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

N/A

6. If Indian, Allotee or Tribe Name

5. Lease Serial No. Surf: LC068282B/BHL: LC068282A

#### BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER

UNITED STATES

DEPARTMENT OF THE INTERIOR

| la. Type of work: DRILL REENI                                                                                                                                                                                                         | ER                                                      |                | 7 If Unit or CA Agreer                               | nent, Name and No.                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|----------------|------------------------------------------------------|---------------------------------------|
| lb. Type of Well: Oil Well Gas Well Other                                                                                                                                                                                             | Single Zone Mult                                        | iple Zone      | 8 Lease Name and Wo                                  | il No.<br>IC Com 34 1H 44             |
| 2. Name of Operator ConocoPhillips Company                                                                                                                                                                                            | 2178177                                                 |                | 9 API Well No.                                       | 42123                                 |
| 3a: Address P:O: Box 51810.<br>Midland, Tx: 79710                                                                                                                                                                                     | (3b) Phone No. (include area code)<br>432-688-6943      |                | 10. Field and Pool or Ex<br>Wildcat Wolfcamp         | ploratory<br>-08 S2631251             |
| 4. Location of Well (Report location clearly and in accordance with a At surface 250 FSL & 380 FWL (SWSW) Section 34-26                                                                                                               |                                                         | ا ما<br>ر      | 11 Sec., T.R.M., or Blk<br>Section 34-26S-31E        | and Survey or Area                    |
| At proposed prod. zone 330, FNL & 380, FWL (NWNW) Set                                                                                                                                                                                 | ction 27-26S-31E                                        | <br>           |                                                      | •                                     |
| 14. Distance in miles and direction from nearest town or post office.  —6 miles south/east of Battle Axe Road & Orla Hwy                                                                                                              | **                                                      | , v            | 12. County or Parish                                 | 13. State<br>NM                       |
| 15 Distance from proposed* location to nearest property or lease line, fi. (Also to nearest drig. unit line, if any)                                                                                                                  | 16. No. of acres in lease<br>+/-800                     | .240 acre      | g. Unit dedicated to this we                         | ii                                    |
| 18. Distance from proposed location*  to nearest well, drilling, completed, applied for, on this lease, it.                                                                                                                           | 19 Proposed Depth<br>18414 MD/11549 TVD<br>PH-11910 TVD | ES0085         |                                                      |                                       |
| 21. Elevations (Show whether DF, KDB, 'RT, GL, etc.) 3138' GL                                                                                                                                                                         | 22. Approximate date work will sta<br>10/01/2013        | art*           | 23. Estimated duration 30 days                       |                                       |
|                                                                                                                                                                                                                                       | 24. Attachments                                         |                |                                                      |                                       |
| The following, completed in accordance with the requirements of Onsho                                                                                                                                                                 | ore Oil and Gas Order No.1, must be                     | attached to th | is form:                                             |                                       |
| <ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (in the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office).</li> </ol> | Lands, the 5. Operator certifi                          | ication        | ns unless covered by an expression and/or plans as n | •                                     |
| 25. Signature                                                                                                                                                                                                                         | Name (Printed/Typed) Donna Williams                     |                | ¥ ·                                                  | ate<br>06/15/2013                     |
| Title<br>Sr. Regulatory Advisor                                                                                                                                                                                                       |                                                         |                | ,                                                    | · · · · · · · · · · · · · · · · · · · |
| Approved by (Signature)                                                                                                                                                                                                               | Name (Printed/Typed)                                    |                | .   [                                                | Date .                                |
| FIELD MANAGER                                                                                                                                                                                                                         | Office CARLSBAD (                                       |                |                                                      |                                       |
| Application approval does not warrant or certify that the applicant hol conduct operations thereon.  Conditions of approval, if any, are attached.                                                                                    | ds legăl or equitable title to those rigi               | hts in the sub | ject lease which would ent<br>APPROVAL FO            | itle the applicant to RTWO 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)

Carlsbad Controlled Water Basin



SEE ATTACHED FOR CONDITIONS OF APPROVAL

Approval Subject to General Requirements & Special Stipulations Attached

#### **Operator Certification**

#### **CONOCOPHILLIPS COMPANY**

#### **CERTIFICATION:**

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

Donna Williams

Sr. Regulatory Advisor

Date: tel 15/13

DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 Phone (575) 393-6161 Fax: (575) 393-0720 DISTRICT II 811 S. First St., Artesia, NM 88210 Phone (575) 748-1283 Fax: (575) 748-9720

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM,87410 Phone (505) 334-6178 Fax: (505) 334-6170

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

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised August 1, 2011

Submit one copy to appropriate District Office

#### OIL CONSERVATION DIVISION

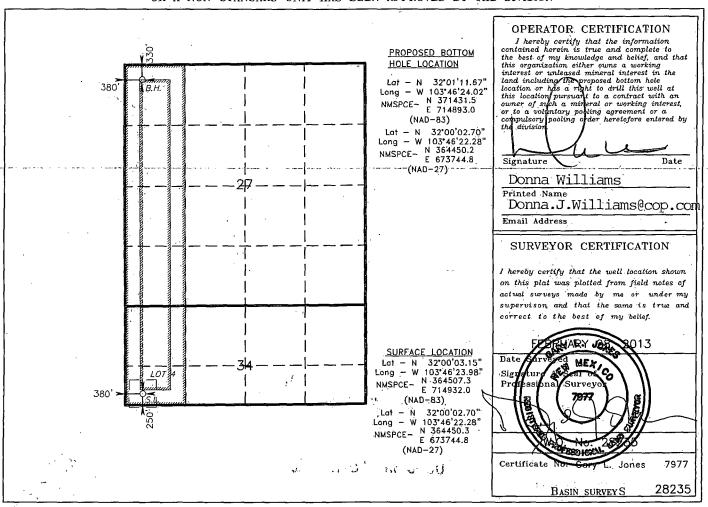
1220 South St. Francis Dr. Santa Fe, New Mexico 87505

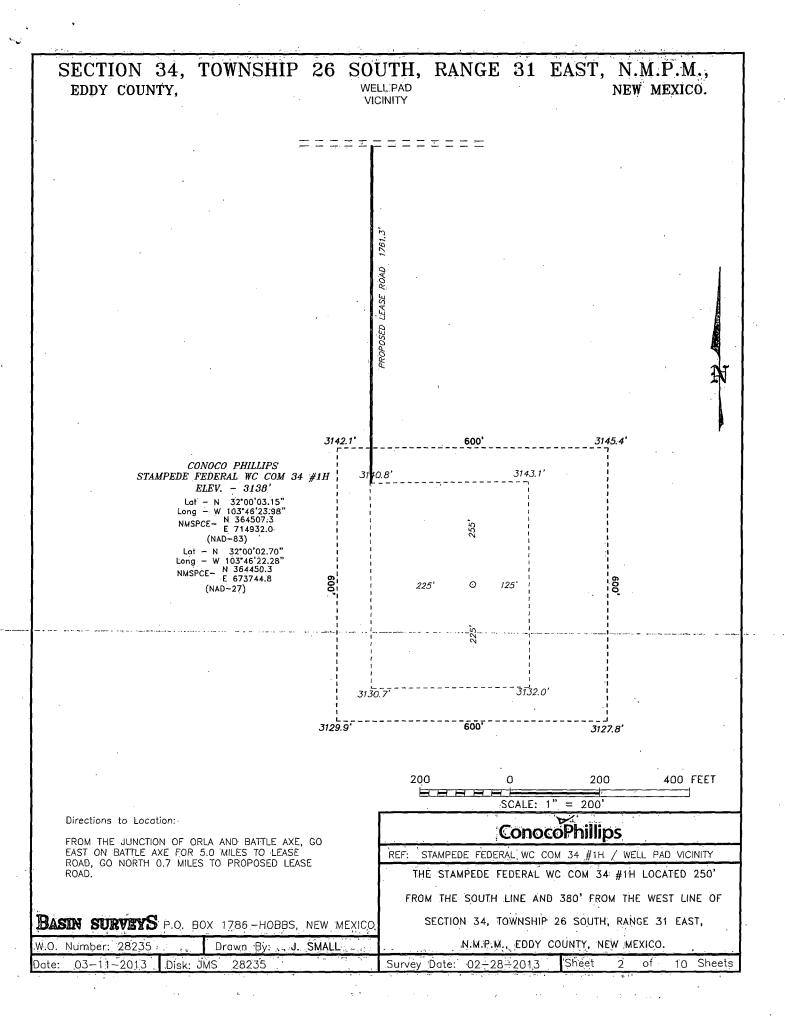
WELL LOCATION AND ACREAGE DEDICATION PLAT

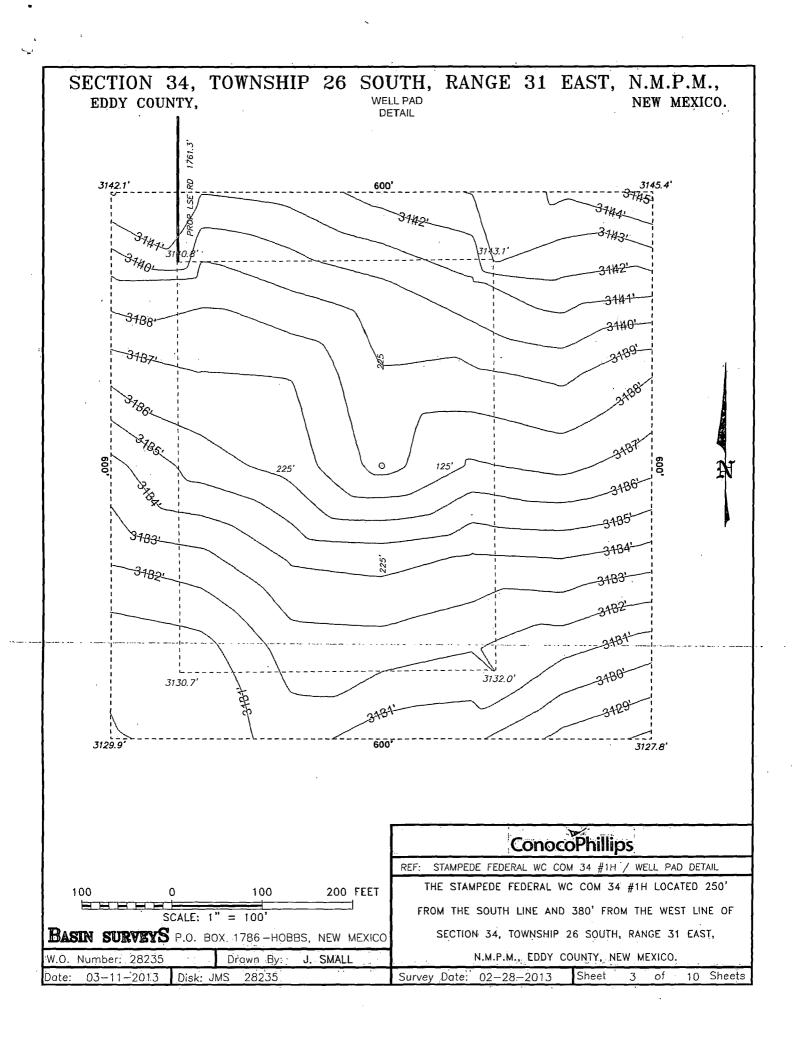
☐ AMENDED REPORT

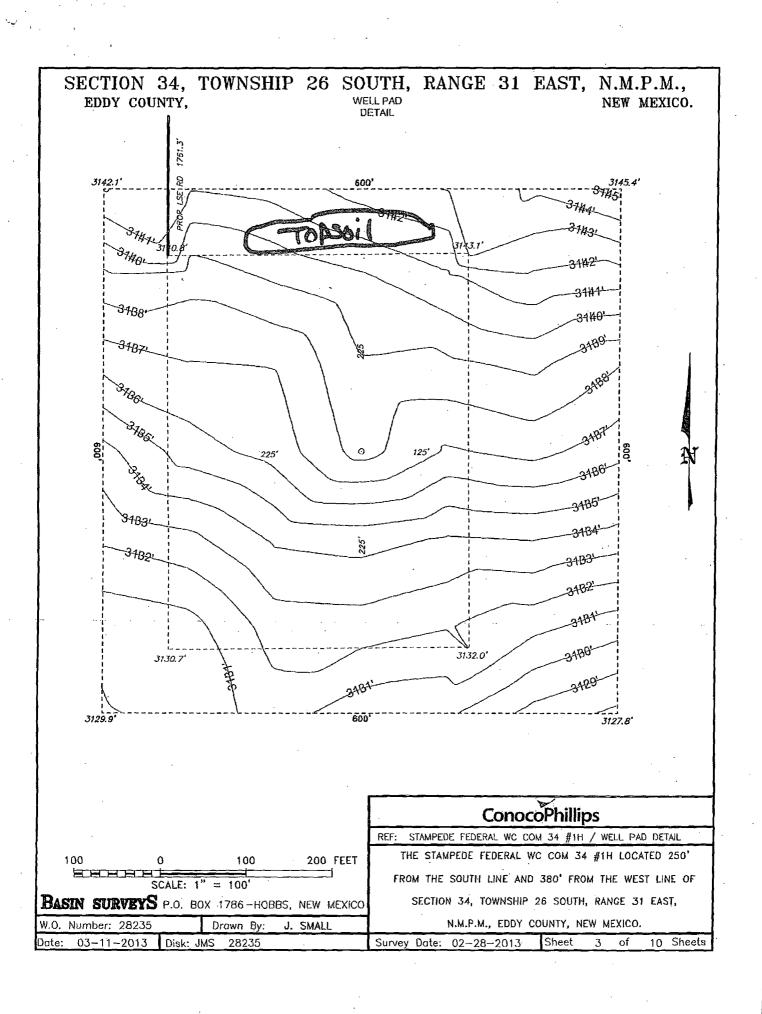
| 30-015-             | 42/2     | 23          | 980                                   | Pool Code |                             | Wildcat Wol      | Pool Name Ecamp- | 12125P.        | W.C.    |
|---------------------|----------|-------------|---------------------------------------|-----------|-----------------------------|------------------|------------------|----------------|---------|
| 40433               |          |             | S                                     | STAMPED   | , = , = ,                   | wc com 34        | .6 -08 320       | 23/20 WAI NO   |         |
| OGRID No.<br>217817 |          |             |                                       | Ċ         | Operator Nan<br>CONOCO PHII |                  |                  | Eleva<br>313   |         |
| Surface Location    |          |             |                                       | ation     |                             |                  |                  |                |         |
| UL or lot No.       | Section  | Township    | Range                                 | Lot Idn   | Feet from the               | North/South line | Feet from the    | East/West line | County  |
| LOT 4               | 34       | 26 S        | 31 E                                  |           | 250                         | SOUTH            | 380              | WEST           | EDDY    |
| ٠.                  | -        |             | Bottom                                | Hole Loc  | cation If Diffe             | erent From Sur   | face             |                |         |
| UL or lot No.       | Section  | Township    | Range                                 | Lot Idn   | Feet from the               | North/South line | Feet from the    | East/West line | County. |
| D                   | .27      | 26 S        | 31 E                                  |           | 330                         | NORTH            | 380              | WEST           | EDDY    |
| Dedicated Acres     | Joint o  | r Infill Co | nsolidation (                         | Code Or   | der No.                     |                  |                  | 7-28-          | 14.     |
| 225.20              | <u> </u> | <u> </u>    | · · · · · · · · · · · · · · · · · · · |           | <u> </u>                    |                  |                  | 1841           | 4 .     |

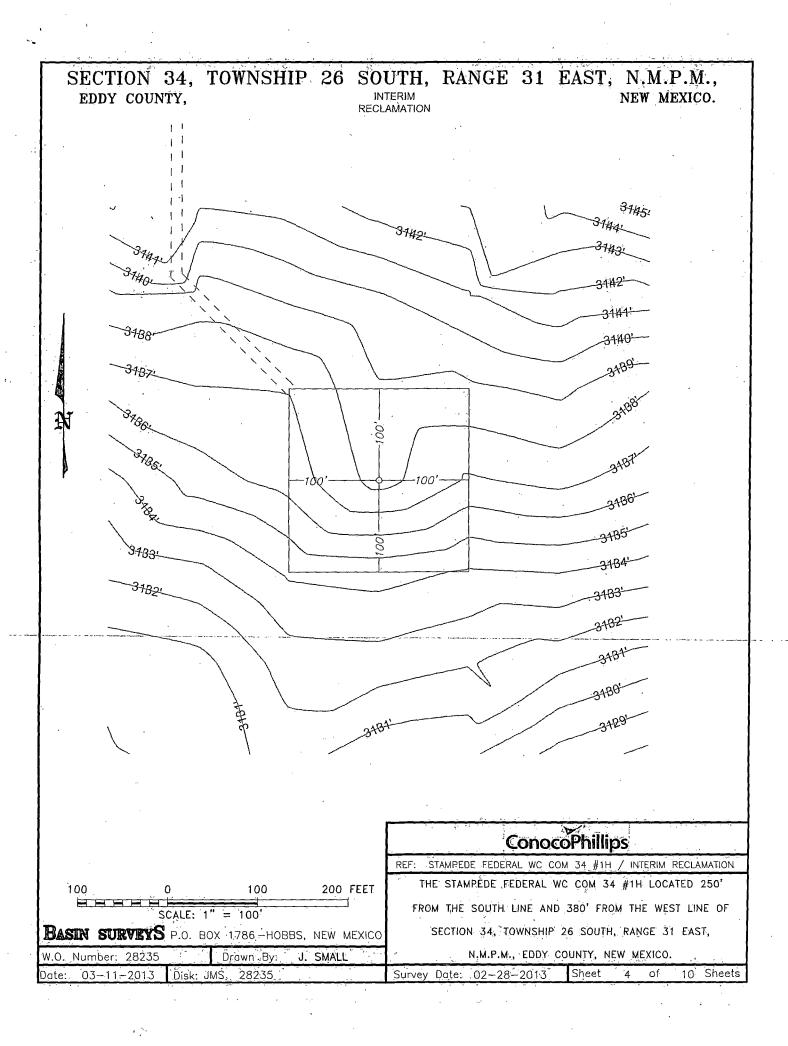
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

