	
8,800.0	8,779.6	8,789.4	8,779.6	22.0	22.0	90.00	-199.9	1.1	329.9	285.3	44.59	7.399	
8,900.0	8,879.6	8,889.4	8,879.6	22.3	22.3	90.00	-199.9	1.1	329.9	284.8	45.13	7.311	
9,000.0	8,979.6	8,989.4	8,979.6	22.5	22.6	90.00	-199.9	1.1	329.9	284.3	45.67	7.224	
9,100.0	9,079.6	9,089.4	9,079.6	22.8	22.9	90.00	-199.9	1.1	329.9	283.7	46.22	7.139	
9,200.0	9,179.6	9,189.4	9,179.6	23.1	23.1	90.00	-199.9	1.1	329.9	283.2	46.77	7.055	
9,300.0	9,279.6	9,289.4	9,279.6	23.4	23.4	90.00	-199.9	1.1	329.9	282.6	47.32	6.973	
9,400.0	9,379.6	9,389.4	9,379.6	23.6	23.7	90.00	-199.9	1.1	329.9	282.1	47.88	6.891	
9,500.0	9,479.6	9,489.4	9,479.6	23.9	24.0	90.00	-199.9	1.1	329.9	281.5	48.44	6.811	
9,600.0	9,579.6	9,589.4	9,579.6	24.2	24.3	90.00	-199.9	1.1	329.9	280.9	49.01	6.733	
9,700.0	9,679.6	9,689.4	9,679.6	24.5	24.6	90.00	-199.9	1.1	329.9	280.4	49.58	6.655	
9,800.0	9,779.6	9,789.4	9,779.6	24.8	24.9	90.00	-199.9	1.1	329.9	279.8	50.15	6.579	
9,900.0	9,879.6	9,889.4	9,879.6	25.1	25.2	90.00	-199.9	1.1	329.9	279.2	50.73	6.504	
10,000.0	9,979.6	9,989.4	9,979.6	25.3	25.5	90.00	-199.9	1.1	329.9	278.6	51.31	6.431	
10,100.0	10,079.6	10,089.4	10,079.6	25.6	25.8	90.00	-199.9	1.1	329.9	278.0	51.89	6.358	
10,200.0	10,179.6	10,189.4	10,179.6	25.9	26.1	90.00	-199.9	1.1	329.9	277.5	52.48	6.287	
10,300.0	10,279.6	10,289.4	10,279.6	26.2	26.4	90.00	-199.9	1.1	329.9	276.9	53.07	6.217	
10,400.0	10,379.6	10,389.4	10,379.6	26.5	26.7	90.00	-199.9	1.1	329.9	276.3	53.66	6.149	
10,500.0	10,479.6	10,489.4	10,479.6	26.8	27.0	90.00	-199.9	1.1	329.9	275.7	54.25	6.081	
10,600.0	10,579.6	10,589.4	10,579.6	27.1	27.3	90.00	-199.9	1.1	329.9	275.1	54.85	6.015	
10,700.0	10,679.6	10,689.4	10,679.6	27.4	27.6	90.00	-199.9	1.1	329.9	274.5	55.45	5.950	
10,800.0	10,779.6	10,789.4	10,779.6	27.7	27.9	90.00	-199.9	1.1	329.9	273.9	56.06	5.886	
10,900.0	10,879.6	10,889.4	10,879.6	28.0	28.2	90.00	-199.9	1.1	329.9	273.3	56.66	5.823	
10,974.3	10,953.9	10,963.9	10,954.1	28.2	28.5	90.34	-197.5	1.1	329.9	272.8	57.11	5.777	
11,000.0	10,979.6	10,989.4	10,979.4	28.3	28.5	89.78	-194.7	1.1	329.9	272.7	57.26	5.762	
11,100.0	11,077.8	11,088.7	11,076.1	28.4	28.7	89.06	-172.8	0.9	330.0	272.5	57.44	5.745	
11,200.0	11,171.1	11,187.4	11,167.2	28.5	28.8	88.54	-134.9	0.7	330.0	272.6	57.43	5.747	
11,300.0	11,256.3	11,285.8	11,250.1	28.5	28.8	88.22	-82.1	0.4	330.1	272.7	57.43	5.748	
11,400.0	11,330.5	11,384.0	11,322.6	28.5	28.8	88.12	-16.1	0.1	330.1	272.6	57.47	5.745	
11,500.0	11,391.3	11,482.1	11,382.8	28.6	28.9	88.24	61.3	-0.4	330.1	272.5	57.54	5.736	
11,600.0	11,436.5	11,580.5	11,429.0	28.6	28.9	88.57	148.0	-0.9	330.0	272.4	57.68	5.722	
11,700.0	11,464.8	11,679.3	11,459.8	28.6	29.0	89.11	241.7	-1.4	330.0	272.1	57.88	5.701	

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

Company:	ConocoPhillips MCBU	**Local Co-ordinate Reference:**	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS
Project:	Permian Delaware Hz New Mexico	**TVD Reference:**	GRND + SKID @ 3164.0usft
Reference Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	**MD Reference:**	GRND + SKID @ 3164.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	STAMPEDE 34 FEDERAL COM 06H - PS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	***Output errors are at***	2.00 sigma
Reference Wellbore	Original Hole	**Database:**	EDM Central Planning
Reference Design:	Design 1	**Offset TVD Reference:**	Offset Datum

Offset Design STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS - STAMPEDE 34 FEDERAL COM 05H - PS - Original

Offset Site Error: 0.0 usft

Survey Program: 0-MWD+IFR1, 4000-MWD+IFR1, 11000-MWD+IFR1

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
11,800.0	11,475.0	11,778.7	11,474.1	28.7	29.0	89.84	339.9	-1.9	329.9	271.8	58.15	5.674	
11,842.0	11,475.3	11,820.6	11,475.0	28.7	29.1	89.95	381.8	-2.2	329.9	271.7	58.28	5.661	
11,900.0	11,475.0	11,878.6	11,475.0	28.8	29.2	90.00	439.9	-2.5	329.9	271.5	58.48	5.642	
12,000.0	11,475.0	11,978.6	11,475.0	29.0	29.4	90.00	539.9	-3.0	329.9	271.1	58.86	5.605	
12,100.0	11,475.0	12,078.6	11,475.0	29.2	29.6	90.00	639.9	-3.6	329.9	270.6	59.32	5.562	
12,200.0	11,475.0	12,178.6	11,475.0	29.5	29.9	90.00	739.9	-4.2	329.9	270.1	59.83	5.514	
12,300.0	11,475.0	12,278.6	11,475.0	29.8	30.2	90.00	839.9	-4.7	329.9	269.5	60.40	5.462	
12,400.0	11,475.0	12,378.6	11,475.0	30.1	30.5	90.00	939.9	-5.3	329.9	268.9	61.04	5.405	
12,500.0	11,475.0	12,478.6	11,475.0	30.5	30.8	90.00	1,039.9	-5.8	329.9	268.2	61.73	5.345	
12,600.0	11,475.0	12,578.6	11,475.0	30.8	31.2	90.00	1,139.9	-6.4	329.9	267.5	62.47	5.281	
12,700.0	11,475.0	12,678.6	11,475.0	31.2	31.6	90.00	1,239.9	-6.9	329.9	266.7	63.27	5.215	
12,800.0	11,475.0	12,778.6	11,475.0	31.7	32.0	90.00	1,339.9	-7.5	329.9	265.8	64.12	5.146	
12,900.0	11,475.0	12,878.6	11,475.0	32.1	32.5	90.00	1,439.9	-8.0	329.9	264.9	65.01	5.075	
13,000.0	11,475.0	12,978.6	11,475.0	32.6	33.0	90.00	1,539.9	-8.6	329.9	264.0	65.96	5.002	
13,100.0	11,475.0	13,078.6	11,475.0	33.1	33.5	90.00	1,639.9	-9.2	329.9	263.0	66.95	4.928	
13,200.0	11,475.0	13,178.6	11,475.0	33.6	34.0	90.00	1,739.9	-9.7	329.9	262.0	67.98	4.854	
13,300.0	11,475.0	13,278.6	11,475.0	34.2	34.5	90.00	1,839.9	-10.3	329.9	260.9	69.05	4.778	
13,400.0	11,475.0	13,378.6	11,475.0	34.7	35.1	90.00	1,939.9	-10.8	329.9	259.8	70.16	4.703	
13,500.0	11,475.0	13,478.6	11,475.0	35.3	35.7	90.00	2,039.9	-11.4	329.9	258.6	71.31	4.627	
13,600.0	11,475.0	13,578.6	11,475.0	35.9	36.3	90.00	2,139.9	-11.9	329.9	257.4	72.49	4.551	
13,700.0	11,475.0	13,678.6	11,475.0	36.5	36.9	90.00	2,239.9	-12.5	329.9	256.2	73.71	4.476	
13,800.0	11,475.0	13,778.6	11,475.0	37.2	37.5	90.00	2,339.9	-13.1	329.9	255.0	74.96	4.402	
13,900.0	11,475.0	13,878.6	11,475.0	37.8	38.2	90.00	2,439.9	-13.6	329.9	253.7	76.24	4.328	
14,000.0	11,475.0	13,978.6	11,475.0	38.5	38.8	90.00	2,539.9	-14.2	329.9	252.4	77.55	4.255	
14,100.0	11,475.0	14,078.6	11,475.0	39.2	39.5	90.00	2,639.9	-14.7	329.9	251.1	78.88	4.183	
14,200.0	11,475.0	14,178.6	11,475.0	39.9	40.2	90.00	2,739.9	-15.3	329.9	249.7	80.24	4.112	
14,300.0	11,475.0	14,278.6	11,475.0	40.6	40.9	90.00	2,839.8	-15.8	329.9	248.3	81.63	4.042	
14,400.0	11,475.0	14,378.6	11,475.0	41.3	41.6	90.00	2,939.8	-16.4	329.9	246.9	83.04	3.973	
14,500.0	11,475.0	14,478.6	11,475.0	42.0	42.3	90.00	3,039.8	-17.0	329.9	245.5	84.47	3.906	
14,600.0	11,475.0	14,578.6	11,475.0	42.7	43.1	90.00	3,139.8	-17.5	329.9	244.0	85.92	3.840	
14,700.0	11,475.0	14,678.6	11,475.0	43.5	43.8	90.00	3,239.8	-18.1	329.9	242.5	87.39	3.775	
14,800.0	11,475.0	14,778.6	11,475.0	44.3	44.6	90.00	3,339.8	-18.6	329.9	241.0	88.88	3.712	
14,900.0	11,475.0	14,878.6	11,475.0	45.0	45.3	90.00	3,439.8	-19.2	329.9	239.5	90.39	3.650	
15,000.0	11,475.0	14,978.6	11,475.0	45.8	46.1	90.00	3,539.8	-19.7	329.9	238.0	91.92	3.589	
15,100.0	11,475.0	15,078.6	11,475.0	46.6	46.9	90.00	3,639.8	-20.3	329.9	236.5	93.46	3.530	
15,200.0	11,475.0	15,178.6	11,475.0	47.4	47.7	90.00	3,739.8	-20.9	329.9	234.9	95.02	3.472	
15,300.0	11,475.0	15,278.6	11,475.0	48.2	48.5	90.00	3,839.8	-21.4	329.9	233.3	96.59	3.416	
15,400.0	11,475.0	15,378.6	11,475.0	49.0	49.3	90.00	3,939.8	-22.0	329.9	231.8	98.18	3.360	
15,500.0	11,475.0	15,478.6	11,475.0	49.8	50.1	90.00	4,039.8	-22.5	329.9	230.1	99.78	3.307	
15,600.0	11,475.0	15,578.6	11,475.0	50.6	50.9	90.00	4,139.8	-23.1	329.9	228.5	101.39	3.254	
15,700.0	11,475.0	15,678.6	11,475.0	51.4	51.7	90.00	4,239.8	-23.6	329.9	226.9	103.02	3.203	
15,800.0	11,475.0	15,778.6	11,475.0	52.3	52.5	90.00	4,339.8	-24.2	329.9	225.3	104.65	3.153	
15,900.0	11,475.0	15,878.6	11,475.0	53.1	53.4	90.00	4,439.8	-24.8	329.9	223.6	106.30	3.104	
16,000.0	11,475.0	15,978.6	11,475.0	53.9	54.2	90.00	4,539.8	-25.3	329.9	222.0	107.96	3.056	
16,100.0	11,475.0	16,078.6	11,475.0	54.8	55.1	90.00	4,639.8	-25.9	329.9	220.3	109.63	3.010	
16,200.0	11,475.0	16,178.6	11,475.0	55.6	55.9	90.00	4,739.8	-26.4	329.9	218.6	111.30	2.964	
16,300.0	11,475.0	16,278.6	11,475.0	56.5	56.8	90.00	4,839.8	-27.0	329.9	216.9	112.99	2.920	
16,400.0	11,475.0	16,378.6	11,475.0	57.3	57.6	90.00	4,939.8	-27.5	329.9	215.2	114.69	2.877	
16,500.0	11,475.0	16,478.6	11,475.0	58.2	58.5	90.00	5,039.8	-28.1	329.9	213.5	116.39	2.836	
16,600.0	11,475.0	16,578.6	11,475.0	59.1	59.3	90.00	5,139.8	-28.7	329.9	211.8	118.10	2.794	
16,700.0	11,475.0	16,678.6	11,475.0	60.0	60.2	90.00	5,239.8	-29.2	329.9	210.1	119.82	2.754	

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

ConocoPhillips

Anticollision Report

Company:	ConocoPhillips MCBU	**Local Co-ordinate Reference:**	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS
Project:	Permian Delaware Hz New Mexico	**TVD Reference:**	GRND + SKID @ 3164.0usft
Reference Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	**MD Reference:**	GRND + SKID @ 3164.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	STAMPEDE 34 FEDERAL COM 06H - PS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Original Hole	**Database:**	EDM Central Planning
Reference Design:	Design 1	**Offset TVD Reference:**	Offset Datum

Offset Design STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS - STAMPEDE 34 FEDERAL COM 05H - PS - Original — **Offset Site Error:** 0.0 usft

Survey Program: 0-MWD+IFR1, 4000-MWD+IFR1, 11000-MWD+IFR1 — **Offset Well Error:** 0.0 usft

Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
16,800.0	11,475.0	16,778.6	11,475.0	60.8	61.1	90.00	5,339.8	-29.8	329.9	208.4	121.55	2.714	
16,900.0	11,475.0	16,878.6	11,475.0	61.7	62.0	90.00	5,439.8	-30.3	329.9	206.6	123.28	2.676	
17,000.0	11,475.0	16,978.6	11,475.0	62.6	62.9	90.00	5,539.8	-30.9	329.9	204.9	125.02	2.639	
17,100.0	11,475.0	17,078.6	11,475.0	63.5	63.7	90.00	5,639.8	-31.4	329.9	203.2	126.77	2.603	
17,200.0	11,475.0	17,178.6	11,475.0	64.4	64.6	90.00	5,739.8	-32.0	329.9	201.4	128.52	2.567	
17,300.0	11,475.0	17,278.6	11,475.0	65.3	65.5	90.00	5,839.8	-32.6	329.9	199.7	130.28	2.533	
17,400.0	11,475.0	17,378.6	11,475.0	66.2	66.4	90.00	5,939.8	-33.1	329.9	197.9	132.04	2.499	Caution - Monitor Closely
17,500.0	11,475.0	17,478.6	11,475.0	67.1	67.3	90.00	6,039.8	-33.7	329.9	196.1	133.81	2.466	Caution - Monitor Closely
17,600.0	11,475.0	17,578.6	11,475.0	68.0	68.2	90.00	6,139.8	-34.2	329.9	194.3	135.58	2.433	Caution - Monitor Closely
17,700.0	11,475.0	17,678.6	11,475.0	68.9	69.1	90.00	6,239.8	-34.8	329.9	192.6	137.36	2.402	Caution - Monitor Closely
17,800.0	11,475.0	17,778.6	11,475.0	69.8	70.0	90.00	6,339.8	-35.3	329.9	190.8	139.15	2.371	Caution - Monitor Closely
17,900.0	11,475.0	17,878.6	11,475.0	70.7	70.9	90.00	6,439.8	-35.9	329.9	189.0	140.94	2.341	Caution - Monitor Closely
18,000.0	11,475.0	17,978.6	11,475.0	71.6	71.8	90.00	6,539.8	-36.4	329.9	187.2	142.73	2.312	Caution - Monitor Closely
18,100.0	11,475.0	18,078.6	11,475.0	72.5	72.7	90.00	6,639.8	-37.0	329.9	185.4	144.53	2.283	Caution - Monitor Closely
18,200.0	11,475.0	18,178.6	11,475.0	73.4	73.6	90.00	6,739.8	-37.6	329.9	183.6	146.33	2.255	Caution - Monitor Closely
18,300.0	11,475.0	18,278.6	11,475.0	74.3	74.6	90.00	6,839.8	-38.1	329.9	181.8	148.14	2.227	Caution - Monitor Closely
18,400.0	11,475.0	18,378.6	11,475.0	75.2	75.5	90.00	6,939.8	-38.7	329.9	180.0	149.95	2.200	Caution - Monitor Closely
18,500.0	11,475.0	18,478.6	11,475.0	76.2	76.4	90.00	7,039.8	-39.2	329.9	178.2	151.76	2.174	Caution - Monitor Closely
18,600.0	11,475.0	18,578.6	11,475.0	77.1	77.3	90.00	7,139.8	-39.8	329.9	176.4	153.58	2.148	Caution - Monitor Closely
18,664.3	11,475.0	18,642.9	11,475.0	77.7	77.9	90.00	7,204.0	-40.1	329.9	175.2	154.74	2.132	Caution - Monitor Closely, SF

ConocoPhillips

Anticollision Report

Company:	ConocoPhillips MCBU	**Local Co-ordinate Reference:**	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS
Project:	Permian Delaware Hz New Mexico	**TVD Reference:**	GRND + SKID @ 3164.0usft
Reference Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	**MD Reference:**	GRND + SKID @ 3164.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	STAMPEDE 34 FEDERAL COM 06H - PS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Original Hole	**Database:**	EDM Central Planning
Reference Design:	Design 1	**Offset TVD Reference:**	Offset Datum

Offset Design Stampede Federal 27 1M - Stampede Federal 27 1M - Original Borehole - Original Borehole_GYRO — **Offset Site Error:** 0.0 usft

Survey Program: 60-GYD-CT-CMS — **Offset Well Error:** 0.0 usft

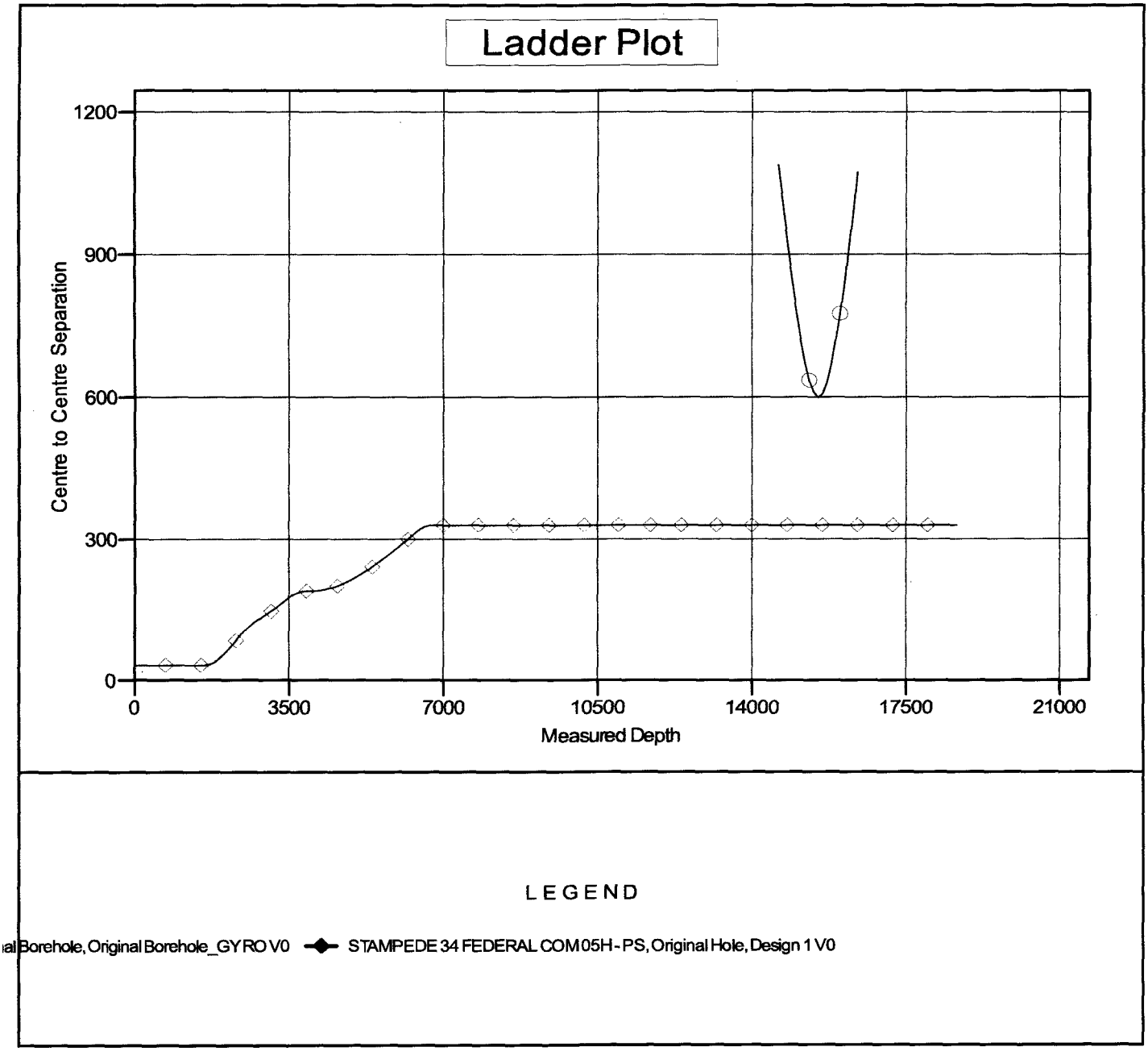
Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,600.0	11,475.0	11,492.0	11,490.3	42.7	20.2	90.89	4,050.4	247.4	1,089.2	1,032.5	56.76	19.191	
14,700.0	11,475.0	11,490.5	11,488.8	43.5	20.2	90.74	4,050.4	247.4	1,007.3	949.2	58.06	17.350	
14,800.0	11,475.0	11,488.9	11,487.3	44.3	20.2	90.60	4,050.5	247.4	928.9	869.2	59.64	15.574	
14,900.0	11,475.0	11,487.4	11,485.7	45.0	20.2	90.45	4,050.5	247.4	855.0	793.4	61.55	13.890	
15,000.0	11,475.0	11,485.9	11,484.2	45.8	20.2	90.30	4,050.5	247.4	786.8	723.0	63.82	12.330	
15,100.0	11,475.0	11,484.3	11,482.6	46.6	20.2	90.16	4,050.5	247.3	726.1	659.7	66.42	10.933	
15,200.0	11,475.0	11,482.8	11,481.1	47.4	20.2	90.01	4,050.6	247.3	674.9	605.6	69.24	9.747	
15,300.0	11,475.0	11,481.2	11,479.5	48.2	20.2	89.86	4,050.6	247.3	635.3	563.3	72.02	8.821	
15,400.0	11,475.0	11,479.7	11,478.0	49.0	20.2	89.71	4,050.6	247.3	609.7	535.3	74.39	8.196	
15,500.0	11,475.0	11,478.1	11,476.5	49.8	20.2	89.57	4,050.6	247.3	599.9	524.0	75.92	7.902	
15,509.3	11,475.0	11,478.0	11,476.3	49.9	20.2	89.55	4,050.6	247.3	599.8	523.8	76.01	7.892	CC, ES, SF
15,600.0	11,475.0	11,476.6	11,474.9	50.6	20.2	89.42	4,050.6	247.3	606.6	530.3	76.36	7.945	
15,700.0	11,475.0	11,475.1	11,473.4	51.4	20.2	89.27	4,050.7	247.3	629.4	553.7	75.73	8.311	
15,800.0	11,475.0	11,473.5	11,471.8	52.3	20.2	89.12	4,050.7	247.3	666.5	592.2	74.32	8.969	
15,900.0	11,475.0	11,472.0	11,470.3	53.1	20.2	88.98	4,050.7	247.2	715.8	643.4	72.48	9.877	
16,000.0	11,475.0	11,470.4	11,468.7	53.9	20.2	88.83	4,050.7	247.2	774.9	704.4	70.51	10.991	
16,100.0	11,475.0	11,468.9	11,467.2	54.8	20.2	88.68	4,050.8	247.2	841.8	773.2	68.62	12.268	
16,200.0	11,475.0	11,467.3	11,465.6	55.6	20.2	88.53	4,050.8	247.2	914.7	847.8	66.90	13.674	
16,300.0	11,475.0	11,465.8	11,464.1	56.5	20.2	88.38	4,050.8	247.2	992.4	927.0	65.39	15.177	
16,400.0	11,475.0	11,464.2	11,462.5	57.3	20.1	88.24	4,050.8	247.2	1,073.8	1,009.7	64.09	16.753	

ConocoPhillips

Anticollision Report

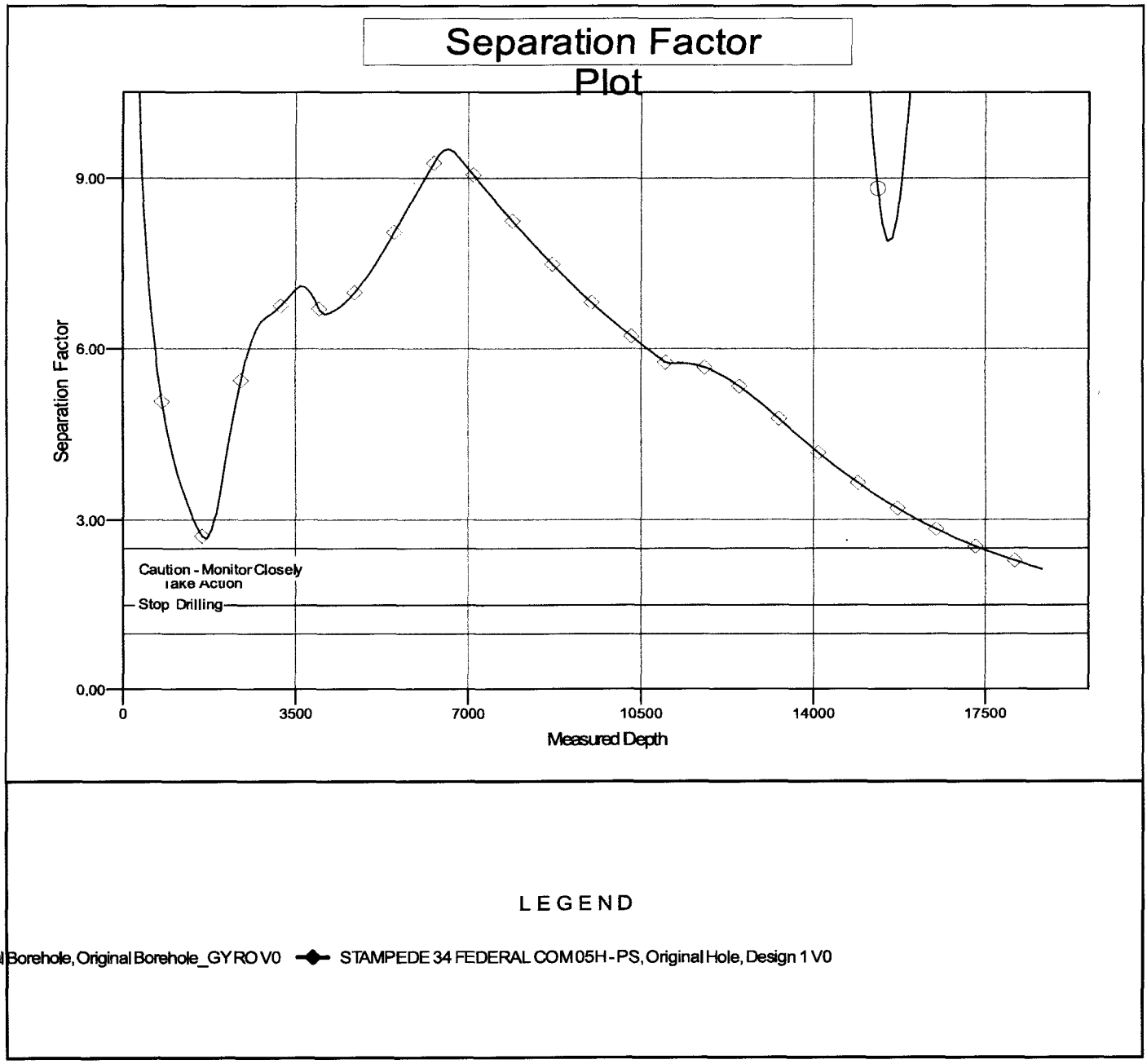
Company:	ConocoPhillips MCBU	**Local Co-ordinate Reference:**	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS
Project:	Permian Delaware Hz New Mexico	**TVD Reference:**	GRND + SKID @ 3164.0usft
Reference Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	**MD Reference:**	GRND + SKID @ 3164.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	STAMPEDE 34 FEDERAL COM 06H - PS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Original Hole	**Database:**	EDM Central Planning
Reference Design:	Design 1	**Offset TVD Reference:**	Offset Datum