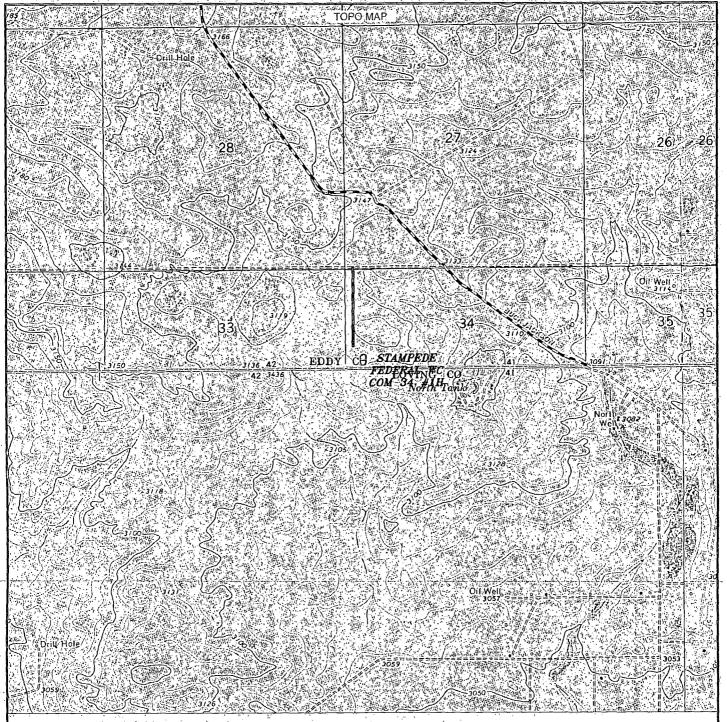














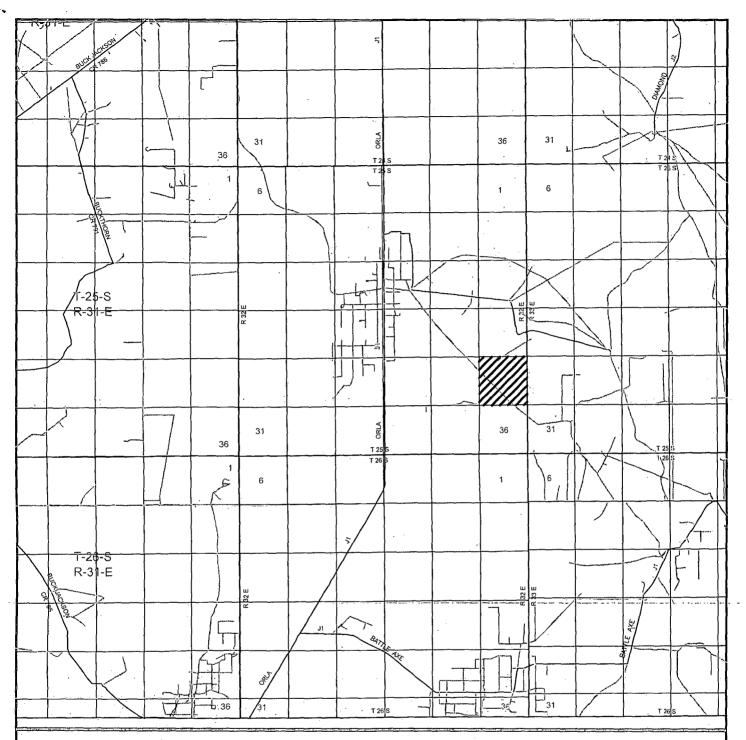
P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393-7316 - Office (575) 392-2206 - Fax basinsurveys.com W.O. Number: JMS 28235

Survey Date: 02-28-2013

Scale: 1" = 2000'

Date: 03-11-2013







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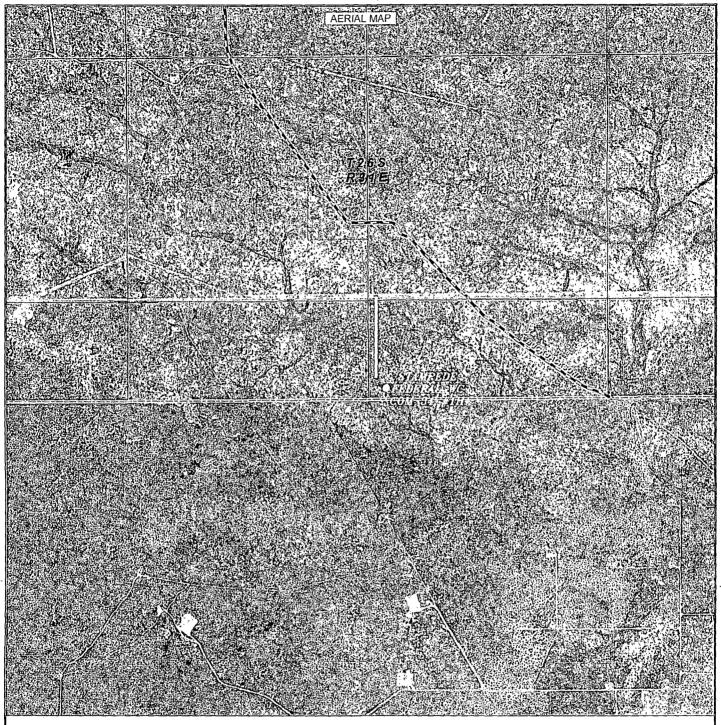
W.O. Number: JMS 28235

Survey Date: 02-28-2013

Scale: 1" = 2 Miles

Date: 03-11-2013





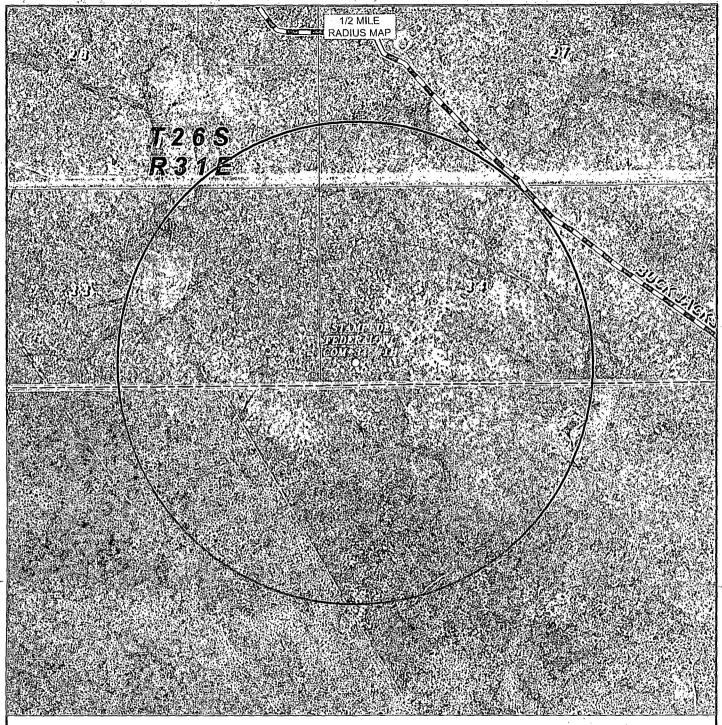


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Scale: 1" = 2000'

YELLOW TINT — USA LAND
BLUE TINT — STATE LAND
NATURAL COLOR — FEE LAND





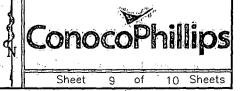


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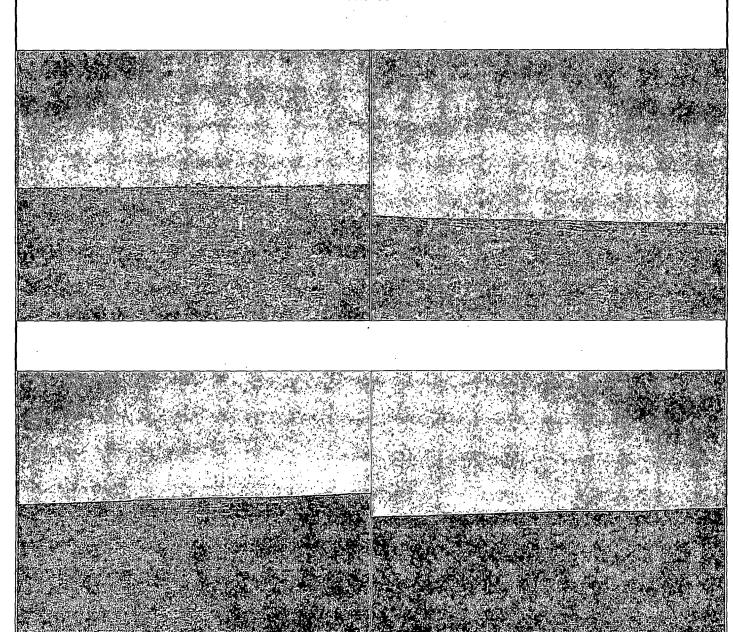
Survey Date: 02-28-2013

Scale: NONE

Date: 03-11-2013



RECLAMATION PHOTOS



STAMPEDE FEDERAL WC COM 34 #1H Located 250' FSL and 380' FWL Section 34, Township 26 South, Range 31 East, N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393—7316 — Office (575) 392—2206 — Fax basinsurveys.com W.O. Number: JMS 28235

Survey Date: 02-28-2013

Scale: NONE

Date: 03-11-2013



Sheet 10 of 10 Sheets

#### **OPERATORS NAME:**

#### ConocoPhillips Company

| LEASE NAME AND WELL NO.: | - Stampede-Federal-WC-GOM-34-1H-                     |
|--------------------------|------------------------------------------------------|
| SURFACE LOCATION:        | 250 FSL & 380 FWL (SWSW) 34-26S-31E                  |
| CASING POINT:            | 611.2 FSL & 378 FWL (SWSW) 34-26S-31E                |
| BHL:                     | 330 FNL & 380 FWL (NWNW) 27-26S-31E                  |
| FIELD NAME:              | Wildcat Wolfcamp                                     |
| POOL NAME:               | Wolfcamp                                             |
| COUNTY:                  | Eddy County, New Mexico                              |
|                          | Federal Surface LC068282B/Federal Minerals LC068282A |

The following information is to supplement the Application for Permit to Drill.

#### **DRILLING PLAN**

1. Name and estimated tops of all geologic groups, formations, members, or zones.(TVD)

| Quaternary                            | Surface | Water         |
|---------------------------------------|---------|---------------|
| Rustler                               | 875     | Water         |
| Top of Salt (Salado)                  | 1220    | Salt          |
| Castille                              | 2230    | Salt          |
| Delaware Top                          | 3980    | Oil/gas/water |
| Ramsey                                | N/A     | Oil/gas/water |
| Ford Shale                            | 4045    | Oil/gas/water |
| Olds                                  | 4095    | Oil/gas/water |
| Cherry Canyon                         | 4935    | Oil/gas/water |
| Brushy Canyon                         | 6435    | Oil/gas/water |
| Bone Spring                           | 7725    | Oil/gas/water |
| Bone Spring 1 <sup>st</sup> Carbonate | 7995    | Oil/gas/water |
| Avalon                                | 8260    | Oil/gas/water |
| Bone Spring 1 <sup>st</sup> Sand      | 8925    | Oil/gas/water |
| Bone Spring 2 <sup>nd</sup> Sand      | 9555    | Oil/gas/water |
| Bone Spring 3 <sup>rd</sup> Sand      | 10810   | Oil/gas/water |
| Wolfcamp                              | 11195   | Oil/gas/water |
| Wolfcamp 2                            | 11810   | Oil/gas/water |

2. Estimated depths and thickness of formations, members or zones potentially containing usable water, oil, gas, or prospectively valuable deposits of other minerals that the operator expects to encounter, and the operator's plans for protecting such resources.

Quanternary Surface Rustler 875

All of the water bearing formations identified above will be protected by the setting of the 13 3/8" casing at 930' and circulating of cement to surface

Top of Salt (Salado) Castille (Salt) 1220 2230

Delaware

3977-4932 (oil/gas/water)

The prospective formation identified above will be protected by the setting of the 9 5/8" casing set at 4960 and circulating of cement to surface.

Bone-Spring

7697=11322 (oil/gas/water)

The prospective formation identified above will be protected by the setting of the 7" casing set at 11850 and circulating of cement to previous casing string

Wolfcamp

11322-18414 MD

The geologic tops identified above from the top of the Wolfcamp are part of the target formation

3. The operator's minimum specifications for blowout prevention equipment and diverter systems to be used, including size, pressure rating, configuration, and the testing procedure and frequency.

The rig slated to drill this location will have a 10M system as it pertains to the BOP. It is our intent to test to the 10M requirements as indicated in Onshore Order 2. By utilizing the .78 psi/ft gradient (based off offset wells) minus the .22 psi/ft as per the Onshore Order, this well would require 7957 psi. Testing to the 10M requirements will meet the guidelines for well control. After nippling up, and every 30 days thereafter, preventors will be pressure tested. BOP will be inspected and operated at least daily to insure good working order. All pressure and operating tests will be recorded on the daily drilling reports. Ram type preventors will be tested to rated working pressure or 70% of the minimum internal yield of the casing. See attached schematic. This rig is equipped with co-flex hoses. COP respectfully requests a variance for said use of co-flex hoses. Please see attached manufacturer specifications and test information.

See (of) full test required

4. The proposed casing program including size, grade, weights, type of thread and coupling, and the setting depth of each string and its condition. For exploratory wells, or for wells as otherwise specified by the authorized officer, the operator shall include the minimum design factors for tensions, burst, and collapse that are incorporated into the casing design. In cases where tapered casing strings are utilized, the operator shall also include and/or setting depths of each portion.

**NEW CASING:** 

Surface: 17 1/2" hole, 13 3/8" 54.5# J55 STC csg, set @ 930. Drill out with

12 1/4" bit and perform shoe test to 12.5 ppg MWE. Burst: 4.39/Collapse: 1.88/Tension: 5.98/9.13

Intermediate 1: 12 1/4" hole, 9 5/8" 40# J55 LTC csg, set @ 4960

Burst: 2.43/Collapse: 1.4/Tension: 5.45/6.44

(This string of casing would not be subject to the production collapse load case of being pumped off to zero pressure on the inside by beam pump or ESP production pumping the fluid level down. The 9 5/8" casing would be isolated from the beam pumping production collapse load case by the production casing that would be run. If loss of circulation occurs during the drilling phase while drilling below the 9 5/8" intermediate casing, we would expect the fluid level would fall no further than 2200' below the surface of ground before reaching hydrostatic balance with the pressure of the loss zone. Our anticipated maximum mud weight for drilling below the 9 5/8" intermediate casing is 9.3 ppg and our experience has been that we have not had severe losses with this mud weight in our previous wells in this area. The 9 5/8" casing will be filled with mud while running it by filling it at least once each 30 joints)

The intent is to drill a pilot hole to 11910 TVD for the purpose of extensive logging and coring of the target formation, plug back with openhole whipstock and proceed with drilling operations as follows:

Intermediate 2: 8 3/4" hole, 7" 29# P110 BTC csg set @ 11850 Burst: 3.25/Collapse: 3.36/Tension: 5.78/6.8

Production Liner (Uncemented): 6 1/8" hole, 4 ½" 15.1# P110 BTC liner set @ 10903-11549 TVD Burst: 3.25/Collapse: 3.36/Tension: 5.78/6.80 (Packers and Sleeves)

The plan is to set casing and drill in a northern direction to a proposed bottomhole location of 330 FNL & 380 FWL (NWNW) of Section 27-26S-31E

ConocoPhillips will utilize casing friendly hardbanded drill pipe in a manner that is consistent with current company policy and standards with respect to minimizing or mitigating internal casing wear. The responsibility to ensure all parties are acting according to their roles and responsibilities rest with the Company. Any damage or impacts from use of casing friendly hardbanded drill pipe rest with ConocoPhillips Company.

5. The amount and type(s) of cement, including anticipated additives to be used in setting each casing string, shall be described. If stage cementing techniques are to be employed, the setting depth of the stage collars and amount and type of cement, including additives, and preflush amounts to be used in each stage, shall be given. The expected linear fill-up of each cemented string, or each stage when utilizing stage-cementing techniques, shall also be given.

13 3/8 casing: Lead w/640 sxs Class C cmt + HalCem-C (Yield 1.73 cft) Tail w/310 sxs Class C cmt + 1 lbm/sk EconoChem HRLTRRC (Yield 1.35 Cuft/sk). Circulated to surface based on 17 ½" hole with 100% excess

9 5/8" casing: Lead w/2200 sxs 50/50 Class C Poz + 2.5 gal/bbl WG-19 + 1 lbm/sk EconoCem-C (Yield 1.91 cft/sk), Tail w/310 sxs H + HalCem C (Yield 1.33 cft/sk) Circulated to surface based on 12 ¼" hole w/200% Excess.

Pilot Hole Plug: Lead w/270 sxs (1.2 yield) and tail w/330 sxs (1.0 yield), Set open hole whipstock, reorient and continue with drilling operations.

7" easing: Stage 1: Lead w/170 sxs 50/50 Class G Poz (Tune Light System) + 2.5 ga/bbl WG-19 + 1 lbm/sk EconoCem-C (Yield: 3.1 cft/sk) Tail w/137 sxs Class H + HalCem C (Yield 1.66 cft/sk). Stage 2: Cement w/250 sxs 50/50 Class C Poz (Tune Light System) + .2.5 ga/bbl WG-19 + 1 lbm/sk EconoCem-C (Yield: 3.1 cft/sk), DV + ACP planned around 8300' TVD. Circulate cement 500'into the 9 5/8" casing based on 8 3/4" hole w/200% excess.

4 1/2" Liner: Lead w/50 sxs (2.6 yield) and tail w/320 sxs (2.61 yield).

6. The anticipated type and characteristics of the proposed circulating medium or mediums proposed for the drilling of each wellbore section, the quantities and types of mud and weighting material to be maintained, and the monitoring equipment to be used on the circulating system.

| Mud Program:             |                  |      |       |            |     |
|--------------------------|------------------|------|-------|------------|-----|
| Mud Program: 0-930 10-25 | Aquagel-Spud Mud | 8.9  | Wt/G1 | 32-36 Vis. | NC  |
| 930-4960                 | Brine            | 10.5 | Wt/G1 | 28-30 Vis. | 5-8 |
| 4960-11850               | Brine            | 9.8  | Wt/Gl | 30-39 Vis  | <=4 |
| 11850-18414              | OBM .            | 12.5 | Wt/G1 | 30-40 Vis  | <=5 |

Gas detection equipment and pit level flow monitoring equipment will be on location. ConocoPhillips Company will maintain sufficient mud and weighted material on location at all times.

- 7. The anticipated testing, logging, and coring procedures to be used, including drill stem testing procedures, equipment, and safety measures.
  - a. DST Program: None
  - b. Mud Logging: Two-Man 950-TD (Vertical & Horizontal Sections)
    Logs to be run: Triple Combo + Spectral Gamma + Sonic + FMI + VSP Seismic +
    Gamma (MWD) + Sonic Scanner + Caliper + Resistivity+Sonic+CMI
- 8. List the expected bottom-hole pressure and any anticipated abnormal pressures, temperatures or potential hazards that are expected to be encountered, such as lost circulation zones and hydrogen sulfide. The operator's plans for mitigating such hazards shall be discussed. Should the potential to encounter hydrogen sulfide exist, the mitigation procedures shall comply with the provisions of the BLM.

The maximum anticipated bottom hole pressure is .65 psi/ft No hydrogen sulfide is expected during drilling operations; however, the potential does exist for H2S. Please see attached H2S contingency plan to be used in the event of occurrence.

Any other facets of the proposed operation which the operator wishes to be considered in reviewing the application.

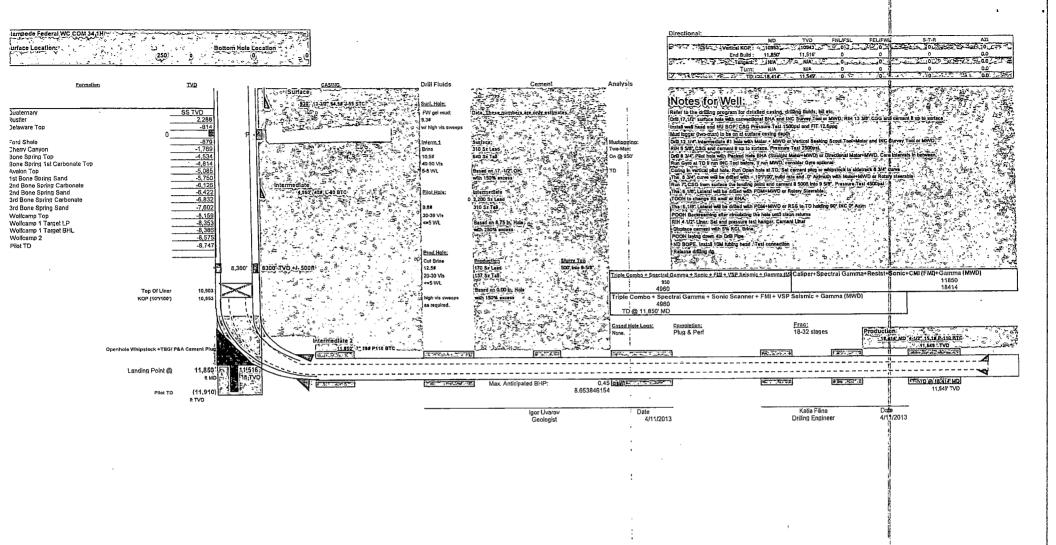
Anticipated construction date is October 1, 2013 with anticipated spud date of November 1, 2013. Construction of well pad and road will begin as soon as all Agency approvals are obtained.

9. Address the proposed directional design, plan view, and vertical section in true vertical and measured depth for directional, horizontal, or coil tubing operations.

The proposed directional/horizontal documents are attached.

DRILLING PLAN PROSPECT/FIELD Bonespring/ Red Hills COUNTY/STATE Eddy County, NM OWNERS LEASE FSI ConocoPhillips FEL FWI WELL NO Stampede Federal WC COM 34 1H FNI Surface Location: 380 250 Bottom Hole Location 330 380 EST. T.D. **GROUND ELEV** Leg #1 18,414' MD 3,138' (est) 3,163' (est) Type (Interval | Interval | Inter PROGNOSIS: LOGS: 12 1/4" E Logs Based on 3,163' KB(est) Marker 8 3/4" E Lags 6 1/8" E Lags TVD S.S. Depth Surface 875 Quaternary Rustler 2,288 DEVIATION: Delaware Top 3,977 -814 Surt: 3 max svy overy 500.

Inti (2) survey 500, 10 max svy overy 500 survey -879 -1,769 Ford Shale 4,042 4,932 Cherry Canyon Bone Spring Sand
2nd Bone Spring Sand
2nd Bone Spring Sand
2nd Bone Spring Carbonate
2nd Bone Spring Carbonate 7,697 7,977 -4,534 -4,814 8,248 8,913 9,289 -5,085 -5,750 -6,126 DST'S: 2nd Bone Spring Sand 9.585 -6.422 9,995 -6,832 3rd Bone Spring Carbonate 10,765 11,322 11,516 11,549 -7,602 -8,159 -8,353 -8,386 3rd Bone Spring Sand Wolfcamp Top Wolfcamp 1 Target LP Wolfcamp 1 Target BHL CORES: Optional Care in Avoicio Bone Spring and Wollcamp 7. Wolfcamp 2 Pilot TD 11,738 11,910 SAMPLES: Mudlogging Start End Vertical and Horbental sections Toy Samples: 1 Every 301 Starting 3507 Vertical and Horbental sections 1 Every 501 Starting 3507 Vertical and Horbental sections 1 Every 501 to 7600 (EVERY 300 from 7600 to TO) 454 Charles (In Pilat from 7600 to TO) BOP-COP Calegory 3 Well Control Requirements 13-5/8"-Shysi Annular 13-5/8"-Shysi Annular 13-5/8"-10Mpsi Blind Ram 13-5/8"-10Mpsi Cross / Choke & Kill Lines 13-5/8"-10Mpsi Spacer Spool BOPE: (With Rotating Head) Slight Down Dip Max. Anticipated BHP: 2. ... 0.65 psi/ft 5 Surface Formation Type Aquage Spu Max. MW Remarks Interval Interval 0-930/4860 980/4860 11850/18444 Surface 93 10.5 4/ 9.8 12.5 A. T. Bring Cut Bring OSM Intermediate 1: Production: CASING: Size Wit opt Surface 13:306 3:306 4.5 (intermediate) 4.175 4.5 (intermediate) 4.175 4.28 (intermediate) 4.175 4.175 (intermediate) 4.175 4.175 (intermediate) 4.175 (inte WOC
18hra
18hra
18hra
18hra Remarks 海山网 packers & Sleevs stage count will be determined based on lateral logs DIRECTIONAL PLAN j Directional Company: DDC/Baker/Weatherford Vertical Build Rate: 10.0 '/100' Tan Leg Turn Rate: 0.0 '/100' Comments: Exact Depth of Logging Intervals and Core Points will be determined while diffulling based on Gamma Readings.



Bonespring/ Red Hills ConocoPhillips Stampede Federal WC COM 34 1H 0

# ConocoPhillips

7in Casing (Tall): Stage #1 2 13.2 ppg

|                                                      | T 40 5   |
|------------------------------------------------------|----------|
| Surface Casing: ************************************ | 13.5ppg  |
| Surface Casing Depth (Ft)                            | 930      |
| Surface Casing O.D. (In.)                            | 13.375   |
| Surface Casing ID (In)                               | 12.715   |
| Hole O.D. (In)                                       | 17.5     |
| Excess (%)                                           | 150%     |
| Volume Tail (Sx)                                     | 310      |
| Yield Tail (Cu. Ft./Sx)                              | 1.35     |
| Yield Lead (Cu. Ft./Sx)                              | 1.73     |
| Shoe Joint (Ft)                                      | 40       |
| Shoe Volume (Cu. Ft)                                 | 35.3     |
| Tail feet of cement                                  | 300      |
| Calculated Total Volume (Cu. Ft.)                    | 1,546    |
| Calc. Tail Volume (Cu. Ft.)                          | 417      |
| Caic. Lead Volume (Cu. Ft.)                          | 1,094    |
| Calc. Lead Volume (Sx)                               | 640      |
|                                                      | 14.8 ppg |

| Pilot Hole P&A Plug #17         |                |
|---------------------------------|----------------|
| Hole O.D. (In)                  | 8.75           |
| Excess (%)                      | 135%           |
| cap 8-3/4" bis/ft               | 0.0744         |
| Calculated fill:                | 555'           |
| Yield Lead (Cu. Ft./Sx)         | 1.2            |
| Calculated Total Lead (Cu. Ft.) | 313            |
| Calc. Lead Volume (Sx)          | 270            |
| Pilot Hole P&A Plug #Z          |                |
|                                 | B.75           |
| Hole O.D. (In)                  | · · · · ·      |
| Excess (%)                      | 135%<br>0.0744 |
| cap 8-3/4" bls/ft               | 0.0744         |
| Calculated fill:                | 550'           |
| Yield Lead (Cu. Ft./Sx)         | 1.0            |
| Calculated Total Lead (Cu. Ft.) | 310            |
| Calc. Lead Volume (Sx)          | 330            |

|                                           |           |                                       | ;             |
|-------------------------------------------|-----------|---------------------------------------|---------------|
| Intermediate 9:5/8 Casing (Lead): (2.3 %) | 12.9ppg . | Intermediate 9/5/8 Casing (Tail);     | 55% 14.8ppg . |
| Intermediate Casing O.D. (In.)            | 9.625     | Intermediate Casing O.D. (in.)        | 9-5/8"        |
| Intermediate Casing ID (In)               | 8.921     | Production Casing ID (In)             | 8.921         |
| Hole O.D. (In)                            | 12.25     | Hole O.D. (In)                        | 12.25         |
| Excess (%)                                | 200%      | Excess (%)                            | 250%          |
| cap 12-1/4 - 9-5/8"                       | 0.0558    | cap 12-1/4 - 9-5/8"                   | 0.0558        |
| Calculated fill:                          | 4,460     | Calculated fill:                      | 500           |
|                                           |           | Yield Tail (Cu. Ft./Sx)               | 1.33          |
| Yield Lead (Cu. Ft./Sx)                   | 1.91      | Shoe Joint (Ft)                       | 40            |
| ,                                         |           | Shoe Volume (Cu. Ft)                  | 17.4          |
| Calculated Total Lead (Cu. Ft.)           | 4,191     | , , , , , , , , , , , , , , , , , , , |               |
| , ,                                       |           | Caic, Tail Volume (Cu, Ft.)           | 409           |
| Calc. Lead Volume (Sx)                    | 2200      |                                       |               |
|                                           |           | . Required Tail Volume (Sx)           | 310           |

ZinkCasing (Lead): Stage #1... 2 5 10.2ppg

|                                     | S - X / TOURED          |                                       |                    |
|-------------------------------------|-------------------------|---------------------------------------|--------------------|
| Intermediate Casing O.D. (In.)      | 7.000                   | Intermediate Casing O.D. (In.)        | 7.000:             |
| Intermediate Casing ID (In)         | 6,184                   | Intermediate Casing ID (In)           | 6.184              |
| Hole O.D. (In)                      | 8,75                    | Hole O.D. (In)                        | 8.75               |
| Excess (%)                          | 135%                    | Excess (%)                            | 150%               |
| cap 7" - 8-3/4" bls/ft              | 0.0268                  | cap 7" - 8-3/4" bls/ft                | 0.0268             |
| cap 7" - 9-5/8" bls/ft              | 0.02823                 | . ,                                   |                    |
| Calculated fill: (DV TOOL)          | 2540.0                  | Calculated fill:                      | 1,010              |
| Yield Lead (Cu. Ft./Sx)             | 3.1                     | Yield Lead (Cu. Ft./Sx)               | 1.66               |
| , , ,                               |                         |                                       |                    |
| Calculated Total Lead (Cu. Ft.)     | 516                     | Calculated Total Tail (Cu. Ft.)       | 228                |
| ` '                                 |                         | , ,                                   | :                  |
| Calc. Lead Volume (Sx)              | 170                     |                                       |                    |
|                                     | h                       | Required Tail Volume (Sx)             | 137                |
| ĺ                                   | 4460                    |                                       |                    |
| 7In=Casing (Lead): Stage #2" 1      |                         | DV+ACP placed around 8300ft TVC       | +/- 300ft          |
| Intermediate Casing O.D."(In.)      | 7.000                   |                                       | ;                  |
| Intermediate Casing ID (In)         | 6.184                   | Gel Spacer WG19 or Polymer Space      | er Ultra Seal      |
| Hole O.D. (in)                      | 8.75                    | 1 Stage with LCM Kol Seal + Fiber     |                    |
| Excess (%)                          | 135%                    | 2 Stage no Fiber LCM to reduce risi   | k plugging DV Tool |
| cap 7" - 8-3/4" bis/ft              | 0.0268                  | 2 0(090 110 1 120), 2011 10 10 10 10  |                    |
| cap 7" - 9-5/8" bis/ft              | 0.02823                 | Proceed with stage 2 right after circ | ulating stage 1    |
| Calculated fill: (500' into 9-5/8") | 3,840'                  | 1 100000 Will Stage 2 fight alter one | claiming bridge 1  |
| Yield Lead (Cu. Ft./Sx)             | 3.1                     |                                       | 1                  |
| Tield Lead (Cd. FL70X)              | 3.1                     |                                       |                    |
| Calculated Total Lead (Cu. Ft.)     | 780                     |                                       |                    |
| }                                   |                         |                                       | i                  |
| Calc, Lead Volume (Sx)              | 250                     |                                       | ì                  |
|                                     | لنسسا                   |                                       |                    |
|                                     | 4460                    |                                       |                    |
| B                                   | 45.0                    | Production 4.5" Liner (Tail):         | 15,0 ppg           |
| Production 4.5" Liner (Lead):       | <u>15.0ppg</u><br>4.500 | Intermediate Casing O.D. (In.)        | 4.500              |
| Intermediate Casing O.D. (In.)      |                         | Intermediate Casing C.D. (in.)        | 3,826              |
| intermediate Casing ID (In)         | 3.826                   | Hole O.D. (In)                        | 6.12               |
| Hole O.D. (in)                      | 6.125<br>120%           | Excess (%)                            | 135%               |
| Excess (%)                          |                         |                                       | 0.016              |
| cap 4-1/2" - 6-1/8" bls/ft          | 0.0168<br>0.0175        | cap 4-1/2" - 6-1/8" bls/ft            | 0.010              |
| cap 4-1/2 - 7" bls/ft               | 947'                    | Calculated 5th (Ta 1.5)               | 6,564              |
| Calculated fill: (to TOL)           |                         | Calculated fill: (To LP)              |                    |
| Yield Lead (Cu. Ft./Sx)             | 2.6                     | Yield Lead (Cu. Ft./Sx)               | 2.6                |
| Calculated Total Load (Cir. 51)     | 112                     | Calculated Tatal Tail /Cu. Et )       | 83                 |
| Calculated Total Lead (Cu. Ft.)     | 112                     | Calculated Total Tail (Cu. Ft.)       | 83                 |
| Cala Land Valuma (Sv)               |                         |                                       |                    |
| Calc. Lead Volume (Sx)              | 50                      | B 1 T - 111/- 1 (C-)                  |                    |
| 1                                   |                         | Required Tail Volume (Sx)             | 320                |
|                                     |                         |                                       |                    |