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



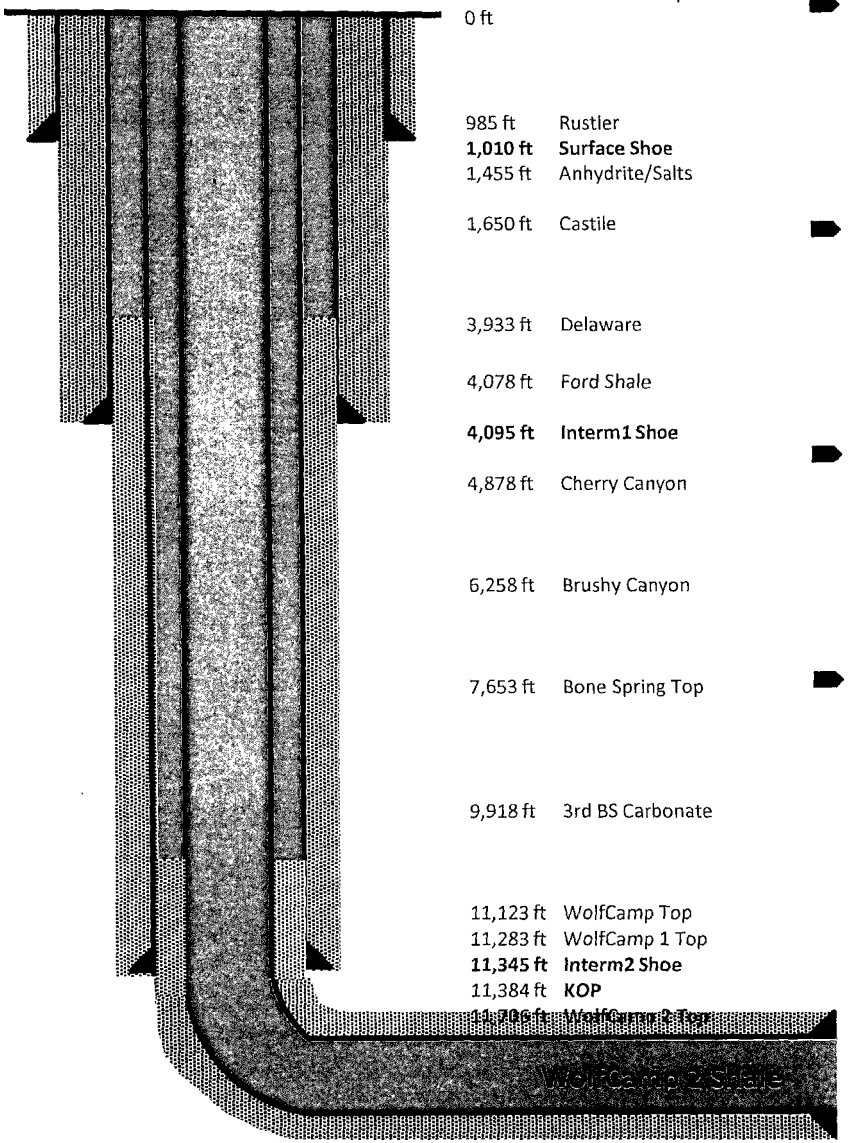
Company:	ConocoPhillips MCBU	**Local Co-ordinate Reference:**	Site STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS
Project:	Permian Delaware Hz New Mexico	**TVD Reference:**	GRND + SKID @ 3164.0usft
Reference Site:	STAMPEDE 34 FED DUAL PAD 2 (5H, 6H) - PS	**MD Reference:**	GRND + SKID @ 3164.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	STAMPEDE 34 FEDERAL COM 06H - PS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Original Hole	**Database:**	EDM Central Planning
Reference Design:	Design 1	**Offset TVD Reference:**	Offset Datum

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



STAMPEDE 34 FEDERAL COM W2 06H

Attachment #2



Surface Section:

- Objective: Protect fresh water horizons.
- Drill 17-1/2" hole to +/- 1,010 ft, 25' inside "Rustler".
- Mud weight: 8.6 – 9.3 ppg FW-Native Mud.
- **Set 13-3/8" 54.5# J-55 BTC casing.**
- Cement to surface.

Intermediate1 Section:

- Objective: Isolate the Salado Salt and Delaware Sand interval.
- Drill 12-1/4" hole to +/- 4,095 ft, 15'-20'-TVD inside "Ford Shale".
- Mud weight: 9.3 - 10.2 ppg Brine.
- **Set 9-5/8" 40# L-80 BTC casing.**
- Cement to surface.

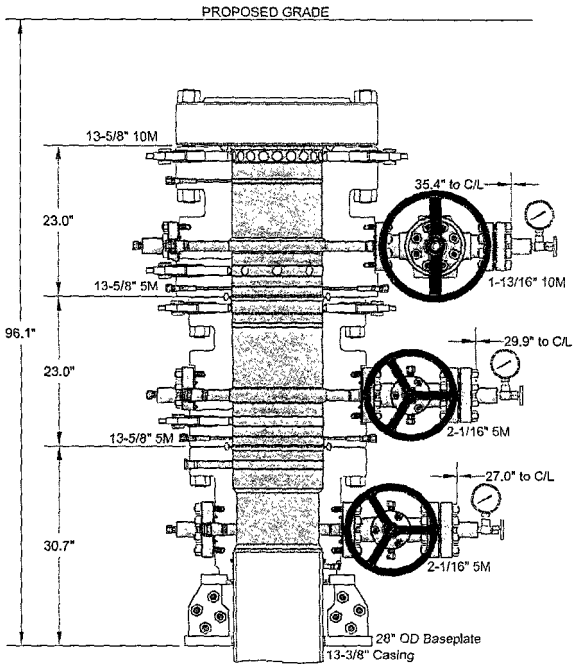
Intermediate2 Section:

- Objective: Isolate depleted/weak formations above WC1.
- Drill 8-3/4" hole to +/- 11,345 ft. 60'-80' inside WC1 Top.
- Mud weight: 8.9 – 9.2 ppg Cut Brine.
- **Set 7-5/8" 33# P-110 Tenaris W523 casing.**
- Cement lap 600 ft above previous shoe.

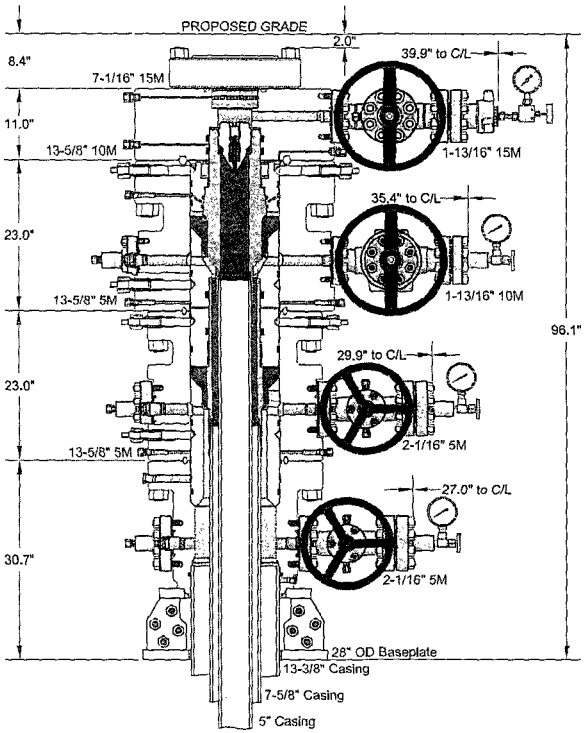
Production Section:

- Objective: Provide zonal isolation of production interval and provide medium for stimulation.
- Drill 6-5/8" hole to +/-18,787 ft. "Production TD".
- Mud Weight: 12.0 – 14.5 ppg OBM.
- **Set 5" 21.4# P-110 TenBlue X 4-1/2" 15.1# P-110 Ten XP BTC casing.**
- Cement lap 1,000 ft above previous shoe.

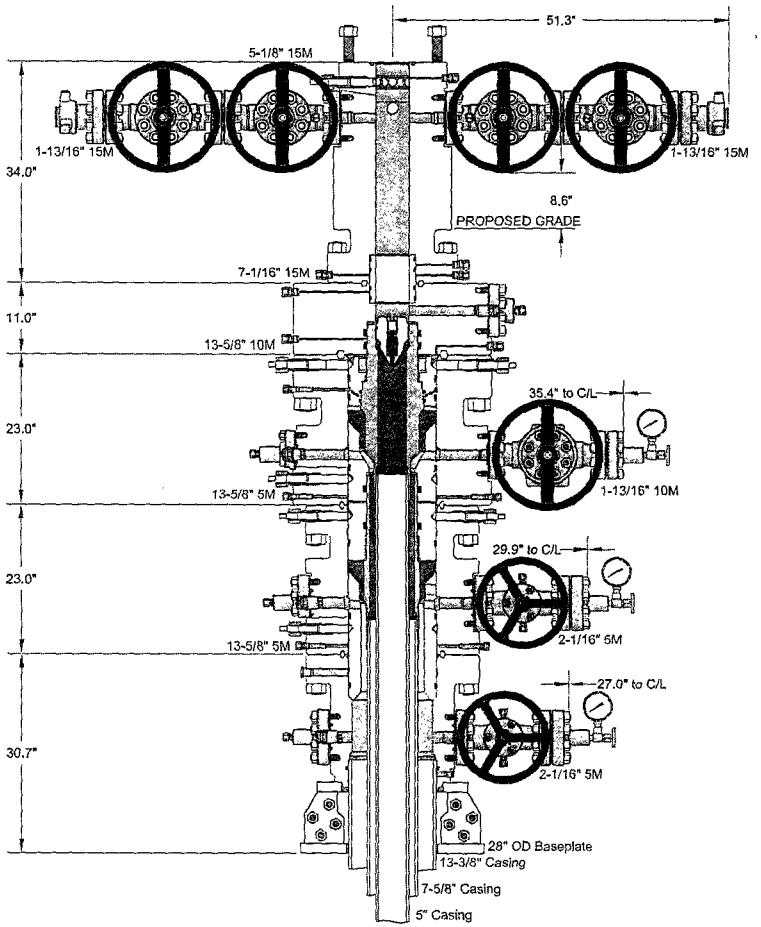
Completion	
Type:	
Tubing Design:	
Total Stages:	



SPUD CONFIGURATION



DRILL & SKID CONFIGURATION



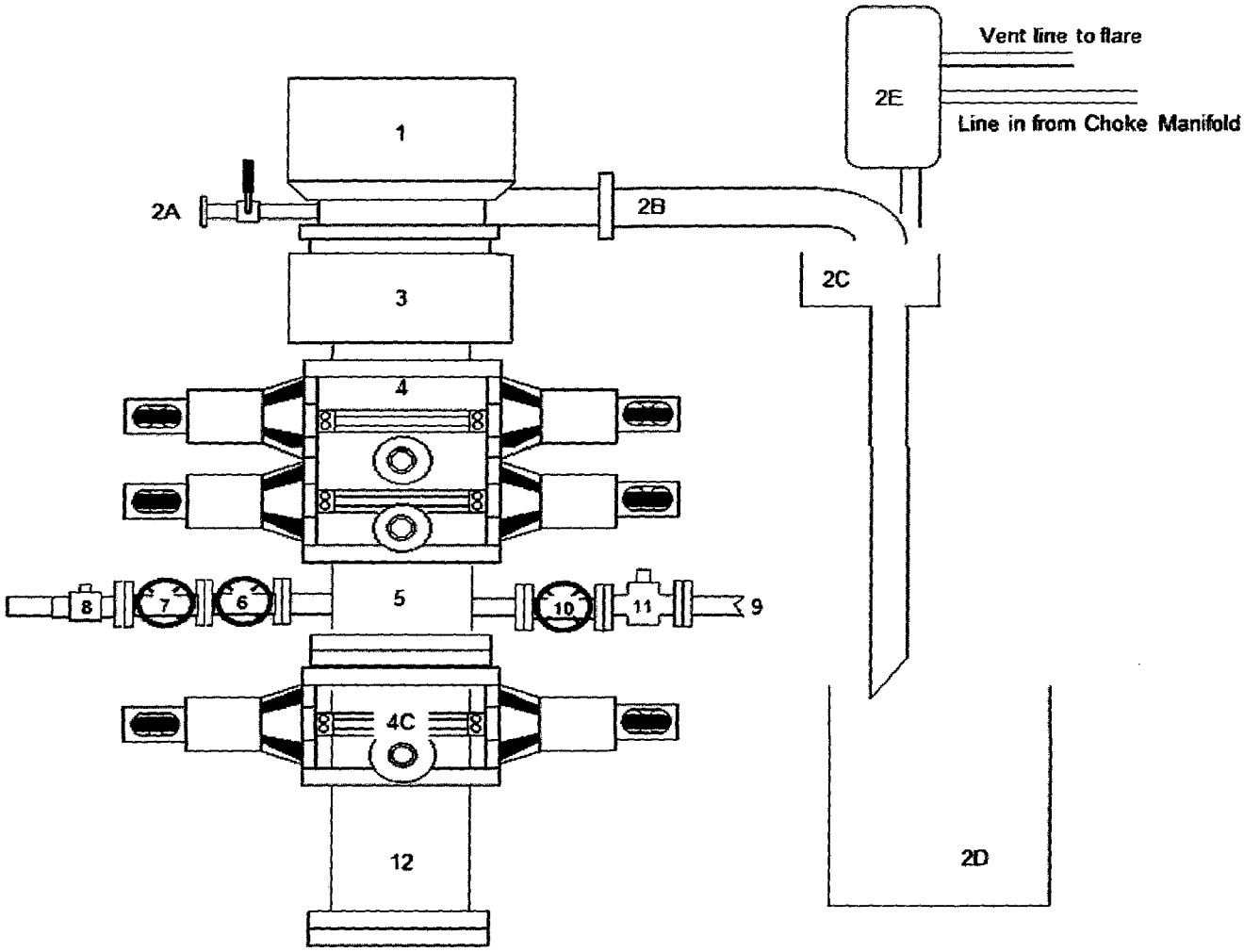
COMPLETION CONFIGURATION

CACTUS WELLHEAD LLC	CONOCOPHILLIPS 3 STRING CONFIGURATION		
13-3/8" x 7-5/8" x 5" 5M MBS2 Wellhead System With 13-5/8" 10M x 7-1/16" 15M DBLHPS DSPA And 7-1/16" 15M x 5-1/8" 15M CMT-FB-EN Tubing Head, 34" Tall	DRAWN	THH	09JUN15
	APPRV		
	DRAWING NO.	ODE0000491-A	

Attachment #4

BLOWOUT PREVENTER ARRANGEMENT - H&P486

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



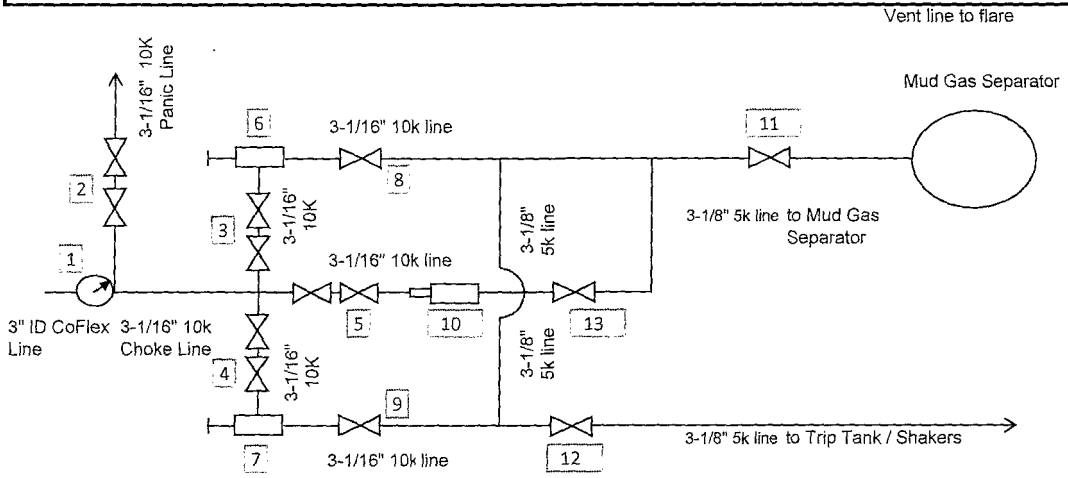
Item	Description
1	Rotating Head
2A	Fill up Line and Valve
2B	Flow Line (8")
2C	Shale Shakers and Centrifuges
2D	Cuttings Bins for Zero Discharge
2E	Mud Gas Separator with vent line to flare and return line to mud system
3	Annular Preventer (13-5/8", 10M)
4	Double Ram (13-5/8", 10M, Bline Ram bottom 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

CHOKE MANIFOLD ARRANGEMENT - HP486

10M System per Onshore Oil and Gas Order No. 2 utilizing 5M/10M Equipment



All Tees must be Targeted

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

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

Drawn by:
James Chen, P.E.
Drilling Engineer, ConocoPhillips Company

Date: June 25th-2014

January 28 2014

TenarisHydril

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

Connection: Wedge 523™
Casing/Tubing: CAS

PIPE BODY DATA

GEOMETRY

Nominal OD	**7.625** in.	Nominal Weight	**29.70** lbs/ft	Standard Drift Diameter	**6.750** in.
Nominal ID	**6.875** in.	Wall Thickness	**0.375** in.	Special Drift Diameter	**N/A**
Plain End Weight	**29.06** lbs/ft				

PERFORMANCE

Body Yield Strength	**940** x 1000 lbs	Internal Yield	**9470** psi	SMYS	**110000** psi
Collapse	**5350** psi				

WEDGE 523™ CONNECTION DATA

GEOMETRY

Connection OD	**7.752** in.	Connection ID	**6.800** in.	Make-Up Loss	**4.420** in.
Critical Section Area	**6.021** sq. in.	Threads per in.	**3.29**		

PERFORMANCE

Tension Efficiency	**70.5** %	Joint Yield Strength	**663** x 1000 lbs	Internal Pressure Capacity	**9470** psi
Compression Strength	**768** x 1000 lbs	Compression Efficiency	**81.7** %	Bending	**47** °/100 ft
External Pressure Capacity	**5350** psi				

MAKE-UP TORQUES

Minimum	**9900** ft-lbs	Target	**11900** ft-lbs	Maximum (*)	**17300** ft-lbs

OPERATIONAL LIMIT TORQUES

Operating Torque	**52000** ft-lbs	Yield Torque	**78000** ft-lbs		

BLANKING DIMENSIONS

Blanking Dimensions

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

October 21 2014

TenarisHydril

Size: 5.000 in.
Wall: 0.362 in.
Weight: 18.00 lbs/ft
Grade: P110
Min. Wall Thickness: 87.5 %

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

PIPE BODY DATA

GEOMETRY

Nominal OD	**5.000** in.	Nominal Weight	**18.00** lbs/ft	Standard Drift Diameter	**4.151** in.
Nominal ID	**4.276** in.	Wall Thickness	**0.362** in.	Special Drift Diameter	**N/A**
Plain End Weight	**17.95** lbs/ft				

PERFORMANCE

Body Yield Strength	**580** x 1000 lbs	Internal Yield	**13940** psi	SMYS	**110000** psi
Collapse	**13470** psi				

BLUE® CONNECTION DATA

GEOMETRY

Connection OD	**5.630** in.	Coupling Length	**10.551** in.	Connection ID	**4.264** in.
Critical Section Area	**5.275** sq. in.	Make-Up Loss	**4.579** in.	Threads per in.	**5.00**

PERFORMANCE

Tension Efficiency	**100** %	Joint Yield Strength	**580** x 1000 lbs	Internal Pressure Capacity	**13940** psi
Compression Efficiency	**100** %	Compression Strength	**580** x 1000 lbs	Bending	**101** °/100 ft
External Pressure Capacity	**13470** psi				

MAKE-UP TORQUES

Minimum	**6400** ft-lbs	Target	**7110** ft-lbs	Maximum	**7820** ft-lbs

OPERATIONAL LIMIT TORQUES

Operating Torque	**ASK**	Yield Torque	**17600** ft-lbs		

SHOULDER TORQUES

Minimum	**1070** ft-lbs	Maximum	**6040** ft-lbs		

BLANKING DIMENSIONS

Blanking Dimensions

Datasheet is also valid for Special Bevel option when applicable.

December 18 2014

Tenaris

Size: 5.000 in.
Wall: 0.362 in.
Weight: 18.00 lbs/ft
Grade: P110
Min. Wall Thickness: 87.5 %

Connection: TenarisXP™ BTC
Casing/Tubing: CAS
Coupling Option: REGULAR

PIPE BODY DATA

GEOMETRY

Nominal OD	**5.000** in.	Nominal Weight	**18.00** lbs/ft	Standard Drift Diameter	**4.151** in.
Nominal ID	**4.276** in.	Wall Thickness	**0.362** in.	Special Drift Diameter	**N/A**
Plain End Weight	**17.95** lbs/ft				

PERFORMANCE

Body Yield Strength	**580** x 1000 lbs	Internal Yield	**13940** psi	SMYS	**110000** psi
Collapse	**13470** psi				

TENARISXP™ BTC CONNECTION DATA

GEOMETRY

Connection OD	**5.720** in.	Coupling Length	**9.325** in.	Connection ID	**4.264** in.
Critical Section Area	**5.275** sq. in.	Threads per in.	**5.00**	Make-Up Loss	**4.141** in.

PERFORMANCE

Tension Efficiency	**100** %	Joint Yield Strength	**580** x 1000 lbs	Internal Pressure Capacity(1)	**13940** psi
Structural Compression Efficiency	**100** %	Structural Compression Strength	**580** x 1000 lbs	Structural Bending(2)	**101** °/100 ft
External Pressure Capacity	**13470** psi				

ESTIMATED MAKE-UP TORQUES(3)

Minimum	**N/A** ft-lbs	Target	**N/A** ft-lbs	Maximum	**N/A** ft-lbs

OPERATIONAL LIMIT TORQUES

Operating Torque	**ASK**	Yield Torque	**N/A** ft-lbs		

BLANKING DIMENSIONS

Blanking Dimensions

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

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

(3) Torque values calculated for API Modified thread compounds with Friction Factor=1. For other thread compounds please contact us at licensees@oilfield.tenaris.com. Torque values may be further reviewed.

For additional information, please contact us at contact-tenarishydril@tenaris.com

Attachment #7

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

Attachment # 1

Continental CONTITECH

Hose Data Sheet

CRI Order No.	516273
Customer	ContiTech Beattie Co.
Customer Order No	PO5438 STOCK
Item No.	3
Hose Type	Flexible Hose
Standard	**API SPEC 16 C**
Inside dia in inches	3
Length	35 ft
Type of coupling one end	FLANGE 4 1/16" API SPEC 6A TYPE 6BX FOR 10000 PSIBX155 RING GROOVE
Type of coupling other end	FLANGE 4 1/16" API SPEC 6A TYPE 6BX FOR 10000 PSI BX155 RING GROOVE
H2S service NACE MR0175	Yes
Working Pressure	10 000 psi
Design Pressure	10 000 psi
Test Pressure	15 000 psi
Safety 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
Safety 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

Attachment # 2

QC-DB- 45/2012
Page: 7/50

ContiTech

Fluid Technology
Quality Document

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE				CERT. N°:	184
PURCHASER:	ContiTech Beattie Co.			P.O. N°:	005438
CONTITECH ORDER N°:	516273	HOSE TYPE: 3" ID	Choke and Kill Hose		
HOSE SERIAL N°:	61477	NOMINAL / ACTUAL LENGTH:	10,67 m / 10,71 m		
W.P. 68,9 MPa 10000 psi		T.P. 103,4 MPa 15000 psi		Duration: 60 min.	

Pressure test with water at
ambient temperature

See attachment. (1 page)

↑ 10 mm = 10 Min.
→ 10 mm = 20 MPa

COUPLINGS Type	Serial N°		Quality	Heat N°
3" coupling with	10178	10173	AISI 4130	20231
4 1/16" 10K API Flange end			AISI 4130	33051

NOT DESIGNED FOR WELL TESTING

API Spec 16 C

Temperature rate:"B"

All metal parts are flawless

WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER INSPECTED AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.

STATEMENT OF CONFORMITY: We hereby certify that the above items/equipment supplied by us are in conformity with the terms, conditions and specifications of the above Purchaser Order and that these items/equipment were fabricated inspected and tested in accordance with the referenced standards, codes and specifications and meet the relevant acceptance criteria and design requirements.

COUNTRY OF ORIGIN HUNGARY/EU

Date:	Inspector	Quality Control
30. January 2012.		ContiTech Rubber Industrial Kft. Quality Control Dept. (1)

ContiTech Rubber Industrial Kft.
Budapesti út 10., Szeged H-6728
P.O. Box 152 Szeged H-6701
Hungary

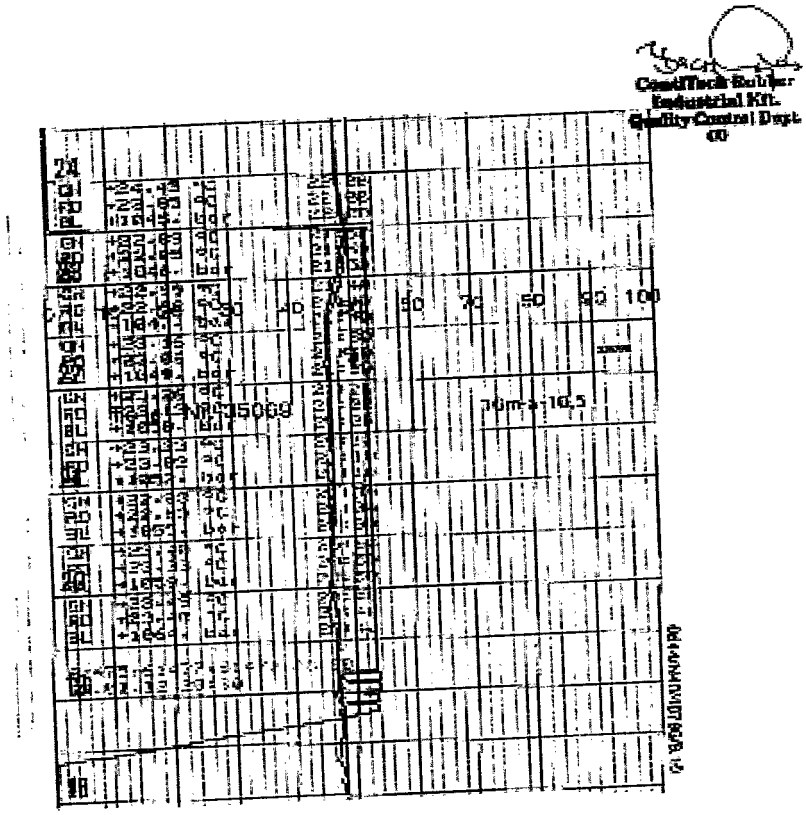
Phone: +36 62 566 737
Fax: +36 62 566 738
e-mail: info@fluid.contitech.hu
Internet: www.contitech-rubber.hu

The Court of Csongrád County as Registry Court
Registry Court No. HU 06-09-002502
EU VAT No. HU11087209

Bank data
Commerzbank Zrt.
Budapest
14220108-26830003-00000000

ATTACHMENT OF QUALITY CONTROL INSPECTION AND TEST CERTIFICATE *No: 182, 184, 185*

Page: 1 / 1



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

Attachment # 1

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

Hose Data Sheet

CRI Order No.	516273
Customer	ContiTech Beattie Co.
Customer Order No	PO5438 STOCK
Item No.	3
Hose Type	Flexible Hose
Standard	**API SPEC 16 C**
Inside dia in inches	3
Length	35 ft
Type of coupling one end	FLANGE 4 1/16" API SPEC 6A TYPE 6BX FOR 10000 PSIBX155 RING GROOVE
Type of coupling other end	FLANGE 4 1/16" API SPEC 6A TYPE 6BX FOR 10000 PSI BX155 RING GROOVE
H2S service NACE MR0175	Yes
Working Pressure	10 000 psi
Design Pressure	10 000 psi
Test Pressure	15 000 psi
Safety 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
Safety 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

Attachment # 2

Continental
CONTITECH

Fluid Technology

Quality Document

453.369-001.

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE				CERT. N°:	1098	
PURCHASER:	ContiTech Beattie Co.			P.O. N°:	004452	
CONTITECH ORDER N°:	482598	HOSE TYPE:	3" ID	Choke and Kill Hose		
HOSE SERIAL N°:	56839	NOMINAL / ACTUAL LENGTH:		10.67 m / 10,69 m		
W.P 68,9 MPa	10000 psi	T.P. 103,4 MPa	15000 psi	Duration:	60 min.	

Pressure test with water at ambient temperature

See attachment. (1 page)

↑ 10 mm = 10 Min.