#### **Request for Variance**

#### **ConocoPhillips Company**

Lease Number: LC 068282A

Well: Stampede Federal WC COM 34 1H

Location: Sec. 34, T26S, R31E

Rig: H&P 486 Date: 2/5/2014

#### 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



## ConocoPhillips MCBU

Permian Delaware Hz New Mexico Stampede Federal WC COM 34 1H Stampede Federal WC COM 34 1H

Original Borehole Pilot

Plan: Design #1

### **Standard Planning Report - Geographic**

11 April, 2013

ConocoPhillips
Planning Report - Geographic

| Database: EDM Central Planning Local Co-ordinate Reference:    | Site Stampede Federal WC COM 34 1H |
|----------------------------------------------------------------|------------------------------------|
| Company: ConocoPhillips MCBU                                   | KB PLAT @ 3163.0usft (HNP486)      |
| Project: Permian Delaware Hz. New Mexico MD Reference:         | KB PLAT @ 3163.0usft (HNP486)      |
| Site: Stampede Federal WC COM 34.1H North Reference:           | Grid                               |
| Well: Stampede Federal WC COM 34 1H Survey/Calculation Method: | Minimum Curvature                  |
| Wellbore: Original Borehole Pilot                              |                                    |
| Design: Design#1.                                              |                                    |

| Project     | Permian Delaware Hz New Mexico, Mexic | o · · · · · · · · · · · · · · · · · · · |                |                               |
|-------------|---------------------------------------|-----------------------------------------|----------------|-------------------------------|
| Map System: | US State Plane 1927 (Exact solution)  | System Datum:                           | Mean Sea Level |                               |
| Geo Datum:  | NAD 1927 (NADCON CONUS)               |                                         | 2"             |                               |
| Map Zone:   | New Mexico East 3001                  |                                         |                | and the state of the state of |

| - 1 | Site                  | tampede Federa | I WC COM 34 1H        |                 |                   |   |                   |
|-----|-----------------------|----------------|-----------------------|-----------------|-------------------|---|-------------------|
| -1  | Site Position:        |                | Northing:             | 364,450.30 usft | Latitude:         |   | 32° 0″ 2.698 N    |
|     | From:                 | Мар            | Easting:              | 673,744.80 usft | Longitude:        | • | 103° 46' 22 282 W |
|     | Position Uncertainty: |                | 0.0 usft Slot Radius: | . 13-3/8        | Grid Convergence: |   | 0.30 °            |

| Well                 | Stampede Fed | eral WC COM 34 11 |                     |           |                          |       |                        |
|----------------------|--------------|-------------------|---------------------|-----------|--------------------------|-------|------------------------|
| Well Position        | +N/-S        | .0.0 usft         | Northing:           | 364,450.3 | 0 usft <b>Latitude:</b>  |       | 32° 0' 2.698 N         |
|                      | +E/-W        | 0.0 usft          | Easting:            | 673,744.8 | Dusft <b>Longitude</b> : | * * * | <br>103° 46" 22, 282 W |
| Position Uncertainty |              | 0.0 usft          | Wellhead Elevation: |           | Ground Le                | vel:  | 3,138.0 usft           |

|   | Wellbore .               | Original Borehole Pilot |             |             | ر المراجع المر<br>المراجع المراجع المراج |                 |
|---|--------------------------|-------------------------|-------------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| 1 | indicates and the second |                         |             |             |                                                                                                                                                                                                                                  |                 |
| Í | Magnetics                | ✓ Model Name            | Sample Date | Declination | Dip Angle                                                                                                                                                                                                                        | Field Strength. |
| 1 |                          |                         |             |             | (9)                                                                                                                                                                                                                              | in Time         |
| 1 |                          | BGGM2012                | 2/11/2014   | 7.44        | 59.79                                                                                                                                                                                                                            | 8 48 151        |

| Design            | Design #1 |               |           |               |           |  |
|-------------------|-----------|---------------|-----------|---------------|-----------|--|
| Audit Notes:      |           |               |           |               |           |  |
| Version:          |           | Phase:        | PROTOTYPE | Tie On Depth: | 0.0       |  |
| Vertical Section: | Dep       | th From (TVD) | ±N/-S     | %+E/-W        | Direction |  |
|                   |           | (usft)        | (ùsft)    | (usft)        | (0)       |  |
|                   |           | 0.0           |           | 0:0           | 0.00      |  |

| Plan Sections     | المنتقلة المالية | 100       |                             |               | In the Missier                                                                                                  |                                |                              | المناسات والمناسات | . عَكَنْهُ مُنْ مُنْ مُنْ مُنْ مُنْ مُنْ مُنْ مُن | المرابع المرابع المرابع المرابع |
|-------------------|------------------|-----------|-----------------------------|---------------|-----------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------|--------------------|---------------------------------------------------|---------------------------------|
| Measured<br>Depth | Inclination      | Azimuth ( | Vertical<br>Depth<br>(usff) | +N/S          | +E/-W                                                                                                           | Dogleg<br>Rate<br>(100usft) (* | Build<br>Rate<br>/100usft) ( | Turn<br>Rate       | ŤĒO .                                             | Target                          |
|                   |                  |           | X                           | in the second | المراجع |                                |                              |                    |                                                   |                                 |
| 0.0               | .0.00            | 0.00      | 0.0                         | 0.0           | 0:0                                                                                                             | 0.00                           | .0.00                        | 0.00               | 0.00                                              |                                 |
| 1,100.0           | 0.00             | 0.00      | 1,100.0                     | 0.0           | 0.0                                                                                                             | 0.00                           | 0.00                         | 0.00               | 0.00                                              |                                 |
| 1,500.0           | 6.00             | 179,68    | 1,499.3                     | -20.9         | <u>0</u> .1                                                                                                     | 1.50                           | 1.50                         | 0.00               | 179.68                                            |                                 |
| 3,100.0           | 6.00             | 179.68    | 3,090.5                     | -188.2        | 1.1                                                                                                             | 0.00                           | 0.00                         | 0.00               | 0.00                                              |                                 |
| 3,500.0           | 0.00             | 0.00      | 3,489.8                     | -209.1        | 1.2                                                                                                             | 1.50                           | -1.50                        | 0.00               | 180:00                                            | ,                               |
| 12,010.2          | 0.00             | 0.00      | 12,000.0                    | -209.1        | 1.2                                                                                                             | 0.00                           | 0.00                         | 0.00               | 0.00                                              |                                 |

### Planning Report - Geographic

| Database: | EDM Central Planning Local Co-ordinate Reference:        | Site Stampede Federal WC COM 341H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Company:  | ConocoPhillips MCBU                                      | KB PLAT @ 3163.0usft (HNP486)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Project:  | Permian Delaware Hz New Mexico                           | KB PLAT @ 3163.0usft (HNP486)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Site:     | Stampede Federal WC COM 34 1H North Reference:           | Grid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Well:     | Stampede Federal WC COM 34 1H Survey Calculation Method: | Minimum Curvature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Wellbore: | Original Borehole Pilot                                  | The state of the s |
| Design:   | Design #1                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

| nned Survey        |              | محد بوسود ورمال المعادر،<br>محد |                    | 7                            | <del>در المراجعة أحدود المراجعة ال</del> | Andreas Santonia of 1884 or                                                | a Maria Sarah 1 ga miner da w           | 7.75 7.75 T                                                                                                                                                                                                                      | on - eddands of any particular party |
|--------------------|--------------|---------------------------------|--------------------|------------------------------|---------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| inned Survey       |              |                                 |                    | دراهیدها البدند باکند.<br>وا | ىدىد دېنځىدادسې .<br>راي                                                                                                  | مىسەدىدىنىدۇر كەسى بىرىغانلىكىكىكى<br>مىسەدىدىنىدۇر كەسى بىرىغانلىكىكىكىكى |                                         | الفائدة المالية المالي<br>المالية المالية المالي |                                      |
| Measured           |              |                                 | Vertical           |                              | \$                                                                                                                        | , Map,                                                                     | Map                                     |                                                                                                                                                                                                                                  |                                      |
| Depth I            | nclination * | Azimuth                         | Depth              | +N/-S                        | +E/-W                                                                                                                     | Northing                                                                   | Easting                                 |                                                                                                                                                                                                                                  |                                      |
| (usft)             | (°)          | (°)                             | (usft)             | (usft)                       | (usft)                                                                                                                    | (usft)                                                                     | (usft)                                  | Latitude                                                                                                                                                                                                                         | Longitude;                           |
| 0.0                | 0.00         | 0.00                            | 0.0                | 0.0                          | 0.0                                                                                                                       | 364,450.30                                                                 | 673,744.80                              | 32° 0"2.698 N                                                                                                                                                                                                                    | 103° 46' 22.282                      |
| 200.0              | 0.00         | 0.00                            | 200:0              | 0.0                          | 0.0                                                                                                                       | 364,450.30                                                                 | 673,744.80                              | 32° 0' 2:698 N                                                                                                                                                                                                                   | 103° 46' 22.282                      |
| 400.0              | 0.00         | 0.00                            | 400:0              | 0.0                          | 0:0                                                                                                                       | 364,450.30                                                                 | 673,744.80                              | 32° 0' 2.698 N                                                                                                                                                                                                                   | 103° 46' 22.282                      |
| 600:Ò              | 0.00         | 0.00                            | 600.0              | 0.0                          | 0.0                                                                                                                       | 364,450:30                                                                 | 673,744.80                              | 32° 0' 2.698 N                                                                                                                                                                                                                   | 103° 46"22.282                       |
| ∘800.0             | 0.00         | 0.00                            | 0.008              | 0:0                          | 0.0                                                                                                                       | 364,450,30                                                                 | 673,744,80                              | 32° 0' 2.698 N                                                                                                                                                                                                                   | 103° 46 22.282                       |
| 1,000.0            | 0:00         | 0.00                            | 1,000.0            | 0.0                          | 0.0                                                                                                                       | 364,450.30                                                                 | 673,744.80                              | 32° 0' 2.698 N                                                                                                                                                                                                                   | 103° 46' 22.282                      |
| 1,100.0            | 0.00         | 0:00                            | 1,100.0            | 0.0                          | 0.0                                                                                                                       | 364,450:30                                                                 | 673,744.80                              | 32° 0' 2:698 N                                                                                                                                                                                                                   | 103° 46' 22.282                      |
| 1,200.0            | 1.50         | 179.68                          | 1,200.0            | -1.3                         | 0.0                                                                                                                       | 364,448.99                                                                 | 673,744.80                              | 32° 0′ 2.685 N                                                                                                                                                                                                                   | 103° 46' 22 282                      |
| 1,400.0            | 4.50         | 17,9.68                         | 1,399:7            | ~11.8                        | 0.1                                                                                                                       | 364,438.52                                                                 | 673,744.86                              | 32° 0' 2.581 N                                                                                                                                                                                                                   | 103° 46' 22.282                      |
| 1,500.0            | 6,00         | 179.68                          | 1,499.3            | -20.9                        | 0.1                                                                                                                       | 364,429.37                                                                 | 673,744:91                              | 32° 0' 2.491 N                                                                                                                                                                                                                   | 103° 46' 22.282                      |
| 1,600.0            | 6,00         | 179:68                          | 1,598.7            | -31.4                        | 0.2                                                                                                                       | 364,418.92                                                                 | 673,744.97                              | 32° 0′ 2.387 N                                                                                                                                                                                                                   | 103° 46′ 22.28′                      |
| 1,800:0            | 6.00         | 179.68                          | 1,797.6            | -52.3                        | 0.3                                                                                                                       | 364,398.02                                                                 | 673,745.09                              | 32° 0′ 2.180 N                                                                                                                                                                                                                   | 103° 46′ 22.281                      |
| 2,000.0            | 6.00         | 179.68                          | 1,996.5            | -7 <u>,</u> 3.2              | 0.4                                                                                                                       | 364,377.11                                                                 | 673,745.20                              | 32° 0' 1.973 N                                                                                                                                                                                                                   | 103° 46' 22.28                       |
| 2,200.0            | 6:00         | 179.68                          | 2,195.4            | -94.1                        | 0.5                                                                                                                       | 364,356.20                                                                 | 673,745.32                              | 32° 0' 1.766 N                                                                                                                                                                                                                   | 103° 46' 22.28                       |
| 2,400.0            | 6.00         | 179.68                          | 2,394.3            | -115.0                       | 0.6                                                                                                                       | 364,335.30                                                                 | 673,745.44                              | 32° 0' 1.560 N                                                                                                                                                                                                                   | 103° 46' 22.28                       |
| 2,600.0            | 6.00         | 179.68                          | 2,593.2            | -135.9                       | 0.8                                                                                                                       | 364,314.39                                                                 | 673,745.55                              | 32° 0' 1.353 N                                                                                                                                                                                                                   | 103° 46' 22.28                       |
| 2,800.0            | 6.00         | 179 <sub>.</sub> 68             | 2,792.1            | -156.8                       | 0.9                                                                                                                       | 364,293.49                                                                 | 673,745.67                              | 32° 0′ 1.146 N                                                                                                                                                                                                                   | 103° 46' 22.28                       |
| 3,000.0            | 6.00         | 179:68                          | 2,991.1            | -177.7                       | 1.0                                                                                                                       | 364,272.58                                                                 | 673,745.79                              | 32° 0' 0.939 N                                                                                                                                                                                                                   | 103° 46′ 22.28                       |
| 3,100.0            | 6.00         | 179.68                          | 3,090.5            | -188.2                       | 1.1                                                                                                                       | 364,262.13                                                                 | 673,745.85                              | 32° 0' 0.835 N                                                                                                                                                                                                                   | 103° 46' 22.28°                      |
| 3,200.0            | 4.50         | 179.68                          | 3,190.1            | -197.3                       | 1.1                                                                                                                       | 364,252.98                                                                 | 673,745.90                              | 32° 0' 0.745 N                                                                                                                                                                                                                   | 103° 46' 22.28                       |
| 3,400.0            | 1.50         | 179:68                          | 3,389.8            | -207.8                       | 1.2                                                                                                                       | 364,242.52                                                                 | 673,745.96                              | 32° 0' 0.641 N                                                                                                                                                                                                                   | 103° 46' 22.28                       |
| 3,500.0            | 0.00         | 0.00                            | 3,489.8            | -209:1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,745.96                              | 32° 0' 0:628 N                                                                                                                                                                                                                   | 103° 46' 22.28                       |
| 3,600:0            | 0.00         | 0.00                            | 3,589.8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,745.96                              | 32° 0' 0.628 N                                                                                                                                                                                                                   | 103° 46′ 22.28                       |
| 3,800.0            | 0.00         | 0.00                            | .3,789.8           | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,745.96                              | 32° 0' 0.628 N                                                                                                                                                                                                                   | 103° 46' 22:28                       |
| 4,000.0            | 0.00         | 0.00                            | 3,989.8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673:745.96                              | 32° 0' 0.628 N                                                                                                                                                                                                                   | 103° 46' 22:28                       |
| 4,200.0            | 0.00         | 0.00                            | 4,189.8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,7,45.96                             | 32° 0' 0.628 N                                                                                                                                                                                                                   | 103° 46' 22.281                      |
| 4,400.0            | 0.00         | 0.00                            | 4,389.8            | -209.1                       | 1.2                                                                                                                       | 364,241-21                                                                 | 673,745,96                              | 32° 0' 0.628 N                                                                                                                                                                                                                   | 103° 46' 22.281                      |
| 4,600.0            | 0.00         | 0.00                            | 4,589.8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,745.96                              | 32° 0' 0.628 N                                                                                                                                                                                                                   | 103° 46' 22.281                      |
| 4,800.0            | 0.00         | 0.00                            | 4,789.8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,745.96                              | 32° 0′ 0.628 N                                                                                                                                                                                                                   | 103° 46′ 22.28′                      |
| 5,000.0            | 0.00         | 0:00                            | 4,989.8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673;745.96+- <del>-</del><br>673,745.96 | 32° 0' 0.628 N<br>32° 0' 0.628 N                                                                                                                                                                                                 | 103° 46' 22.28<br>103° 46' 22.28     |
| 5,200.0<br>5,400.0 | 0:00<br>0.00 | 0:00                            | 5,189.8<br>5,389.8 | -209.1<br>-209.1             | 1.2                                                                                                                       | 364,241.21<br>364,241.21                                                   | 673,745.96                              | 32° 0' 0.628 N                                                                                                                                                                                                                   | 103° 46' 22.28                       |
|                    |              |                                 |                    |                              |                                                                                                                           | -                                                                          | 673,745.96                              |                                                                                                                                                                                                                                  | 103° 46' 22.281                      |
| 5,600.0<br>5,800.0 | 0.00<br>0.00 | 0.00<br>0.00                    | 5,589.8<br>5,789.8 | -209.1<br>-209.1             | 1.2<br>1.2                                                                                                                | 364,241.21<br>364,241.21                                                   | 673,745.96                              | 32° 0' 0.628 N<br>32° 0' 0.628 N                                                                                                                                                                                                 | 103° 46' 22.281                      |
| 6,000.0            | 0.00         | 0.00                            | 5,989.8            | -209.1                       | 1.2                                                                                                                       | 364;241.21                                                                 | 673,745.96                              | 32° 0' 0.628 N                                                                                                                                                                                                                   | 103° 46' 22.28°                      |
| 6,200.0            | 0.00         | 0.00                            | 6,189.8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,745.96                              | 32° 0' 0.628 N                                                                                                                                                                                                                   | 103° 46' 22.28°                      |
| 6,400.0            | 0.00         | 0.00                            | 6,389.8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,745.96                              | 32° 0' 0.628 N                                                                                                                                                                                                                   | 103° 46' 22.281                      |
| 6,600.0            | 0.00         | 0.00                            | 6,589.8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,745.96                              | 32° 0' 0.628 N                                                                                                                                                                                                                   | 103° 46' 22.281                      |
| 6,800.0            | 0.00         | 0.00                            | 6,789.8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,745.96                              | 32° 0' 0.628 N                                                                                                                                                                                                                   | 103° 46' 22.281                      |
| 7,000:0            | 0.00         | 0.00                            | 6,989.8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,745.96                              | 32° 0' 0.628.N                                                                                                                                                                                                                   | 103° 46' 22.281                      |
| 7,200.0            | 0.00         | 0.00                            | 7,189.8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,745.96                              | 32°.0' 0.628 N                                                                                                                                                                                                                   | 103° 46' 22.281                      |
| 7,400.0            | 0.00         | 0.00                            | 7,389.8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,745:96                              | 32° 0' 0,628 N                                                                                                                                                                                                                   | 103° 46' 22.281                      |
| 7,600.0            | 0.00         | 0.00                            | 7,589.8            | -209.1                       | 1,2                                                                                                                       | 364,241.21                                                                 | 673,745.96                              | 32° 0' 0.628 N                                                                                                                                                                                                                   | 103° 46' 22.281                      |
| 7,800.0            | 0.00         | 0.'00                           | 7,789.8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,745:96                              | ' '32° 0' 0.628 N                                                                                                                                                                                                                | 103° 46′ 22.281                      |
| 8,000.0            | 0.00         | 0.00                            | 7,989.8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,745.96                              | 32° 0' 0.628 N                                                                                                                                                                                                                   | 103° 46' 22.281                      |
| 8,200.0            | 0.00         | 0.00                            | 8,189.8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,745.96                              | 32° 0' 0.628 N                                                                                                                                                                                                                   | 103° 46' 22.281                      |
| 8,400.0            | 0.00         | 0.00                            | 8,389.8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,745.96                              | 32° 0′ 0.628 N                                                                                                                                                                                                                   | · 103° 46' 22.281                    |
| 8,600.0            | 0.00         | 0.00                            | 8,589.8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,745.96                              | 32° 0' 0.628 N                                                                                                                                                                                                                   | 103° 46' 22.281                      |
| 8,800.0            | 0.00         | 0.00                            | 8,789:8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,745.96                              | 32° 0' 0:628 N                                                                                                                                                                                                                   | 103° 46' 22.281                      |
| 9,000.0            | 0.00         | 0.00                            | 8,989.8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,745.96                              | 32° 0' 0.628 N                                                                                                                                                                                                                   | 103° 46' 22:281                      |
| 9,200.0            | 0.00         | 0.00                            | 9,189.8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,745:96                              | 32° 0' 0.628 N                                                                                                                                                                                                                   | 103° 46' 22.281                      |
| 9,400.0            | 0.00         | 0.00                            | 9,389.8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,745.96                              | 32° 0' 0.628 N                                                                                                                                                                                                                   | 103° 46' 22.281                      |
| 9,600.0            | 0.00         | 0.00                            | 9,589.8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,745.96                              | 32° 0′ 0.628 N                                                                                                                                                                                                                   | 103° 46′ 22.281                      |
| 9,800.0            | 0.00         | 0.00                            | 9,789.8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,745.96                              | 32° 0' 0.628 N                                                                                                                                                                                                                   | 103° 46' 22.281                      |
| 10,000.0           | 0.00         | 0.00                            | 9,989.8            | -209.1                       | 1.2                                                                                                                       | 364,241.21                                                                 | 673,745.96                              | 32° 0' 0.628 N                                                                                                                                                                                                                   | 103° 46' 22.281                      |