→ 10 mm = 25 MPa

COUPLINGS Type	Serial N°	Quality	Heat N°
3" coupling with	8436 1662	AISI 4130	16837
4 1/16" Flange end		AISI 4130	31296 31501

API Spec 16 C
Temperature rate:"B"

All metal parts are flawless

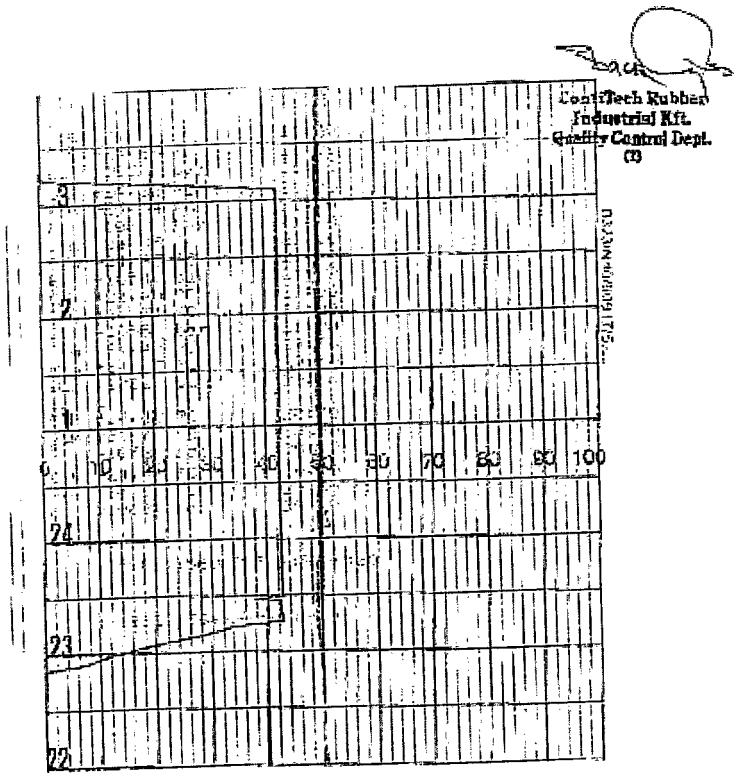
WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER INSPECTED AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.

STATEMENT OF CONFORMITY: We hereby certify that the above items/equipment supplied by us are in conformity with the terms, conditions and specifications of the above Purchaser Order and that these items/equipment were fabricated inspected and tested in accordance with the referenced standards, codes and specifications and meet the relevent acceptance criteria and design requirements.

COUNTRY OF ORIGIN HUNGARY/EU

Date:	Inspector	Quality Control
02. November 2010.		ContiTech Rubber Industrial Kft. Quality Control Dept.

ATTACHMENT OF QUALITY CONTROL INSPECTION AND TEST CERTIFICATE NO: 1052, 1164
1166
Page: 1/1



Variance Request

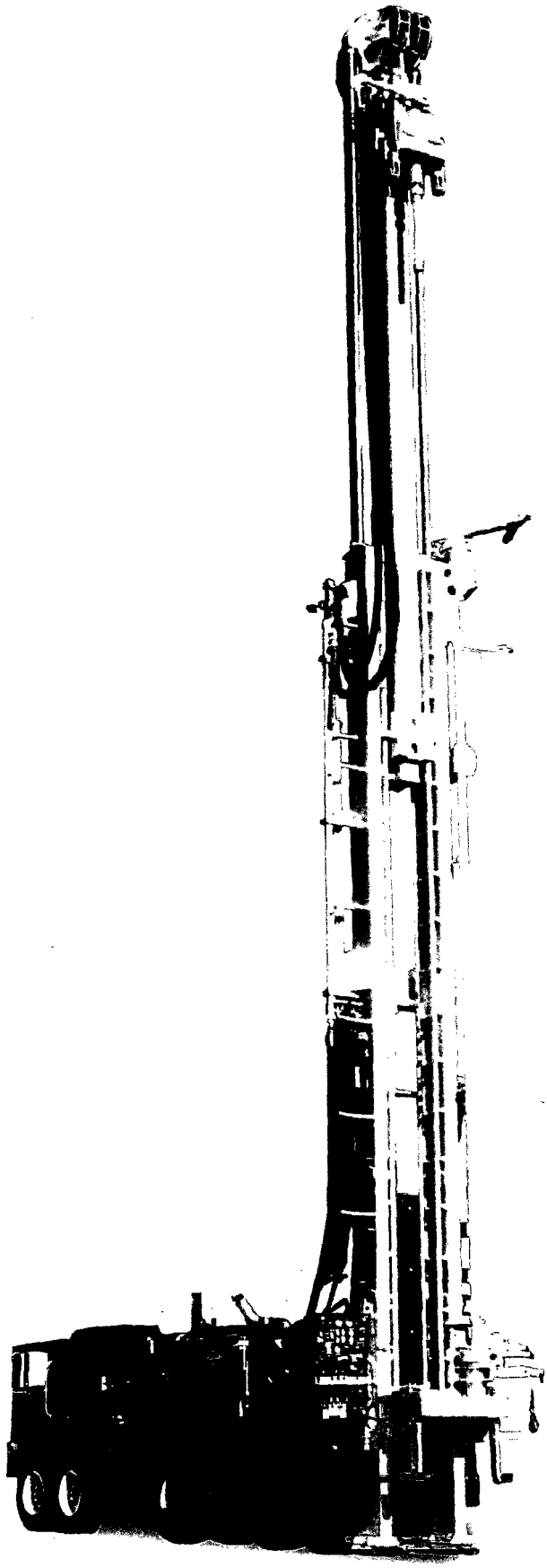
Attachment #8

T130XD

ROTADRILL

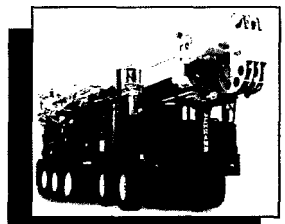
A heavy duty, heavy hoist carrier mounted drill rig. The T130XD utilizes innovative Telemast technology to achieve Range III pipe capability in a compact over the road package.

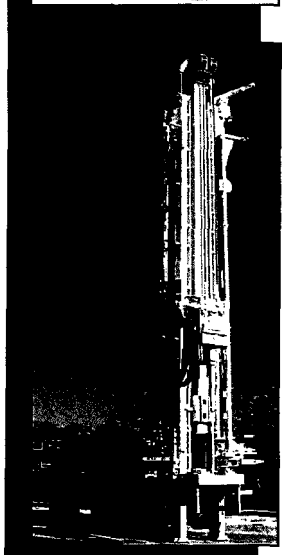
- Equipped with Schramm Telemast
- 50′ head travel handles Range III casing
- 43′ transport length with less than 6′ overhang
- 130,000 lbs hoist
- No sub-structure required
- Mast slides to clear BOP

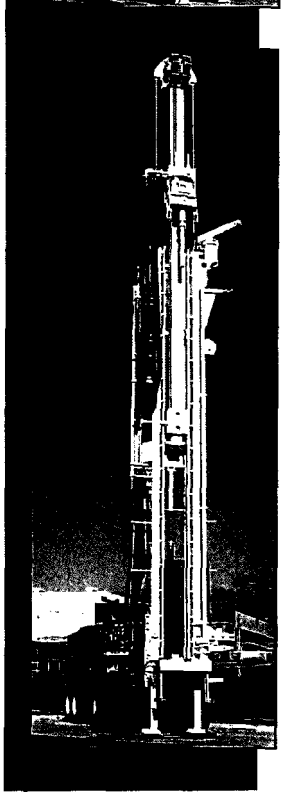


CARRIER MOUNTED RIG EQUIPPED WITH TELEMAST

T130XD ROTADRILL SPECIFICATIONS







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

Standard Compressor
Variable volume two-stage, oil flooded rotary screw
1350 cfm @ 350 psi (38.0 cu. m/min @ 24.1 bar), up to 1150 cfm @ 500 psi (32.6 cu. m/min @ 35.5 bar)

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

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

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

Top Head Rotation
Ductile iron, single reduction oil bath gearbox with two disc valve type hydraulic motors. Infinitely variable rotation speed.
3.5:1 Reduction Gear
3" diameter (76.2 mm) spindle thru hole
0-143 rpm, infinitely variable
106,600 in-lb (12,045 N·m) torque

Feed System
Top head is driven by hydraulic traverse cylinders through special wire rope and large diameter Nylatron sheaves. As top head is raised, the inner mast section extends by a ratio of 1:2 until it reaches its fully extended position at 50' of clear head travel.
42' 9" (13 m) OA height (retracted)
69' 9" (21.65 m) OA height (extended)
50' (15.24 m) top head travel
130,000 lb (59,090 kg) pullup
8 fpm (2.44 mpm) pullup speed-slow feed
125 fpm (38.1 mpm) pullup speed-rapid feed
32,000 lb (14,545 kg) pulldown capacity
26 fpm (7.92 mpm) pulldown speed-slow feed
270 fpm (82.3 mpm) pulldown speed-rapid feed
52' 10" (16.1 m) working clearance mast spindle to table (sub removed)
48' 10" (14.9 m) working clearance mast sub to table

Drill Pipe & Casing
30' x 4-½" OD x 2-⅞ 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

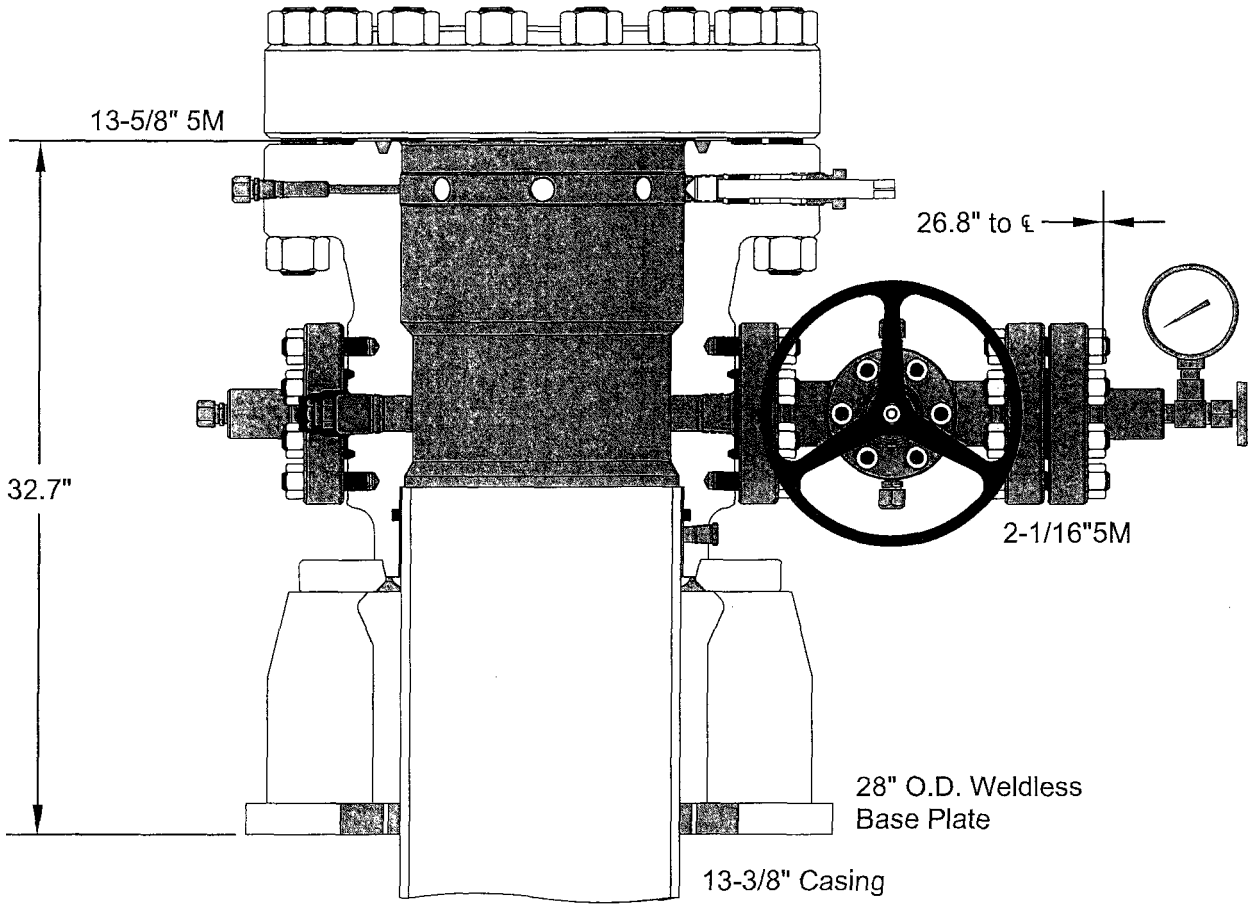
Accessories
Pipe handling sling, 60" breakout wrench, and 50 hour maintenance kit.

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

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

GE Oil & Gas

Attachment #9



ALL DIMENSIONS ARE APPROXIMATE

CONOCOPHILLIPS
SPUDDER RIG

HSG,WG,SH2-LWR,13-5/8 5M X 13-3/8 SOW,W/2 2-1/16 5M FP
BASEPLATE,WELDLESS,28 OD
FLANGE,BLIND, 13-5/8 5M

DRAWN	VJK	19AUG14
APPRV	KN	16AUG14

FOR REFERENCE ONLY
DRAWING NO. PE00624

SKID / BATCH DRILLING OPERATIONS – "QUAD PAD"

Attachment #10

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

1. **ALL SURFACE CASINGS PRE-SET** (Pre-set with "Spudder Rig").
2. WELL 1 / BS3C. Drill all well (Set 9-5/8" CASING and 5-1/2" CASING) – WBM All Hole Sections.
3. WELL 2 / WolfCamp 3. 9-5/8" CASING and 7-5/8 CASING – WBM.
4. WELL 3 / WolfCamp 2. 9-5/8" CASING and 7-5/8 CASING – WBM.
5. WELL 4 / WolfCamp 1. 9-5/8" CASING and 7-5/8 CASING – WBM.

"INTERMEDIATE 1" and "INTERMEDIATE 2" BATCH

6. WELL 4 / WolfCamp 1. 5"x4-1/2" CASING – **OBM**.
7. WELL 3 / WolfCamp 2. 5"x4-1/2" CASING – **OBM**.
8. WELL 2 / WolfCamp 3. 5"x4-1/2" CASING – **OBM**.