#### Planning Report - Geographic

Database: EDM Central Planning. Local Co-ordinate Reference: Site Stampede Federal WC COM 34 1H
Company: ConocoPhillips MCBU TVD Reference: KB PLAT @ 3163 Oust (HNP486)
Pròject: Permian Delaware Hz New Mexico MD Reference: KB PLAT @ 3163 Oust (HNP486)
Site: Stampede Federal WC COM 34 1H North Reference:
Well: Stampede Federal WC COM 34 1H Survey Calculation Method: Minimum Curvature
Well: Original Borehole Pilot
Design: Design #1

| Planned Survey  Measured  Depth | Inclination  | «Azimuth     | Vertical<br>Depth<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Map<br>Northing<br>(usft) | Map<br>Easting<br>(úsft) | Lätitüde       | Löngitüde           |
|---------------------------------|--------------|--------------|-----------------------------|-----------------|-----------------|---------------------------|--------------------------|----------------|---------------------|
| minimum - institution           | 0.00         | 0.00         | .10,189.8                   | -209.1          | 1.2             | 364 241 21                | 673,745.96               | 32° 0' 0.628 N | 103° 46' 22:281 W   |
| 10,200.0                        | 0.00<br>0.00 | 69.0         | 10,103.0                    | -209.1          | 1.2             | 364,241,21                | 673,745,96               | 32° 0' 0 628 N | 103° 46' 22.281 W   |
| 10,400:0.                       | / " " i      | 0.00<br>0.00 | 10,589.8                    | -209.1          | 1.2             | 364 241 21                | 673 745 96               | 32° 0' 0.628 N | 103° 46' 22.281 W   |
| 10,600.0                        | 0.00         | 0.00         | 10.789.8                    | -209.1          | 1.2             | 364.241.21                | 673,745.96               | 32° 0"0.628 N  | 103° 46' 22.281 W   |
| 10,800.0                        | 0.00         | 0:00         | 10,989.8                    | -209.1          | 1.2             | 364,241.21                | .673,745,96              | 32° 0' 0.628 N | 103° 46' 22,281 W   |
| 11,000.0                        | 0.00         | 0.00         | 11.189.8                    | -209.1          | 1.2             | 364,241.21                | 673,745 96               | 32° 0' 0:628 N | 103° 46' 22 281 W   |
| 11,200,0                        | 0.00         | 0.00         | 11.389.8                    | -209.1          | 1.2             | 364,241,21                | 673,745.96               | 32° 0' 0.628 N | 103° 46' 22.281 W   |
| 11,400.0                        | 0.00         | 0.00         | 11.589.8                    | -209.1          | 1.2             | 364,241.21                | 673,745.96               | 32° 0' 0.628 N | 103° 46' 22.281 W   |
| 11,600.0                        | 0.00         | 0:00         | 11.789.8                    | -209.1          | 1:2             | 364,241.21                | 673,745.96               | 32° 0' 0.628 N | 103° 46′ 22.281 W   |
| 12:000.0                        | 0.00         | 0.00         | 11:989.8                    | -209.1          | 1.2             | 364,241.21                | 673,745.96               | 32° 0' 0.628 N | -103° 46' 22' 281 W |
| 12,000.0                        | 0.00         | 0:00         | 12,000.0                    | -209.1          | 1.2             | 364,241.21                | 673,745.96               | 32° 0' 0.628 N | 103° 46' 22-281 W   |

Page 4

### ConocoPhillips MCBU

Permian Delaware Hz New Mexico Stampede Federal WC COM 34 1H Stampede Federal WC COM 34 1H

**ST01** 

Plan: Design #2

### **Standard Planning Report - Geographic**

11 April, 2013

#### Planning Report - Geographic

Site Stampede Federal WC COM 34 1H KB PLAT @ 3163 0usft (HNP486) EDM Central Planning Database: Local Co-ordinate Reference: ConocoPhillips MCBU Company: TVD Reference: Permian Delaware Hz New Mexico KB PLAT @ 3163.0usft (HNP486) Project: MD Reference: Stampede Federal WC COM 34 1H Site: North Reference: Grid Stampede Federal WC COM 34 1H Minimum Curvature Well: Survey Calculation Method: ST01 Wellbore: Design #2 Design:

Project Permian Delaware Hz New Mexico, Mexico

Map System: US State Plane 1927 (Exact solution) System Datum: Mean Sea Level

 Map System:
 US State Plane 1927 (Exact solution)
 System Datum:

 Geo Datum:
 NAD 1927 (NADCON CONUS)

 Map Zone:
 New Mexico East 3001

Stampede Federal WC COM 34 1H Site 364,450:30 usft Site Position: Northing: Latitude: 32° 0' 2.698 N 673,744.80 usft 103° 46' 22 282 W From: Мар Easting: Longitude: 13-3/8 " **Grid Convergence:** 0.30 0:0 usft Slot Radius: Position Uncertainty:

Well Stampede Federal WC COM 34 1H Well Position 0.0 usft 32° 0' 2.698 N +N/-S Northing: 364,450.30 usft Latitude: 673,744.80 usft Longitude: 103° 46' 22.282 W +E/-W 0.0 usft Easting: Position Uncertainty 0.0 usft Wellhead Elevation: **Ground Level:** 3,138.0 usft

 Wellbore
 ST01

 Magnetics
 Model Name
 Sample Date
 Declination
 Dip Angle
 Field Strength

 (°)
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 BGGM2012
 1/11/2014
 7.45
 59.80
 48,162

Design Design #2 **Audit Notes:** PROTOTYPE Version: Phase: Tie On Depth: 0.0 +E/-W Vertical Section: Depth From (TVD) Direction . +N/-S (usft) (usft) (üsft) (°) 0.0 0.0 0.0 359.68

| Measured<br>Depth<br>(usft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Dogleg<br>Rate<br>(°/100usft) | Build<br>Rate<br>(°/100usft) | Turn<br>Rate<br>(°/100usft) | TFO<br>(°) | Tàrget         |
|-----------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------------|------------------------------|-----------------------------|------------|----------------|
| 0.0                         | . 0.00             | 0.00           | 0.0                         | 0.0             | 0.0             | 0.00                          | 0.00                         | 0.00                        | 0.00       |                |
| 1;100.0                     | 0.00               | 0.00           | 1,100.0                     | 0:0             | 0.0             | 0.00                          | 0.00                         | 0.00                        | 0.00       |                |
| 1,500.0                     | 6.00               | 179.68         | 1,499.3                     | -20.9           | 0.1             | 1.50                          | 1.50                         | 0.00                        | 179.68     |                |
| 3,100.0                     | 6:00               | 179.68         | 3,090.5                     | -188.2          | 1.1             | 0.00                          | 0.00                         | 0.00                        | 0.00       |                |
| 3,500.0                     | 0.00               | 0.00           | 3,489.8                     | -209.1          | 1.2             | 1.50                          | -1.50·                       | 0.00                        | 180.00     |                |
| 10,953.0                    | 0.00               | 0.00           | 10,942.8                    | -209.1          | 1.2             | 0.00                          | 0.00                         | 0.00                        | 0.00       |                |
| 11,850.5                    | 89:71              | 359:68         | 11,516.0                    | 361.2           | -2.0            | 10.00                         | 10.00                        | 0.00                        | 359.68     |                |
| 18,413.5                    | 89.71              | 359.68         | 11,549.0                    | 6,924.0         | -38.7           | 0.00                          | 0.00                         | 0.00                        | -7.50      | Stampede 34 1H |

Planning Report - Geographic

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| Database:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | EDM Central Planning                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Local Co-ordinate Reference:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Site Stampede Federal WC COM 34 1H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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| Company:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ConocoPhillips MCBU                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | TVD Reference:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | KB PLAT @ 3163.0usft (HNP486)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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| Prôject:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Permian Delaware Hz New Mexico                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          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                                                                                                                                             | KB PLAT @ 3163.0usft (HNP486)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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| Site:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Stampede Federal WC COM 34 1H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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| Well:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Stampede Federal WC COM 34 1H                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Survey Calculation Method:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               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| Wellbore:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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| Design:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                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| lan | ned Survey           | ri e i f          | and the state of the second se | ما المارية على المارية المارية<br>والمارية المارية المار | emme ingegrapi nase<br>Alaba Amma minaka | e indicate in a second | and the state of t | معاومها معام وموقع المداد والمحادث المداد.<br>المرافقة معاد معها والمعادد المداد المداد الم |                                  |                                              |
|     |                      |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                  | H er                                     |                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                             |                                  |                                              |
| . 1 | <b>leasured</b>      | grand the sale of |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Vertical                                                                                                                                                                                                                         |                                          |                        | Map                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Map                                                                                         |                                  |                                              |
| •   | Depth                | Inclination       | Azimuth                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Depth                                                                                                                                                                                                                            | +N/-S                                    | :: +E/-W               | Northing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Easting                                                                                     |                                  |                                              |
|     | (usft)               | (°)               | (°).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | (usft)                                                                                                                                                                                                                           | (usft)                                   | (usft)                 | (usft)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | (usft)                                                                                      | Latitude'                        | Longitude                                    |
|     | 0.0                  | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0.0                                                                                                                                                                                                                              | 0.0                                      | 0.0                    | 364,450.30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,744.80                                                                                  | 32° 0' 2.698 N                   | 103° 46"22.28                                |
|     | 200.0                | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 200.0                                                                                                                                                                                                                            | 0.0                                      | 0.0                    | 364,450.30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,744.80                                                                                  | 32° 0''2.698 N                   | 103° 46' 22.28                               |
|     | 400.0                | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 400.0                                                                                                                                                                                                                            | 0.0                                      | 0.0                    | 364,450.30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,744.80                                                                                  | 32° 0′ 2 698 N                   | 103° 46' 22.28                               |
|     | 600.0                | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 600.0                                                                                                                                                                                                                            | 0:0                                      | 0.0                    | 364,450.30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,744.80                                                                                  | 32° 0' 2:698 N                   | 103° 46' 22.28                               |
|     | 800;0                | 0.00              | 0:00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0.008                                                                                                                                                                                                                            | 0.0                                      | 0:0.                   | 364,450.30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,744.80                                                                                  | 32° 0′′2:698 N                   | 103° 46' 22.28<br>103° 46' 22.28             |
|     | 960.0                | 0.00,             | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 960.0                                                                                                                                                                                                                            | 0.0                                      | 0.0                    | 364,450.30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,744.80                                                                                  | 32° 0′,2,698 N                   | 103 46 22.26                                 |
|     | 13 3/8" ,<br>1,000.0 | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1,000.0                                                                                                                                                                                                                          | 0.0                                      | 0:0                    | 364,450.30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,744.80                                                                                  | 32° 0' 2.698 N                   | 103° 46' 22.28                               |
|     | 1,100.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1,100.0                                                                                                                                                                                                                          | 0.0                                      | 0:0                    | 364,450.30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,744.80                                                                                  | 32° 0' 2:698 N                   | 103° 46' 22.28                               |
|     | 1,200.0              | 1:50              | 179.68                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1,200.0                                                                                                                                                                                                                          | -1.3                                     | 0.0                    | 364,448.99                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,744.80                                                                                  | 32° 0' 2.685 N                   | 103° 46' 22.28                               |
|     | 1,400.0              | 4.50              | 179.68                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1,399.7                                                                                                                                                                                                                          | -11.8                                    | 0.1                    | 364,438.52                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,744.86                                                                                  | 32° 0' 2:581 N                   | 103° 46';22.28                               |
|     | 1,500.0              | 6.00              | 179.68                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1,499.3                                                                                                                                                                                                                          | -20.9                                    | 0.1                    | 364,429.37                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,744.91                                                                                  | 32° 0' 2.491 N                   | 103° 46' 22.28                               |
|     | 1,600.0              | 6.00              | 179.68                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1,598.7                                                                                                                                                                                                                          | -31.4                                    | 0.2                    | 364,418.92                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,744.97                                                                                  | 32° 0' 2.387 N                   | 103° 46, 22.28                               |
|     | 1,800.0              | 6.00              | 179:68                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1,797.6                                                                                                                                                                                                                          | -52.3                                    | 0.3                    | 364,398.02                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.09                                                                                  | 32° 0' 2.180 N                   | 103° 46 22.20                                |
|     | 2,000.0              | 6.00              | 179.68                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1,996.5                                                                                                                                                                                                                          | -73.2                                    | 0.4                    | 364,377,11                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.20                                                                                  | 32° 0′ 1.973 N                   | 103° 46′ 22.28                               |
|     | 2,200.0              | 6.00              | 179.68                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 2,195.4                                                                                                                                                                                                                          | -94.1                                    | 0.5                    | 364,356.20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.32                                                                                  | 32° 0' 1.766 N                   | 103° 46ื' 22.28                              |
|     | 2,400.0              | 6.00              | 179.68                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 2,394.3                                                                                                                                                                                                                          | -115.0                                   | 0.6                    | 364,335.30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.44                                                                                  | 32° 0' 1.560 N                   | 103° 46' 22.28                               |
|     | 2,600.0              | 6.00              | 179.68                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 2,593.2                                                                                                                                                                                                                          | -135.9                                   | 0.8                    | 364,314.39                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.55                                                                                  | 32° 0' 1,353 N'                  | 103° 46' 22.28                               |
|     | 2,800.0              | 6.00              | 179.68                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 2,792.1                                                                                                                                                                                                                          | -156.8                                   | 0.9                    | 364,293.49                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.67                                                                                  | 32° 0' 1.146 N                   | 103° 46' 22.28                               |
|     | 3,000.0              | 6.00              | 179,68                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 2,991.1                                                                                                                                                                                                                          | -177.7                                   | 1.0                    | 364,272.58                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.79                                                                                  | 32° 0' 0.939 N                   | 103° 46' 22.2                                |
|     | 3,100.0              | 6.00              | 179.68                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3,090.5                                                                                                                                                                                                                          | -188:2                                   | 1.1                    | 364,262,13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.85<br>673,745.90                                                                    | 32° 0' 0.835 N                   | 103° 46' 22.28                               |
|     | 3,200.0<br>3,400.0   | 4.50<br>1.50      | 179.68<br>179.68                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 3,190.1<br>3,389.8                                                                                                                                                                                                               | -197.3<br>-207.8                         | 1.1<br>1.2             | 364,252.98<br>364,242.52                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 673,745.96                                                                                  | 32° 0' 0.745 N<br>32° 0' 0.641 N | 103° 46' 22.28<br>103° 46' 22.28             |
|     | 3,500.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3,489.8                                                                                                                                                                                                                          | -207.8                                   | 1.2                    | 364,241,21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32° 0' 0.628 N                   | 103° 46' 22.28                               |
|     | 3,600.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3,589.8                                                                                                                                                                                                                          | -209.1                                   | 1.2                    | 364,241.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32° 0′ 0.628 N                   | 103° 46' 22.28                               |
|     | 3,800.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3,789.8                                                                                                                                                                                                                          | -209.1                                   | 1.2                    | 364,241,21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32° 0' 0.628 N                   | 103° 46' 22.28                               |
|     | 4,000.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3,989.8                                                                                                                                                                                                                          | -209.1                                   | 1.2                    | 364,241:21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673;745.96                                                                                  | 32° 0' 0.628 N                   | 103° 46' 22.28                               |
|     | 4,200.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 4,189.8                                                                                                                                                                                                                          | -209.1                                   | 1.2                    | 364,241.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32° 0' 0.628 N                   | 103° 46' 22.28                               |
|     | 4,400.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 4,389.8                                                                                                                                                                                                                          | -209.1                                   | 1.2                    | 364,241.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32° 0' 0.628 N                   | 103° 46' 22.28                               |
|     | 4,600.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 4,589.8                                                                                                                                                                                                                          | -209.1                                   | 1.2                    | 364,241,21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32° 0' 0.628 N                   | 103° 46′ 22.28                               |
|     | 4,800.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 4,789.8                                                                                                                                                                                                                          | -209.1                                   | . 1.2                  | 364,241.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32°0' 0.628 N                    | 103° 46' 22.28                               |
|     | 4,940.2              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 4,930.0                                                                                                                                                                                                                          | -209.1                                   | 1.2                    | 364,241.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32° 0' 0.628 N                   | 103° 146' 22.28                              |
|     | 9 5/8"               |                   | 12 m 1 m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 8 3 5 5 5 F                                                                                                                                                                                                                      |                                          |                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                             |                                  |                                              |
|     | 5,000.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 4,989.8                                                                                                                                                                                                                          | -209.1                                   | 1.2                    | 364,241.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32° 0' 0.628 N                   | 103° 46' 22.28                               |
|     | 5,200.0              | 0,00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 5,189.8                                                                                                                                                                                                                          | -209.1                                   | 1.2                    | 364,241.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32° 0′ 0.628 N                   | 103° 46′ 22.28                               |
|     | 5,400.0<br>5,600.0   | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 5,389.8<br>5,580.8                                                                                                                                                                                                               | -209.1                                   | 1.2                    | 364,241.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32° 0' 0.628 N                   | 103° 46' 22.28                               |
|     | 5,800.0              | 0,00<br>0,00      | 0.00<br>0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 5,589:8<br>5,789:8                                                                                                                                                                                                               | -209.1<br>-209.1                         | 1.2<br>1.2             | 364,241.21<br>364,241.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 673,745.96<br>673,745.96                                                                    | 32° 0′ 0.628 N<br>32° 0′ 0.628 N | 103° 46' 22,28<br>103 <sup>°</sup> 46' 22,28 |
|     | 6,000.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 5,769:6                                                                                                                                                                                                                          | -209.1<br>-209.1                         | 1.2                    | 364,241,21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32° 0' 0.628 N                   | 103° 46' 22.28                               |
|     | 6,200.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 6,189:8                                                                                                                                                                                                                          | -209.1                                   | 1.2                    | 364,241.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32° 0' 0.628 N                   | 103° 46' 22.28                               |
|     | 6,400.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 6,389:8                                                                                                                                                                                                                          | -209.1.                                  | 1.2                    | 364,241.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32° 0' 0.628 N                   | 103° 46' 22.28                               |
|     | 6,600.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 6,589.8                                                                                                                                                                                                                          | -209.1                                   | . 1.2                  | 364,241.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32° 0' 0.628 N                   | 103° 46' 22.28                               |
|     | 6,800.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 6,789.8                                                                                                                                                                                                                          | -209.1                                   | 1.2                    | 364,241.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32°.0' 0.628 N                   | 103° 46' 22.28                               |
|     | 7,000.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 6,989.8                                                                                                                                                                                                                          | -209.1                                   | 1.2                    | 364,241.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32° 0' 0.628 N                   | 103° 46' 22.28                               |
|     | 7,200.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 7,189.8                                                                                                                                                                                                                          | -209.1                                   | 1.2                    | 364,241.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32° 0' 0.628 N                   | 103° 46′ 22.28                               |
|     | 7,400.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 7,389.8                                                                                                                                                                                                                          | -209.1                                   | 1.2                    | 364,241.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32° 0' 0.628 N                   | 103° 46' 22.28                               |
|     | 7,600.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 7,589.8                                                                                                                                                                                                                          | -209.1                                   | 1.2                    | 364,241.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32° 0' 0.628 N                   | 103° 46′ 22.28                               |
|     | 7;800.0              | 0.00              | .0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 7,789.8                                                                                                                                                                                                                          | -209.1                                   | 1.2                    | 364,241.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32° 0' 0.628 N                   | 103° 46′ 22.28                               |
|     | 8,000.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 7,989.8                                                                                                                                                                                                                          | -209.1                                   | 1.2                    | 364,241.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745:96                                                                                  | 32° 0' 0.628 N                   | 103° 46' 22.28                               |
|     | 8,200.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 8,189.8                                                                                                                                                                                                                          | -209.1                                   | 1.2                    | 364,241.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32° 0' 0.628 N                   | 103° 46' 22.28                               |
|     | 8,400.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 8,389:8                                                                                                                                                                                                                          | -209.1                                   | 1.2                    | 364,241.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32° 0' 0.628 N                   | 103° 46' 22.28                               |
|     | 8,600.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 8,589.8                                                                                                                                                                                                                          | -209.1                                   | 1.2                    | 364,241.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32° 0′ 0.628 N                   | 103° 46' 22.28                               |
|     | 8,800.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 8,789.8                                                                                                                                                                                                                          | -209.1                                   | 1.2                    | 364,241.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32° 0' 0.628 N                   | 103° 46' 22:28                               |
| _   | 9,000.0              | 0.00              | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 8,989.8                                                                                                                                                                                                                          | -209.1                                   | 1.2                    | 364,241.21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 673,745.96                                                                                  | 32°.0' 0.628 N                   | 103° 46' 22.28                               |

#### Planning Report - Geographic

Database: Company: Project:

Site:

Wellbore:

Design:

Well:

Design #2

EDM Central Planning ConocoPhillips MCBU Permian Delaware Hz New Mexico Stampede Federal WC COM 34 1H Stampede Federal WC COM 34 1H STO1

Local Co-ordinate Reference: TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Site Stampede Federal WC COM 34 1H KB PLAT @ 3163 Qustt (HNP486) KB PLAT @ 3163.00sft (HNP486)