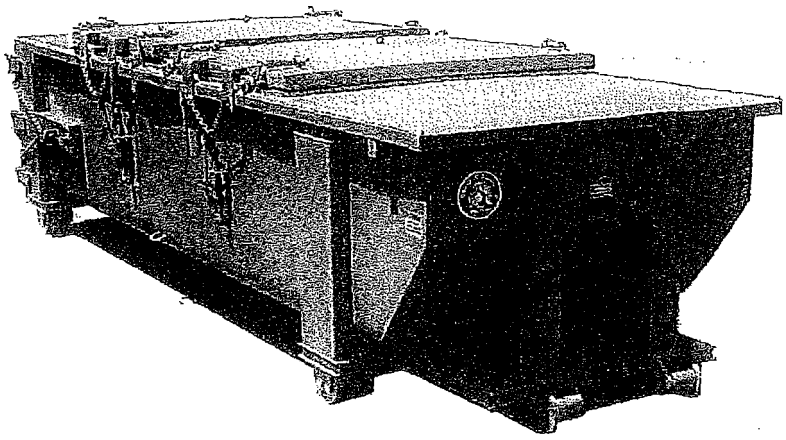
"PRODUCTION" BATCH

9. **RIG RELEASE**.

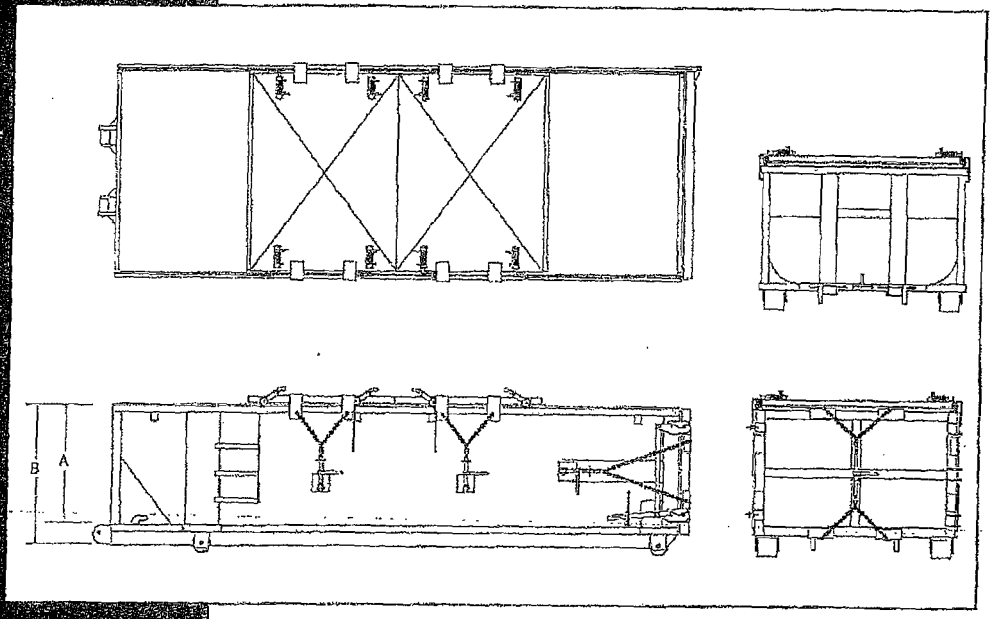
SPECIFICATIONS

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, inside liner hooks
DOOR: 3/16" PL with tubing frame
FRONT: 3/16" PL slant formed
PICK UP: Standard cable with 2" x 6" x 1/4" rails, gusset at each crossmember
WHEELS: 10 DIA x 9 long with rease fittings
DOOR LATCH: 3 Independent ratchet binders with chains, vertical second latch
GASKETS: Extruded rubber seal with metal retainers
WELDS: All welds continuous except sub-structure crossmembers
FINISH: Coated inside and out with direct to metal, rust inhibiting acrylic enamel color coat
HYDROTESTING: Full capacity static test
DIMENSIONS: 22'-11" long (21'-8" inside), 99" wide (88" inside), see drawing for height
OPTIONS: Steel grit blast and special paint, Ampliroll, Heil and Dino pickup
ROOF: 3/16" PL roof panels with tubing and channel support frame
LIDS: (2) 68" x 90" metal rolling lids spring loaded, self raising
ROLLERS: 4" V-groove rollers with delrin bearings and grease fittings
OPENING: (2) 60" x 82" openings with 8" divider centered on container
LATCH: (2) independent ratchet binders with chains per lid
GASKETS: Extruded rubber seal with metal retainers

Heavy Duty Split Metal Rolling Lid



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



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

ConocoPhillips Company
Well: Stampede 34 Federal COM W2 6H
Location: Sec. 34, T26S, R31E
Date: 12/1/2014

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 haul-off 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.

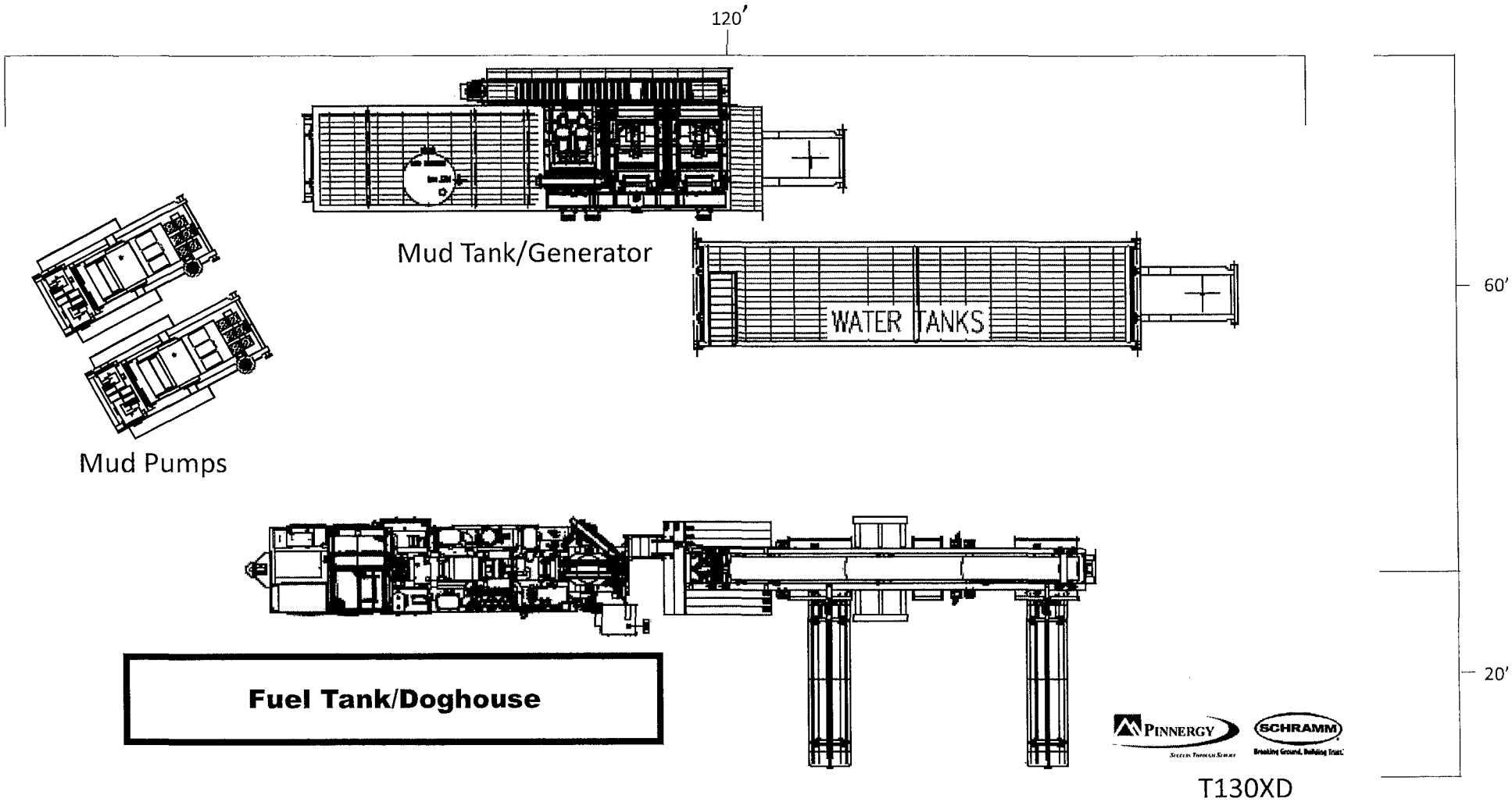
3. Mud will be transported by vacuum truck and disposed of at R-360 Inc. at the facility described above.

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:

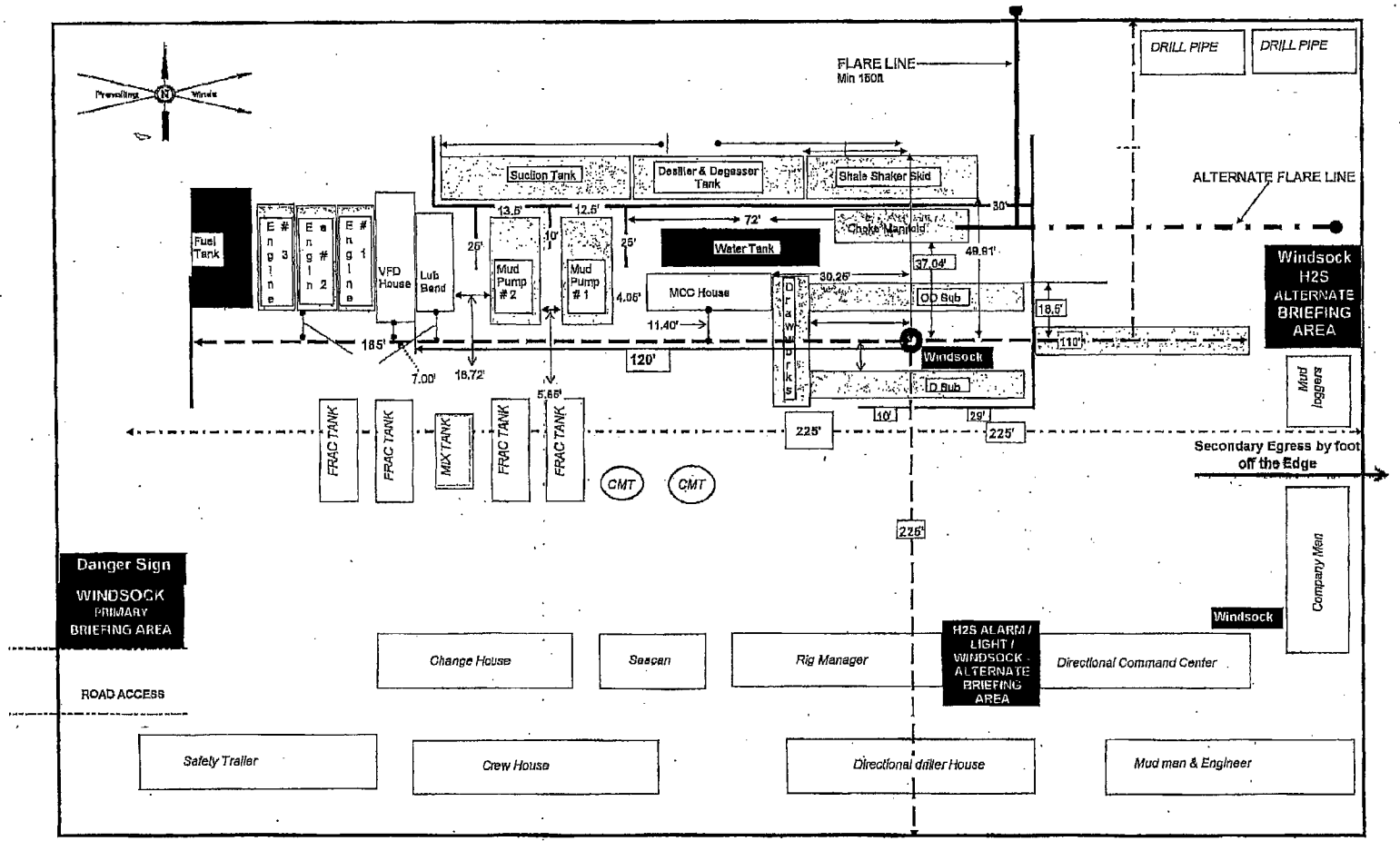
   - Nabors Well Services Company, 3221 NW County Rd; Hobbs, NM 88240, PO 5208 Hobbs, NM, 88241, Permit SWD 092. (Well Location: **Section 3, T19S R37E**)

   - 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.

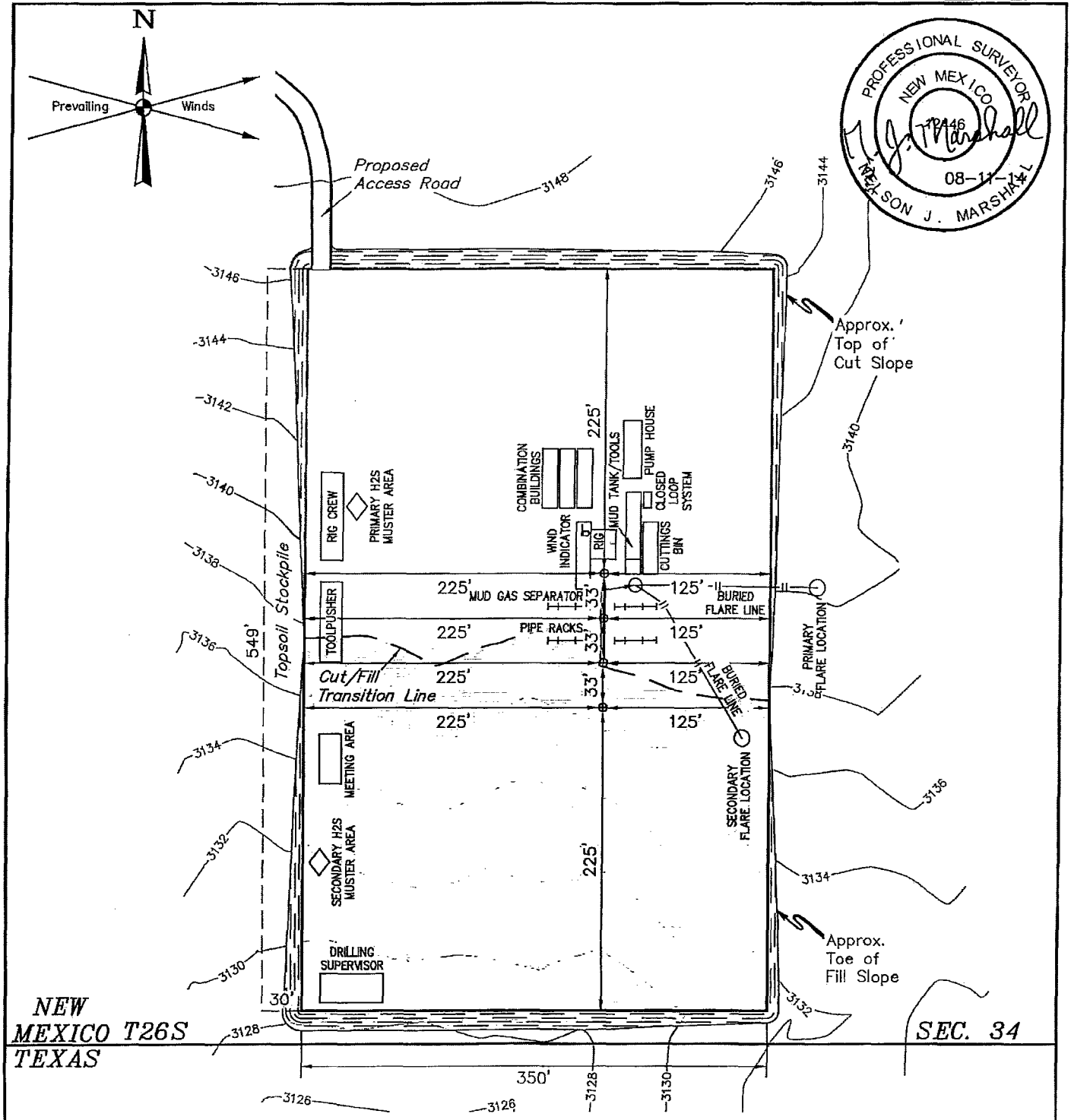
Roger Ramos
Staff Drilling Engineer
Office: 281-206-5334
Cell: 832-566-0804



"Pinnergy #1" Spudder Rig Layout


Prevailing
N
Winds
FLARE LINE
Min 150ft
DRILL PIPE
DRILL PIPE
ALTERNATE FLARE LINE
Suction Tank
Desilter & Degasser Tank
Shale Shaker Skid
Choke Manifold
Water Tank
Fuel Tank
Engine #3
Engine #2
Engine #1
VFD House
Lub Band
Mud Pump #2
Mud Pump #1
MCC House
DOG HOUSE
OD Sub
D Sub
Windsock
Windsock H2S ALTERNATE BRIEFING AREA
Mud Logger
FRAC TANK
FRAC TANK
MIX TANK
FRAC TANK
FRAC TANK
CMT
CMT
Secondary Egress by foot off the Edge
Company Men
Danger Sign
WINDSOCK PRIMARY BRIEFING AREA
ROAD ACCESS
Change House
Seacan
Rig Manager
H2S ALARM / LIGHT / WINDSOCK - ALTERNATE BRIEFING AREA
Directional Command Center
Windsock
Safety Trailer
Crew House
Directional driller House
Mud man & Engineer
185'
120'
225'
225'
226'
72'
30'
49.61'
37.04'
30.25'
18.5'
110'
11.40'
7.00'
18.72'
5.65'
4.06'
25'
10'
25'
13.6'
12.6'
10'
29'

MAP 15



NOTES:

- Flare pit is to be located a min. of 160' from the wellhead.
- Contours shown at 2' intervals.

ConocoPhillips Company

STAMPEDE 34 FEDERAL COM
W3 05H, W2 06H, W1 07H & TC 08H
SECTION 34, T26S, R31E, N.M.P.M.
LOT 4

UINTAH ENGINEERING & LAND SURVEYING

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

DRAWN BY: S.F.	DATE DRAWN: 07-22-14
SCALE: 1" = 100'	REVISED: 00-00-00

TYPICAL RIG LAYOUT | **FIGURE #3**

ConocoPhillips

H_2S Contingency Plan

H_2S Contingency Plan Holders:

Attached is an H_2S 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

ConocoPhillips

HYDROGEN SULFIDE (H_2S) OPERATIONS

Contingency Plan
For
Permian Drilling Operations

ConocoPhillips Company
Mid-Continent Business Unit
Permian Asset Area

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 ensure your own safety.

Note the following:

—— Location of the incident.
—— Nature of the incident.
—— Wind direction and weather conditions.
—— Other assistance that may be needed.

—— Call local supervisory personnel (refer to Section V: Emergency Call List) until personal contact is made with a person on the list.

—— Perform emergency assessment and response as needed. The response may include rescue and/or evacuation of personnel, shutting in a system and/or notification of nearby residents/public (refer to Section VII: Public Notification/Evacuation).

—— Secure the site.

—— Follow the direction of the On-scene Incident Commander (first ConocoPhillips supervisor arriving on-scene).

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

—— Becomes ConocoPhillips' On-scene Incident Commander upon arrival to location.

—— Follow the principles of the **D.E.C.I.D.E.** process below to assess the incident. (Note wind direction and weather conditions and ensure everyone's safety).

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

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

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

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

—— Ensure site security.

—— Set barricades and /or warning signs at or beyond the calculated 100 ppm H_2S radius of exposure (ROE). All manned barricades must be equipped with an H_2S monitor and a 2-way radio.

—— Set roadblocks and staging area as determined.

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

Recording Secretary _____
Public Information Officer _____
Safety/Medical Officer _____
Decontamination Officer _____

—— Have the "Recording Secretary" begin documenting the incident on the "Incident Log" (refer to Section VIII: Forms/Reports).

—— If needed, request radio silence on all channels that use your radio tower stating that, until further notice, the channels should be used for emergency communications only.

—— Perform a Site Characterization and designate the following:

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

AND

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

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

_____ Coordinate the attempt to stop the release of H_2S. You should consider closing upstream and downstream 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_2S and combustible gas throughout the area,

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

Removing all barricades and warning signs,

Allowing evacuees to return to the area, and

Advising all parties previously notified that the emergency has ended.

_____ Ensure the proper regulatory authorities/agencies are notified of the incident (refer to Section V: Emergency Call List).

_____ Clean up the site. (Be sure all contractor crews have had appropriate HAZWOPER training.)

_____ Report completion of the cleanup to the Asset Environmentalist. (Environmentalist will report this to the proper State and/or Federal agencies.)

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

- Company employee receiving occupational injury or illnesses.

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

- Company property that is damaged or lost.

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

- Hazardous Material Spill/Release Report Form

- Emergency Drill Report

_____ 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**.

IV. EMERGENCY EQUIPMENT and MAINTENANCE

Emergency Equipment Suppliers

Safety International – Odessa, Tx. 432.580.3770
H_2S monitors
Breathing air includes cascade systems
First aid and medical supplies
Safety equipment
H2S Specialist

Total Safety US Odessa, Tx/ Hobs, NM 432.561.5049 Odessa, Tx.
575.392.2973 Hobbs, NM
H_2S monitors
Breathing air includes cascade systems
Fire fighting equipment
First aid and medical supplies
Safety equipment

Indian Fire & Safety – Hobbs, NM 575.393.3093
H_2S monitors
Breathing air including cascade systems trailer mounted
30 minute air packs
Safety Equipment

General Information

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

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

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

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

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

H2S Safety Equipment and Monitoring Systems

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

3 – Fixed H2S sensors located as follows:
- 1 – on the rig floor
- 1 – at the Bell Nipple
- 1 – at the Shale Shaker or Flowline

1 – Entrance Warning Sign 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 – 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 size large, unless otherwise specified by the Drilling Supervisor.**

5 – Emergency Escape Paks located at Top Doghouse.
- Note: Ensure provisions are included for any personnel working above rig floor in derrick.

1 – 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 priority list of personnel to contact in an emergency situation. Use the latitude and longitude shown on the NMOCD Form C-102 when reporting the location.

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

Regulatory Agencies

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

Bureau of Land Mngt.
Carlsbad Field Office Office: 575.234.5972
620 E. Greene St. Fax: 575.885.9264
Carlsbad, NM 88220

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 **only with facts,** do not speculate about the cause, amount of damage, or the potential impact of the incident of the community, company, employees, or environment. (This information will be formally determined in the incident investigation.)

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

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

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

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

VII. Public Notification/Evacuation

Alert and/or Evacuate People within the Exposure Area

1. Public Notification – If the escape of gas could result in a hazard to area residents, the general public, or employees, the person **first** observing the leak should take **immediate** 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. Evacuation Procedures – Evacuation will proceed upwind from the source of the release of H_2S. 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

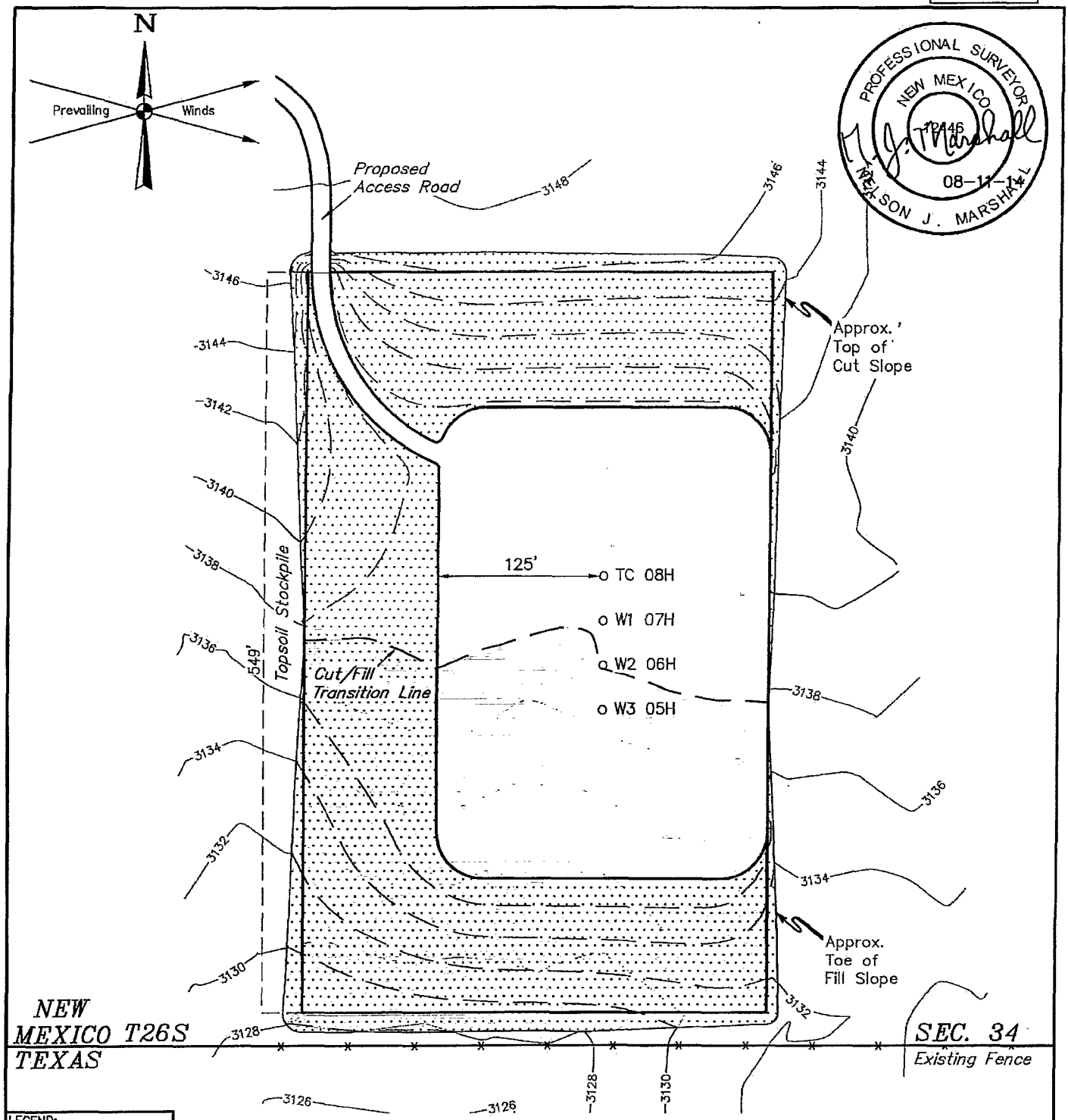
II. Preliminary Emergency Information Sheet

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

MAP 16



LEGEND:

Reclaimed Area

APPROXIMATE UN-RECLAIMED ACREAGE = ±2.034 ACRES

NOTES:

- Contours shown at 2' intervals.

ConocoPhillips Company

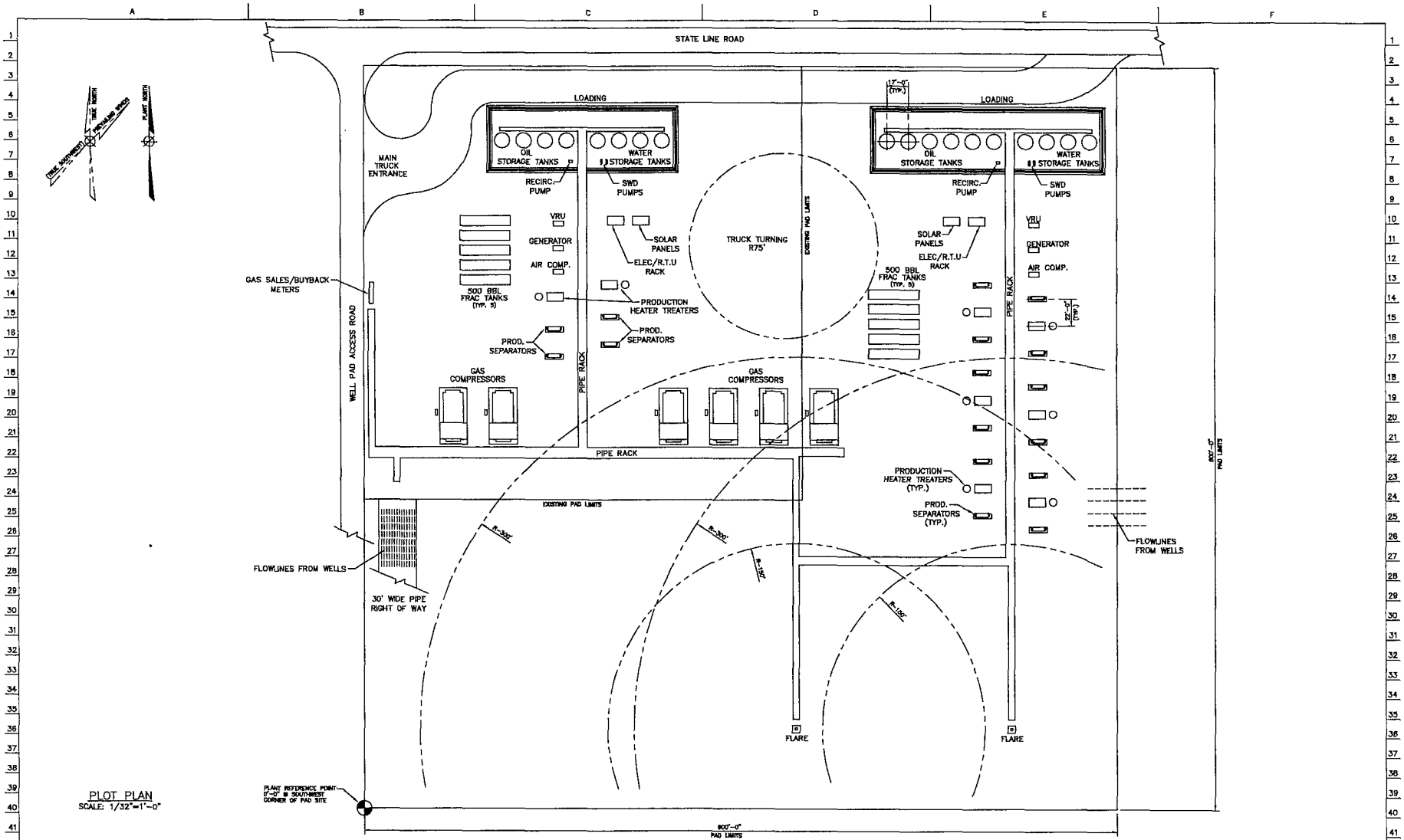
STAMPEDE 34 FEDERAL COM
W3 05H, W2 06H, W1 07H AND TC 08H
SECTION 34, T26S, R31E, N.M.P.M.
LOT 4

UINTAH ENGINEERING & LAND SURVEYING

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

DRAWN BY: S.F.	DATE DRAWN: 07-22-14
SCALE: 1" = 100'	REVISED: 00-00-00

RECLAMATION DIAGRAM FIGURE #4



PLOT PLAN
SCALE: 1/32"=1'-0"

NOTICE

THIS DRAWING IS THE PROPERTY OF CONOCOPHILLIPS CORPORATION AND IS LENT TO THE BORROWER FOR HIS CONFIDENTIAL USE ONLY, AND IS SUBJECT TO RETURN UPON REQUEST AND SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT IS SPECIFICALLY FURNISHED.

DWG No.	REFERENCE DRAWINGS	No.	DATE	REVISIONS	BY	CHK'D	MAINT DATE	APP'D	DATE	APP'D	DATE	NOTES

ENGINEERING RECORD	DATE
DRN: JDK	10/8/14
CHK:	
APP'D:	
APP'D:	
M.O. No.:	
SCALE: AS NOTED	

ConocoPhillips COLUMBIA, TEXAS

PRMU STAMPEDE EXPANSION
16 WELL PRODUCTION FACILITY
PLOT PLAN

DWG. No. STAMPEDE 16 WELL | REV A

Surface Use Plan of Operations

Introduction

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

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

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

1. Existing Roads

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

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

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

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

2. New or Reconstructed Access Roads

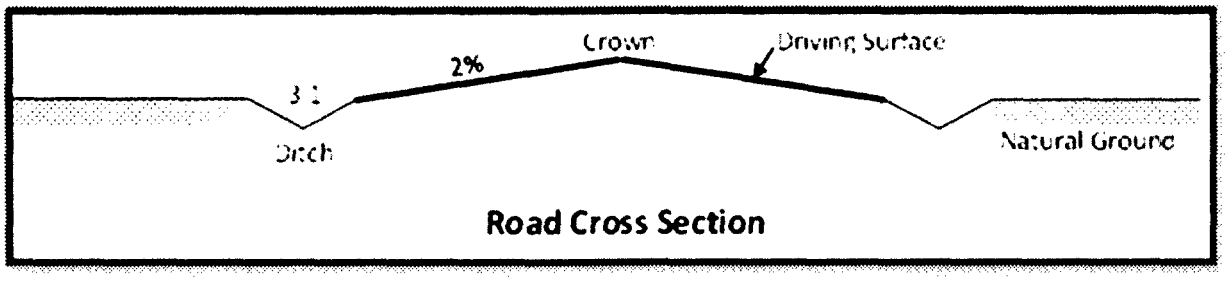
a. An access road will be needed for this proposed project. See the survey plat for the location of the access road.

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

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

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

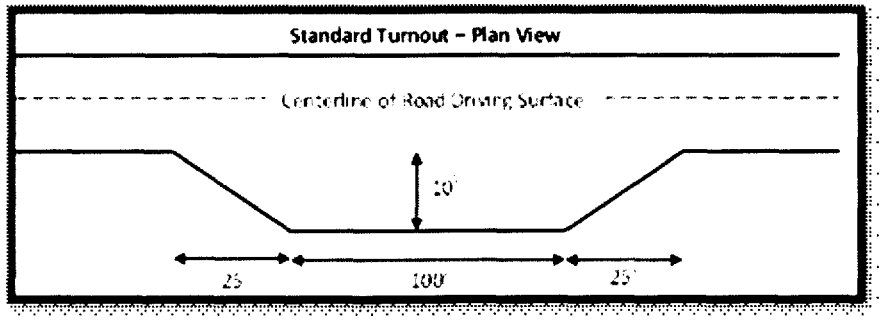
e. When the road travels on fairly level ground, the road will be crowned and ditched with a 2% slope from the tip of the road crown to the edge of the driving surface. The ditches will be 3 feet wide with 3:1 slopes. See Road Cross Section diagram below.



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.

l. No low water crossings will be constructed for the access road.

m. Since the access road is on level ground, no lead-off ditches will be constructed for the proposed access road.

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

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

3. Location of Existing Wells

a. Stampede 34 Federal COM W2 6H, Map 12 of the APD depicts all known wells within a one mile radius of the proposed well.

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

4. Location of Existing and/or Proposed Production Facilities

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

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.

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

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

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

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

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

Additional Pipeline(s)

We propose to install 1 additional pipeline(s):

1. Buried Gas pipeline:

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

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

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

Electric Line(s)

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

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

5. Location and Types of Water

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

6. Construction Material

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

7. Methods for Handling Waste

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

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

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

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

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

8. Ancillary Facilities

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

9. Well Site Layout

a. The following information is presented in the well site survey plat or diagram:

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

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

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

d. Topsoil Salvaging

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

10. Plans for Surface Reclamation

Reclamation Objectives

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

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

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

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

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

Interim Reclamation Procedures (If performed)

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

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

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

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

soil crust and create seed germination micro-sites.

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

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

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

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

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

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

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

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

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

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

11. Surface Ownership

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

12. Other Information

a. The following well pad location was finalized during an onsite conducted June 10, 2014 with Trishia Bad Bear of the BLM. Please review this application with the Stampede 34 Federal COM 5H. Temporary Water Lines will be filed under separate cover.

13. Maps and Diagrams

Access Road R-O-W - Existing Road
Stampede 34 Federal COM W2 6H, Map 12 - Wells Within One Mile
Flow Line R-O-W - Production Pipeline
Flow Line R-O-W - Gas Pipeline
Power Line R-O-W - Electric Line

Reclamation Diagram, Figure #4 - Interim Reclamation

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 Date: 12-2-14

Kristina Mickens
Sr. Regulatory Specialist

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**ConocoPhillips Company**
LEASE NO.:	**NMLC-068282A**
WELL NAME & NO.:	**Stampede 34 Federal Com W2 6H**
SURFACE HOLE FOOTAGE:	**0283' FSL & 1040' FWL**
BOTTOM HOLE FOOTAGE	**0280' FNL & 1040' FWL Sec. 27, T. 26 S., R 31 E.**
LOCATION:	**Section 34, T. 26 S., R 31 E., NMPM**
COUNTY:	**Eddy County, New Mexico**

TABLE OF CONTENTS

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

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. When the Communitization Agreement number is known, it shall also be on the sign.

Desert Heronries

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

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

Cave/Karst Surface Mitigation

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

Construction:

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

No Blasting:

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

Pad Berming:

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

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

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

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 ½ 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 cave-bearing 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

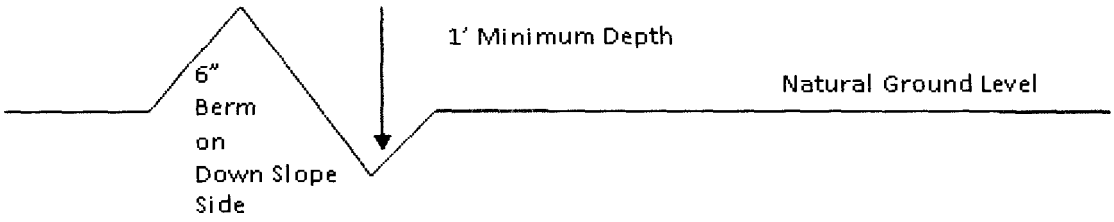
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

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 %);

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: $\frac{400'}{4\%} + 100' = 200'$ 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.

Construction Steps

1. Salvage topsoil
2. Construct road
3. Redistribute topsoil
4. Revegetate slopes

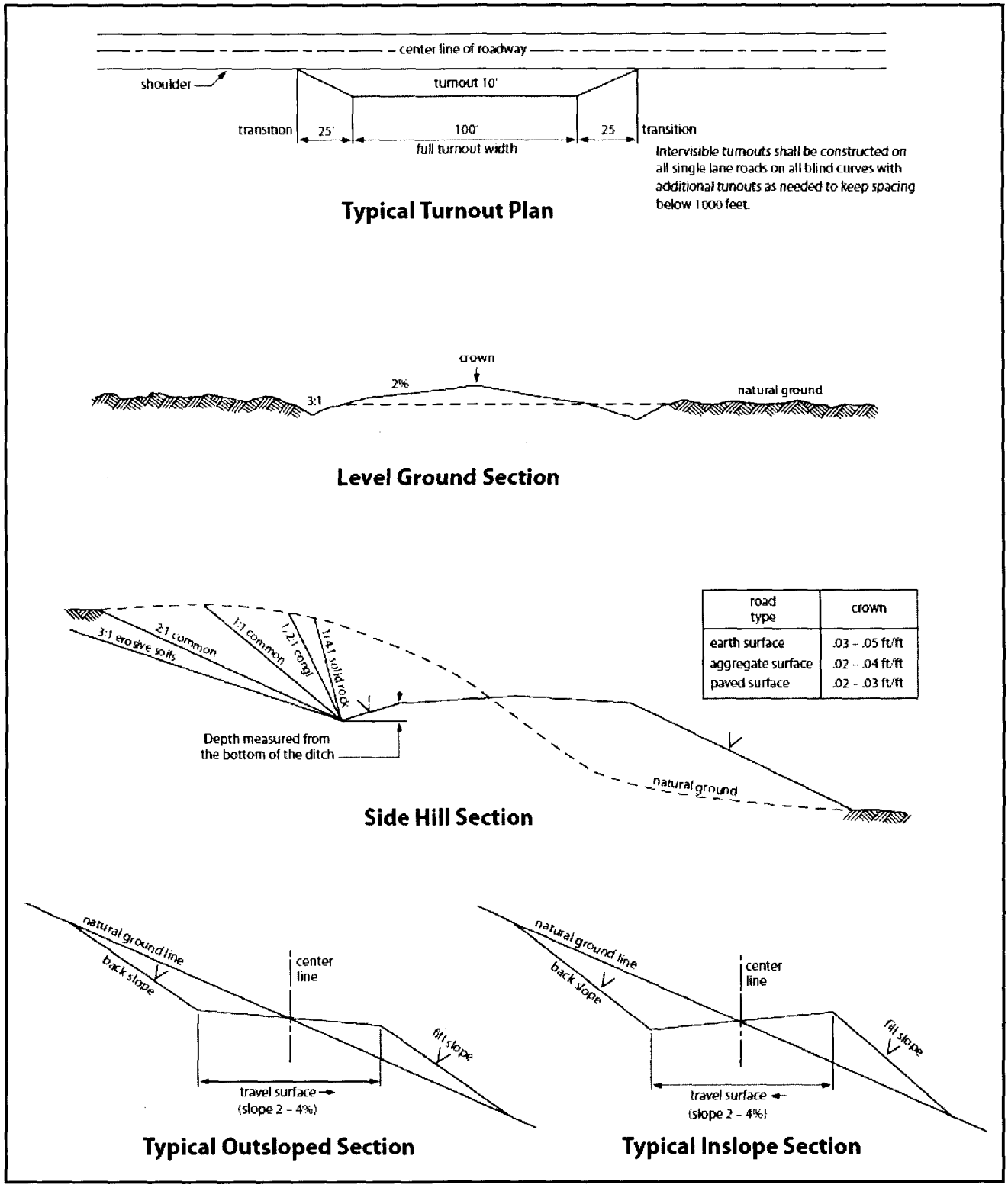


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

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.**

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a "Major" violation.**

3. **The operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other wells.**

4. Option – Setting surface casing with Pinnergy #1 Rig.
   a. Notify the BLM when removing the Pinnergy #1 Rig.
   b. Notify the BLM when moving in the H&P Flex Rig. Rig to be moved in within 60 days of notification that Pinnergy #1 Rig has left the location. Failure to notify or have rig on location within 60 days will result in an Incident of Non-Compliance.
   c. Once the H&P Flex Rig is on location, it shall not be removed from over the hole without prior approval unless the production casing has been run and cemented or the well has been properly plugged. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a "Major" violation.**
   d. BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as H&P Flex Rig is rigged up on well. CIT for the surface casing shall be performed and results recorded on subsequent sundry – pressure to be 1200 psi.

5. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area

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 8 hours. 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 3rd Bone Spring Sandstone and all subsequent formations.

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

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

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

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

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing, which shall be set at approximately **3925** feet **(basal anhydrite of the Castile Formation or the Lamar Limestone),** is:

    ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.**

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

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

Option #1:

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

Option #2:

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

a. First stage to DV tool:

☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.

b. Second stage above DV tool:

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

Formation below the 7-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.
Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.

4. The minimum required fill of cement behind the **5 X 4-1/2** inch production casing is:
   ☒ Cement as proposed by operator. Operator shall provide method of verification.

5. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

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

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

3. BOP Options:

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

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

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

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

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

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

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

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

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

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

D. DRILLING MUD

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

E. DRILL STEM TEST

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

F. WASTE MATERIAL AND FLUIDS

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

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

JAM 062016

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 until the operator removes 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, **Shale Green** 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 et seq. (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-of-way.

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 **30** feet:

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

8. The holder shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately ___6___ inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.

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

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

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

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

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

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

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

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

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

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

18. Escape Ramps - 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 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on

facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

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

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

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

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

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

7. The BLM serial number assigned to this authorization shall be posted in a permanent,

conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.
8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.
9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.
10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.
11. Special Stipulations:
- 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 no 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	lb/acre
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

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

NMOCD CONDITION OF APPROVAL

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.