Grid

Minimum Curvature

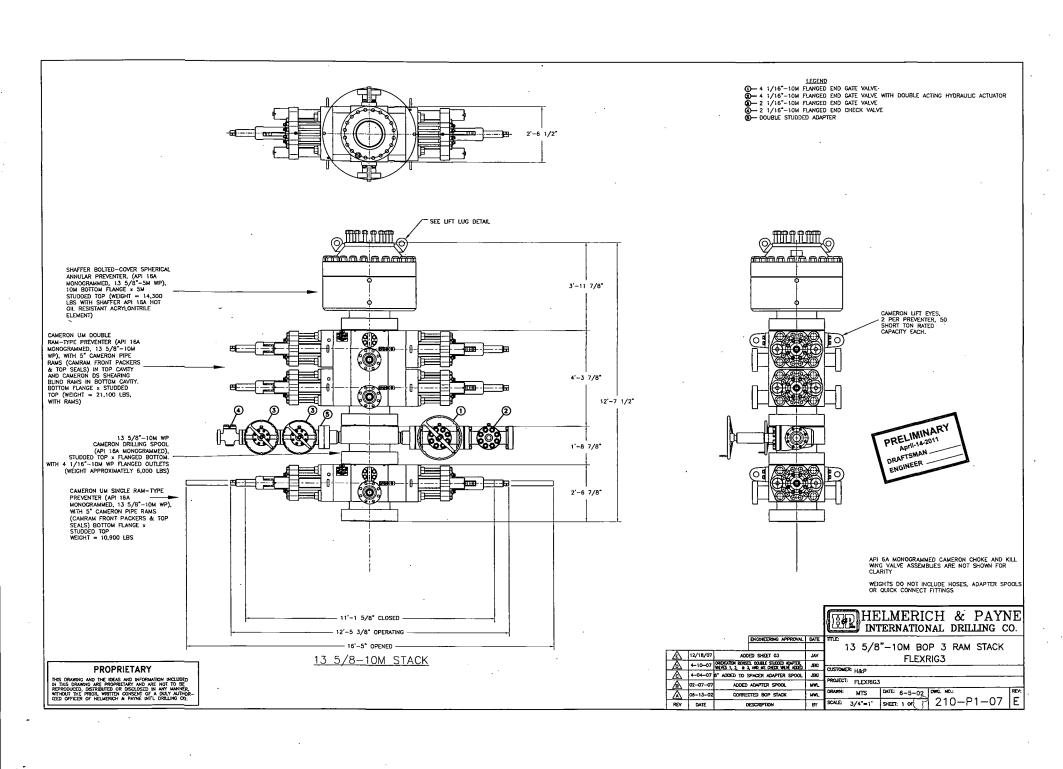
| ned Survey      |                         | The Section of Section 1995. |                 | سيأول السفاعط   | alay da faqaqalay dan<br>ana ang kadikan santa |                    | الله الله الله الله الله الله الله الله | ها الله الله المهاد المالي على الله المالية | ا را ۱۹۰۱ ها ۱۹۰۱ م<br>استونینها دستان در اینامها |
|-----------------|-------------------------|------------------------------|-----------------|-----------------|------------------------------------------------|--------------------|-----------------------------------------|---------------------------------------------|---------------------------------------------------|
| Measured        |                         |                              | Vertical        |                 | <u> </u>                                       | Map                | Мар                                     |                                             |                                                   |
| Depth<br>(usft) | , Inclination `.<br>(°) | (°)(                         | Depth<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft)                                | Northing<br>(usft) | Easting (usft)                          | Latitude                                    | Longitude                                         |
| 9,200:0         | .0.00                   | 0:00                         | 9,189.8         | -209.1          | 1.2                                            | 364,241,21         | 673,745.96                              | 32° 0' 0.628 N                              | 103° 46' 22.28                                    |
| 9,400.0         | 0:00                    | 0.00                         | 9,389.8         | 209.1           | 1.2                                            | 364,241.21         | 673,745.96                              | 32° 0' 0.628 N                              | 103° 46' 22.2                                     |
| 9,600.0         | 0.00                    | 0.00                         | '9,589.8        | -209.1          | 12                                             | 364,241.21         | 673,745.96                              | 32° 0' 0.628 N                              | 103° 46' 22:2                                     |
| 9,800.0         | 0.00                    | 0,00                         | 9,789.8         | -209.1          | 1.2                                            | 364,241.21         | 673,745.96                              | 32° 0' 0.628 N                              | 103° 46′ 22/2                                     |
| 10,000.0        | 0.00                    | 0.00                         | 9,989.8         | -209.1          | 1.2                                            | 364,241.21         | 673,745.96                              | 32°0' 0.628 N                               | 103° 46′ 22 2                                     |
| 10,200.0        | 0.00                    | 0.00                         | 10,189.8        | -209:1          | 1.2                                            | 364,241.21         | 673,745.96                              | 32° 0' 0,628 N                              | 103° 46' 22 2                                     |
| 10,400.0        | 0.00                    | 0.00                         | 10,389.8        | -209.1          | 1.2                                            | 364,241.21         | 673,745.96                              | 32° 0' 0:628 N                              | 103°,46"22.2                                      |
| 10,600.0        | 0.00                    | 0.00                         | 10,589.8        | -209.1          | 1.2                                            | 364,241.21         | 673,745.96                              | 32° 0' 0.628 N                              | 103° 46' 22.2                                     |
| 10,800.0        | 0.00                    | 0.00                         | 10,789.8        | -209.1          | 1.2                                            | 364,241.21         | 673,745.96                              | 32° 0' 0.628 N                              | 103° 46' 22.2                                     |
| 10,953.0        | 0.00                    | 0.00                         | 10,942:8        | -209.1          | 1.2                                            | 364,241.21         | 673,745.96                              | 32° 0' 0.628 N                              | 103° 46' 22.2                                     |
| 11,000.0        | 4.70                    | 359.68                       | 10,989:7        | -207.2          | 1.2                                            | 364,243.13         | 673,745.95                              | 32° 0' 0:647 N                              | 103° 46' 22.2                                     |
| 11,200.0        | 24.69                   | 359,68                       | 11,182.2        | -156.7          | 0.9                                            | 364,293.60         | 673,745.67                              | 32° 0' 1.147 N                              | 103° 46' 22.2                                     |
| 11,400.0        | 44.68                   | 359.68                       | 11,345.8        | -43.5           | 0.2                                            | 364,406.83         | 673,745.04                              | 32° 0′ 2.268 N                              | 103° 46' 22.2                                     |
| 11,600.0        | 64.67                   | 359.68                       | 11,460.9        | 118.9           | -0.7                                           | 364,569.18         | 673,744.13                              | 32° 0' 3.874 N                              | 103° 46" 22.2                                     |
| 11,800.0        | 84.66                   | 359.68                       | 11,513.5        | 310.8           | -1.7                                           | 364,761.08         | 673,743.06                              | 32° 0' 5.773 N                              | 103° 46' 22.2                                     |
| 11,850.5        | .89.71                  | 359,68                       | 11,516.0        | 361.2           | -2.0                                           | 364,811.50         | 673,742.78                              | 32° 0' 6.272 N                              | 103° 46' 22.2                                     |
| 7"              |                         | 505.00                       | 7 1,0 10.0      | 001.2           | -2.0                                           | 00 7,0 7 7,0 0     |                                         | 1 7 6 7                                     | 100 10 22:2                                       |
|                 | 00.74                   | 250.60                       | 44.540.0        | 540.7           |                                                | 364 060 00         | . 672 741 04                            | 32° 0' 7.752 N                              | 103° 46' 22.2                                     |
| .12,000.0       | 89.71                   | 359.68                       | 11,516.8        | 510.7           | -2.9                                           | 364,960.99         | 673,741.94                              |                                             | ,                                                 |
| 12,200.0        | 89.71                   | 359,68 `                     | 11,517.8        | 710.7           | -4.0                                           | 365,160.99         | 673,740.83                              | 32° 0' 9.731 N                              | 103° 46¦ 22.2                                     |
| 12,400.0        | 89.71                   | 359.68                       | 11,518.8        | 910.7           | -5.1                                           | 365,360.98         | 673,739,71                              | 32° 0' 11.710 N                             | 103°, 46' 22.2                                    |
| 12,600.0        | 89.71                   | 359.68                       | 11,519.8        | 1,110.7         | -6.2                                           | 365,560.98         | 673,738.59                              | 32° 0' 13.690 N                             | 103° 46' 22.2                                     |
| 12,800.0        | 89.71                   | 359.68                       | 11,520.8        | 1,310.7         | -7.3                                           | 365,760.97         | 673,737.47                              | 32° 0' 15.669 N                             | 103° 46' 22.2                                     |
| 13,000.0        | 89.71                   | 359.68                       | 11,521.8        | 1,510.7         | -8.4                                           | 365,960.97         | 673,736.36                              | 32° 0' 17.648 N                             | 103° 46' 22.2                                     |
| 13,200.0        | 89.71                   | 359.68                       | 11,522.8        | 1,710.7         | -9.6                                           | 366,160.96         | 673,735.24                              | 32° 0' 19:627 N                             | 103° 46' 22.2                                     |
| 13,400.0        | 89.71                   | 359.68                       | 11,523.8        | 1,910.7         | -10.7                                          | 366,360.95         | 673,734.12                              | 32° 0' 21.607 N                             | 103° 46' 22.2                                     |
| 13,600.0        | 89.71                   | 359.68                       | 11,524.8        | 2,110.6         | -11.8                                          | 366,560.95         | 673,733.00                              | 32° 0' 23.586 N                             | 103° 46' 22.2                                     |
| 13,800.0        | 89.71                   | 359.68                       | 11,525.8        | 2,310.6         | -12.9                                          | 366,760.94         | 673,731.89                              | 32° 0' 25.565 N                             | 103° 46' 22.2                                     |
| 14,000.0        | 89.71                   | 359.68                       | 11,526:9        | 2,510.6         | ~14.0                                          | 366,960.94         | 673,730.77                              | 32° 0′ 27.544 N                             | 103° 46! 22.2                                     |
| 14,200.0        | 89.71                   | 359.68                       | 11,527.9        | 2,710.6         | -15.1                                          | 367,160.93         | 673,729.65                              | 32° 0' 29.524 N                             | 103° 46′ 22.2                                     |
| 14,400.0        | 89.71                   | 359.68                       | 11,528.9        | 2,910.6         | -16,3                                          | 367,360.93         | 673,728.53                              | 32° 0' 31.503 N                             | 103°-46′ 22.2                                     |
| 14,600.0        | 89.71                   | 359.68                       | 11,529.9        | 3,110.6         | -17.4                                          | '367,560.92        | 673,727.42                              | 32° 0' 33.482 N                             | 103° 46′ 22.2                                     |
| 14,800.0        | 89.71                   | 359.68                       | 11,530.9        | 3,310.6         | -18.5                                          | 367,760.91         | 673,726.30                              | 32° 0' 35 461 N                             | 103° 46' 22.2                                     |
| 15,000.0-       | 89.71                   | 359.68                       | 11,531.9        | 3;510.6         | -19.6                                          | 367,960.91         | 673,725.18                              | 32° 0' 37.441 N                             | 103° 46' 22.2                                     |
| 15,200.0        | 89.71                   | 359.68                       | 11,532.9        | 3,710.6         | -20,7                                          | 368,160.90         | 673,724.06                              | 32° 0′ 39,420 N                             | 103° 46′ 22.29                                    |
| 15,400.0        | 89.71                   | 359.68                       | 11,533.9        | 3,910.6         | -21.8                                          | 368,360.90         | 673,722.95                              | 32° 0' 41.399 N                             | 103°,46′ 22.30                                    |
| 15,600.0        | 89.71                   | 359.68                       | 11,534.9        | 4,110.6         | -23.0                                          | 368,560:89         | 673,721.83                              | 32° 0′ 43:378 N                             | 103° 46' 22.30                                    |
| 15,800.0        | 89.71                   | 359.68                       | 11,535.9        | 4,310.6         | -24,1                                          | 368,760.89         | 673,720.71                              | 32° 0′ 45:358 N                             | 103° 46' 22.30                                    |
| 16,000.0        | 89.71                   | 359.68                       | 11,536.9        | 4,510.6         | -25.2                                          | 368,960.88         | 673,719.59                              | 32° 0' 47.337 N                             | 103° 46' 22.3                                     |
| 16,200.0        | 89.71                   | 359.68                       | 11,537.9        | 4,710.6         | -26.3                                          | 369,160.87         | 673,718:47                              | 32° 0' 49.316 N                             | 103° 46' 22.30                                    |
| 16,400.0        | 89.71                   | 359.68                       | 11,538.9        | 4,910.6         | -27.4                                          | 369,360.87         | 673,717.36                              | 32° 0' 51:295 N                             | 103° 46' 22.30                                    |
| 16,600.0        | 89.71                   | 359.68                       | 11,539.9        | 5,110.6         | -28.6                                          | 369,560.86         | 673,716.24                              | 32° 0' 53.275 N                             | 103° 46' 22.30                                    |
| 16,800.0        | 89.71                   | 359.68                       | 11,540.9        | 5,310.6         | -29.7                                          | 369,760:86         | 673,715.12                              | 32° 0' 55.254 N                             | 103° 46' 22.30                                    |
| 17,000.0        | 89.71                   | 359.68                       | 11,541.9        | 5,510.6         | -30.8                                          | 369,960.85         | 673,714.00                              | 32° 0' 57.233 N                             | 103° 46' 22.30                                    |
| 17,200.0        | 89.71                   | 359.68                       | 11,542.9        | 5,710.5         | -31.9                                          | 370,160.85         | 673,712.88                              | 32° 0' 59.212 N                             | 103° 46′ 22.30                                    |
| 17,400.0        | 89.71                   | 359.68                       | 11,543.9        | 5,910.5         | -33.0                                          | 370,360.84         | 673,711.76                              | 32° 1' 1.192 N                              | 103° 46' 22.30                                    |
| 17,600.0        | 89.71                   | 359.68                       | 11,544.9        | 6,110.5         | -34.2                                          | 370,560.84         | 673,710.65                              | 32° 1' 3.171 N                              | 103° 46' 22.3°                                    |
| 17,800.0        | 89.71                   | 359.68                       | 11,545.9        | 6,310.5         | -35.3                                          | 370,760.83         | 673,709.53                              | 32° 1' 5.150 N                              | 103° 46' 22.3°                                    |
| 18,000.0        | 89.71                   | 359.68                       | 11,546.9        | 6,510.5         | -36.4                                          | 370,960.82         | 673,708.41                              | 32° 1' 7.129 N                              | 103° 46' 22.31                                    |
| 18,200.0        | 89.71                   | 359.68                       | 11,547.9        | 6,710.5         | -37.5                                          | 371,160.82         | 673,707.29                              | 32° 1' 9.109 N                              | 103° 46' 22.31                                    |
| 18,400.0        | 89.71                   | 359.68                       | 11,548:9        | 6,910.5         | -38.6                                          | 371,360.81         | 673,706.17                              | 32° 1′ 11.088 N-                            | 103° 46' 22.31                                    |
| 18,413.5        | 89.71                   | 359.68                       | 11,549.0        | 6,924.0         | -38.7                                          | 371,374.30         | 673,706.10                              | 32° 1' 11.221 N                             | 103° 46' 22.31                                    |

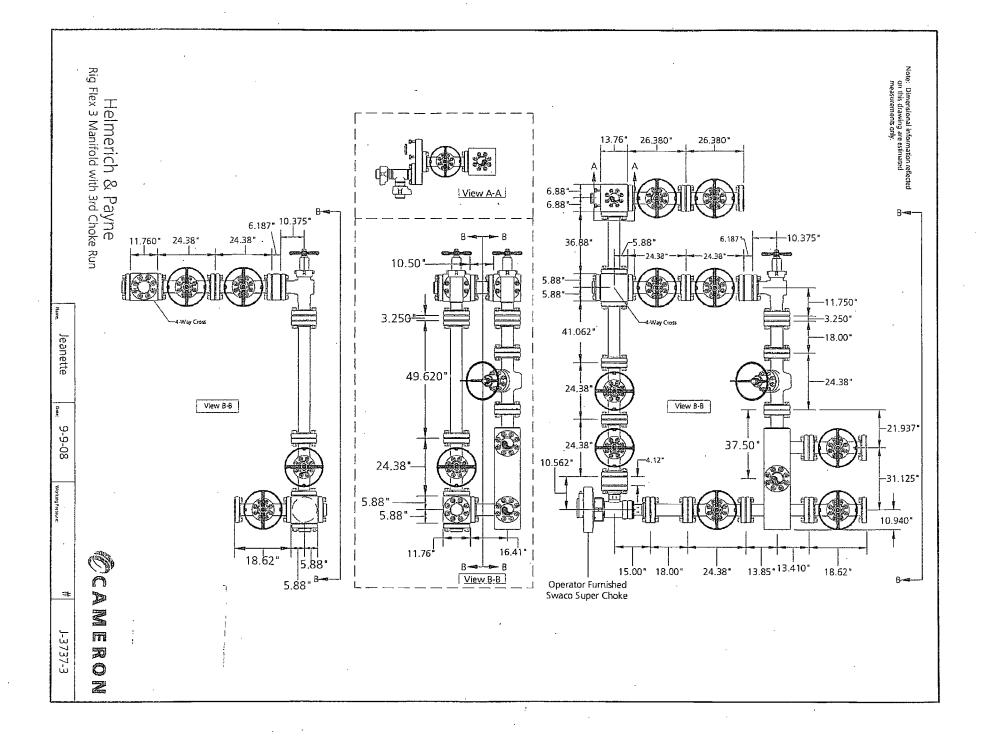
#### Planning Report - Geographic

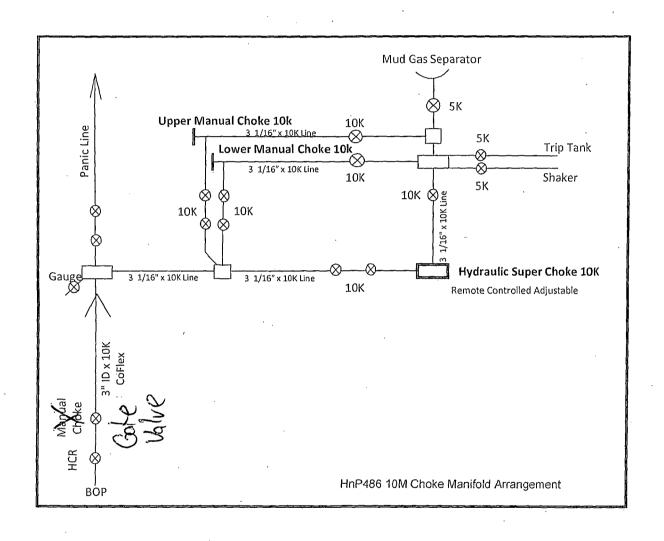
| Database: | EDM Central Planning           | Local Co-ordinate Reference: | Site Stampede Federal WC COM 34 1H |
|-----------|--------------------------------|------------------------------|------------------------------------|
| Company:  | ConocoPhillips MCBU            | TVD Reference:               | KB PLAT @ 3163.0usft (HNP486)      |
| Project:  | Permian Delaware Hz New Mexico | MD Reference:                | KB PLAT @ 3163.0usft (HNP486)      |
| Site:     | Stampede Federal WC COM 34 1H  | North Reference:             | Grid                               |
| Well:     | Stampede Federal WC COM 34 1H  | Survey Calculation Method:   | Minimum Curvature                  |
| Wellbore: | ST01                           |                              |                                    |
| Design:   | Design #2                      |                              |                                    |

| Design Targets                                  | يا مداد يا مرسوده الدين.<br>الدين يا بالمداد الدي | gioren in a man | an agains is company of a second<br>some all analysis all and a second | الدا والمعروبي والخير<br>بالمدالسوري يوليد الدا | an an desario   | en e | er om er de er et en er | and the same of the second sec | in a complete with a second a com-<br>Talanta a complete a |
|-------------------------------------------------|---------------------------------------------------|-----------------|------------------------------------------------------------------------|-------------------------------------------------|-----------------|------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Target Name - hit/miss target - Shape           | Dip Angle<br>(°)                                  | Dip Dir.<br>(°) | TVD<br>(usft)                                                          | +N/-S<br>(usft)                                 | +E/-W<br>(usft) | Northing<br>(usft)                       | Easting<br>(usft)                                           | Latitude                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Longitude                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Stampede 34 1H BHL - plan hits target c - Point |                                                   | 0.00            | 11,549.0                                                               | 6,924.0                                         | -38.7           | 371,374.30                               | 673,706.10                                                  | 32° 1' 11.221 N                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 103° 46' 22.314 W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

| Casing Points                         | 'a commence                 | ente motramente a como como | ra de delimento de se a destadora. |     |                                        | <br>errore reservation of the second seco | - union 40 April 40 pp. 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - |                           |                         | y nyang sangkan pendagan pend<br>Tanah pendagan pendag |
|---------------------------------------|-----------------------------|-----------------------------|------------------------------------|-----|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                       | Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) |                                    | . ` | Name                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Casing<br>Diameter<br>(") | Hole<br>Diameter<br>(") |                                                                                                                                                                                                                                   |
| reports the mile comments with season | 960.0                       | 960.0                       | 13 3/8"                            |     | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | <br>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 13-3/8                    | 17-1/2                  | المنتصفة بالوقاء اين المهمرات ا                                                                                                                                                                                                   |
|                                       | 4,940.2                     | 4,930.0                     | 9 5/8"                             |     |                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 9-5/8                     | 12-1/4                  |                                                                                                                                                                                                                                   |
|                                       | 11,850.5                    | 11,516.0                    | 7"                                 |     |                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 7                         | 8-3/4                   |                                                                                                                                                                                                                                   |







#### **Request for Variance**

#### **ConocoPhillips Company**

Lease Number: LC 068282A

Well: Stampede Federal WC COM 34 1H

Location: Sec. 34, T26S, R31E

Rig: H&P 486 Date: 2/5/2014

#### 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

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

## 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                                                                      |
| Lengih                      | 35 ft                                                                  |
| Type of coupling one end    | FLANGE 4 1/16" API SPEC 6A TYPE 6BX FOR 10000<br>PSIBX155 RING GROOVE  |
| Type of coupling other end  | FLANGE 4 1/16" API SPEC 6A TYPE 6BX FOR 10000 PSI<br>BX155 RING GROOVE |
| H2S service NACE MR0175     | Yes                                                                    |
| Working Pressure            | 10 000 psi                                                             |
| Design Pressure             | 10 000 psl                                                             |
| Test Pressure               | 15 000 psi                                                             |
| Safely Factor               | 2,25                                                                   |
| Marking                     | USUAL PHOENIX                                                          |
| Cover                       | NOT FIRE RESISTANT                                                     |
| Outside protection          | St.steel outer wrap                                                    |
| Internal stripwound tube    | No .                                                                   |
| Lining                      | OIL RESISTANT                                                          |
| Safety clamp                | No                                                                     |
| Lifting collar              | No                                                                     |
| Element C                   | No                                                                     |
| 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                                                   |



OC-DB-45/2012

7/50 Page:

Fluid Technology

Quality Document

| QUALITIES QUALITIES AND A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | TY CONT          |                | TE                                                                                               | CERT. N  | <b>1</b> *: | 184          |      |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------|--------------------------------------------------------------------------------------------------|----------|-------------|--------------|------|--|--|
| PURCHASER:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ContiTech B      | P.O. N°:       |                                                                                                  | 005438   |             |              |      |  |  |
| CONTITECH ORDER N°:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 516273           | HOSE TYPE:     | 3" ID                                                                                            |          | Choke ar    | nd Kill Hose |      |  |  |
| HOSE SERIAL Nº:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 61477            | NOMINAL / ACTU | AL LENGTH:                                                                                       | _        | 10,67       | m / 10,71 m  |      |  |  |
| W.P. 68,9 MPa 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | iaq 0 <b>000</b> | T.P. 103,4 №   | Pa 15 <b>0</b> 0                                                                                 | O psi    | Duration:   | 60           | min. |  |  |
| Pressure test with water at ambient temperature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | S                | ee attachmen   | . ( 1 page                                                                                       | · )      |             |              |      |  |  |
| Î 10 mm = 10 Min. → 10 mm = 20 MPa COUPLINGS Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                  | Serial Nº      |                                                                                                  | Quality  |             | Heat Nº      | ·    |  |  |
| 3" coupling with                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1017             | 8 10173        | AISI 4130                                                                                        |          |             | 20231        |      |  |  |
| 4 1/16" 10K API Flange er                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | nd .             |                | A                                                                                                | ISI 4130 |             | 33051        |      |  |  |
| NOT DESIGNED FOR WELL TESTING API Spec 16 C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                  |                |                                                                                                  |          |             |              |      |  |  |
| All mutal 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 forms, conditions and specifications of the above Purchaser Order and that that the reference of the flow of the above the reference of the r |                  |                |                                                                                                  |          |             |              |      |  |  |
| Date: 30. January 2012.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Inspector        |                | Quality Control  Contillects Rubbor  Industrial Kit.  Quality Control Dept.  (1) (1) (2) (2) (3) |          |             |              |      |  |  |

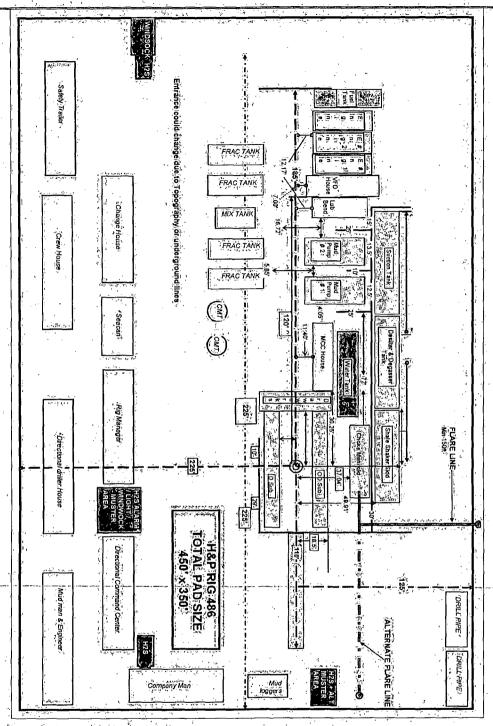
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ATTACHMENT OF QUALITY CONTROL INSPECTION AND TEST CERTIFICATE

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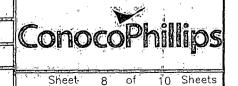


STAMPEDE FEDERAL WC COM 34 #1H Located 250' FSL and 380' FWL Section 34, Township 26 South, Range 31 East, N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393—7316 — Office (575) 392—2206 — Fax basinsurveys.com

| W.O. N | lumber: | JMS   | 28235   |  |
|--------|---------|-------|---------|--|
| Survey | Date:   | 02-2  | 28-2013 |  |
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| Date:  | 03-11   | -2013 | 2       |  |





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

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

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

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

# **Table of Contents**

# **Section**

- I. Purpose
- II. Scope
- III. Procedures
- IV. Emergency Equipment and Maintenance

Emergency Equipment Suppliers General Information H2S Safety Equipment and Monitoring Systems

- V. Emergency Call List
- VI. Public/Media Relations
- VII. Pubic Notification/Evacuation
- VIII. Forms/Reports



# HYDROGEN SULFIDE (H<sub>2</sub>S) 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). **D**ETECT the problem ESTIMATE likely harm without intervention CHOOSE response objectives **IDENTIFY** action options **D**O 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.                                                                                                                                                                                                                                                                                                                                                                                                           |
|   | <ul> <li>Set barricades and /or warning signs at or beyond the calculated 100 ppm</li> <li>H<sub>2</sub>S radius of exposure (ROE). All manned barricades must be equipped with an H<sub>2</sub>S monitor and a 2-way radio.</li> </ul>                                                                                                                                                                                            |
|   | —— 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:                                                                                                                                                                                                                                                                                                                                                                    |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                    |

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# <u>AND</u>

| 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 Officer (refer to Section VI: Public Media Relations).                                                                                                                                                                                                                     | Public Information                                                         |
| Coordinate the attempt to stop the release of H <sub>2</sub> S. You upstream and downstream valves to shut-off gas supply or clamping leaks. Igniting escaping gas to reduce the to used <b>ONLY AS A LAST RESORT</b> . (It must first be do be safely ignited, taking into consideration if there is a p flammable atmosphere.) | sources, and/or plugging oxicity hazard should be etermined if the gas can |
| Once the emergency is over, return the situation to norm                                                                                                                                                                                                                                                                         | nal by:                                                                    |
| Confirming the absence of H <sub>2</sub> S and combustible g                                                                                                                                                                                                                                                                     | as throughout the area,                                                    |
| Discontinuing the radio silence on all channels, sta<br>incident is over,                                                                                                                                                                                                                                                        | nting that the emergency                                                   |
| Removing all barricades and warning signs,                                                                                                                                                                                                                                                                                       |                                                                            |
| Allowing evacuees to return to the area, and                                                                                                                                                                                                                                                                                     | •                                                                          |
| Advising-all-parties previously-notified that the em                                                                                                                                                                                                                                                                             | nergency has ended.                                                        |
| Ensure the proper regulatory authorities/agencies are not to Section V: Emergency Call List).                                                                                                                                                                                                                                    | fied of the incident (refer                                                |
| Clean up the site. (Be sure all contractor crews have had training.)                                                                                                                                                                                                                                                             | appropriate HAZWOPER                                                       |
| Report completion of the cleanup to the Asset Environmentalist will report this to the proper State and                                                                                                                                                                                                                          |                                                                            |

|             | 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.                                                                                                                                                                                                                                                                      |
| t           | • 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                                                                                                                                                                                                                                                                                         |
| <del></del> | 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.

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

432,580,3770

# Total Safety US Odessa, Tx/ Hobs, NM

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

432.561.5049 Odessa, Tx. 575.392.2973 Hobbs, NM

# Indian Fire & Safety - Hobbs, NM

H<sub>2</sub>S monitors Breathing air including cascade systems trailer mounted 30 minute air packs Safety Equipment 575.393.3093

# **Emergency Equipment and Maintenance (continued)**

#### General Information

Materials used for repair should be suitable for use where H<sub>2</sub>S 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
- $1 \underline{\text{Entrance Warning Sign}}$  located at the main entrance to the location, with warning signs and colored flags to determine the current status for entry into the location.
- $2 \underline{\text{Windsocks}}$  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 <u>size large</u>, 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.

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

# V. EMERGENCY CALL LIST:

The following is a priority list of personnel to contact in an emergency situation:

| 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<br>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 |

# EMERGENCY CALL LIST: State Officials

# **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 620 E. Greene St.

Carlsbad, NM 88220

Office: 575.234.5972 Fax: 575.885.9264

**EMERGENCY CALL LIST: Local Officials** 

Refer to the Location Information Sheet

Note: The LIS should include any area residents (i.e. rancher's house, etc)

# VI. Public Media Relations

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

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

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

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

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

#### Note:

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

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

# VII. Public Notification/Evacuation

# Alert and/or Evacuate People within the Exposure Area

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

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

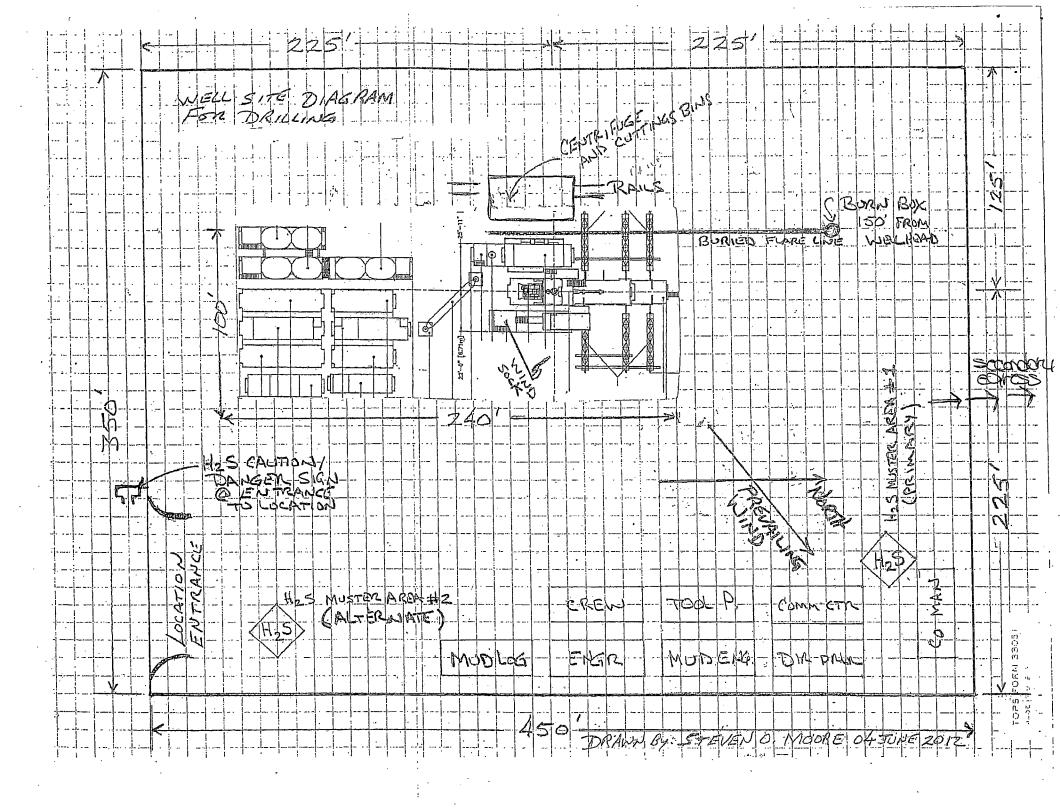
2. Evacuation Procedures – Evacuation will proceed upwind from the source of the release of H<sub>2</sub>S. Extreme caution should be exercised in order to avoid any depressions or low-lying areas in the terrain. The public area within the radius of exposure should be evacuated in a southwesterly and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

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

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

# VIII. FORMS & REPORTS

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



FLARE TANKS 000 SEPARATORS

STAMPEDE FEBERAL WC 34-1 SECT 34 NEW MEXICO

# Surface Use Plan of Operations

ConocoPhillips Company Stampede Federal WC Com 34 # 1H 250 FSL & 380 FWL (SWSW) 34-26S-31E Eddy County, New Mexico Federal Lease (Surf) LC068282B; (BHL) LC068282A

#### 1. Access Road - Existing

- A. From Junction of Orla and Battle Axe, go east on Battle Axe for 5 miles to lease road. Head south on proposed lease road for 1761.3 to location
- B. Proposed route to location See Enclosed County Map & Vicinity Map.
- C. The existing road will be maintained, including Dust Suppression, in the same or better condition as existed prior to the commencement of operations and said maintenance will, continue until final abandonment and reclamation of this drilling location.

#### 2. Planned Access Roads

- A. There will be 1761.3' of new access road with a 30' construction right of way and a minimum travel way width of 14'. All is on federal surface.
- B. Maximum grade will not exceed 8 percent.
- C. There will be no County approach.
- D. There will be no low water crossing or culverts
- E. There will be no cattleguard installed on the access road.
- F. The proposed access road will be constructed in accordance with roading guidelines established for oil & gas exploration and development activities as referenced in the joint BLM/USFS publication: Surface Operating Standards for Oil and Gas Exploration and Development, Third Edition and/or BLM Manual Section 9113 concerning road construction activities on projects under federal jurisdiction. Prior to moving in any heavy equipment, the access road will be thoroughly compacted.

# 3. Location of Existing Wells within a One-Mile Radius. See Enclosed One Mile Radius Plat

- A. There are no water wells within a one-mile radius
- B. There are no dry holes located within a one-mile radius.
- C. There are no plugged and abandoned wells within a one-mile radius.
- D. There are no saltwater disposal wells within a one-mile radius.
- E. There are no proposed drill wells within a one-mile radius.
- F. There are no producing/recently drilled wells within a one-mile radius.
- G. There are no shut-in wells within a one-mile radius.
- H. There are no injection wells within a one-mile radius.
- I. There are no monitoring or observation wells within a one-mile radius.
- J. There is no water source well within a one-mile radius.

#### 4. Location of existing and/or Proposed Facilities

#### A. On Well Pad

- This well will be placed on oil production. Temporary production facilities could be located on this location; however, long term production may be transported to an unidentified CTB. All above ground existing facilities are painted an earth tone color that blends with the surrounding area. Any proposed new facilities will be painted a shale green.
- 2. An electric line will be installed on the east side of the proposed access road (1761.3) and then head east along State Line Road on the south side for approximately 9100' to an Xcel tie in.

#### 5. Location and Type of Water Supply

- A. Fresh water will be obtained from an approved source.
- B. No water well will be drilled on this location.

#### 6. Source of Construction Materials

- A. Any materials needed in addition to what can be used from location and access road will be hauled in from a supplier having a permitted source of materials.
- B. If production is established, any additional construction materials required for the surfacing of the access road and for installation of the production facilities will be purchased from a supplier having a permitted source of materials.
- C. No construction materials will be taken from Federal lands without a prior approval from the appropriate Surface Management Agency.

#### 7. Methods for Handling Waste Disposal

- A. Hazardous substances as listed as hazardous under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) of 1980, as amended, 42 U.S.C. 9601 et seq. and the regulations issued under CERCLA, will be disposed of in the appropriate pit.
- B. Any spills of oil or any other potentially hazardous material will be cleaned up and Immediately removed to an approved disposal site.
- C. Sewage will be disposed of according to county and state requirements in a portable chemical toilet(s) or in a hole at least 20 feet deep excavated in the cut portion of the well pad. Other waste and chemicals may not be disposed of on location. Waste will not be burned on location.
- D. Garbage and trash will be contained in portable trash cages. The contents of the trash cages will be disposed of according to county and state regulations at an approved facility. Disposal of it or burning it will not be allowed on the well location.
- F. After drilling rig has moved out of area, any scattered trash and litter will be removed from site
- G. All potentially hazardous areas will be fenced, and will remain in this condition until entire area can be rehabilitated.

#### 8. Ancillary Facilities

The production facilities are discussed under Item 4.

#### 9. Well Site Layout

- A. See Enclosed Well Location Plat
- B. Well Site Layout The rig to drill this well will need a 450' x 350' location. (See Enclosed Drilling Rig Layout Plat.
- C. Topsoil will be stripped from the locations and access roads and be stockpiled and be deposited apart from other excavated material.
- D. There will be a no reserve pit on location. The well will be drilled via a closed loop system and the contents will be taken to an approved disposal site.

#### 10. Plans for Reclamation of the Surface

- A. If this well is a producer, all site rehabilitation shall be completed within six months. Under normal weather conditions, the timetable for rehab will allow two months for backfill settling and two months to complete final re-contouring, and top-soiling. In the event of winter freeze-up, reclamation will be put on hold as determined by the BLM.
- B. At such time as the well is abandoned, ConocoPhillips Company will contact the BLM for development of the final rehabilitation plan. Upon abandonment, a dry hole marker welded to surface casing four feet below ground level will be installed. It will contain the same information as the well sign as directed by 43 CFR 3162.6 (30 CFR 221.22). The dry hole marker sealing the casing will have an 1/8" to 1/4" weep hole which will allow pressure to dissipate and make detection of any fluid seepage easier.
- C. If this well site is constructed and not drilled, the site and access road will be reclaimed or BLM approved special erosion control measures implemented within 90 days of site construction unless otherwise approved in writing by sundry notice.
- D. The unused portion of the site will be ripped prior to replacing the topsoil. The soil-banked material will be spread over the area. Reseeding will be an approved mixture by the BLM. If the broadcast method is utilized, the seed mixture shall be doubled.

  There shall be no primary or secondary noxious weed seed in the native seed mixture
- E. The entire disturbed location may be fenced after seeding. When the location has been rehabilitated and vegetation re-established, the fence shall be removed or the fenced area reduced as required by the landowner or BLM.
- F. Weeds will be controlled on disturbed areas within the exterior limits of the well pad. The control methods will be in accordance with guidelines established by EPA, BLM, state, and local authorities.
- G. A pre-work onsite with the BLM and ConocoPhillips Company may be held for all phases of reclamation
- H. ConocoPhillips Company will utilize many best management practices. The first is location selection itself and adjusting the project area to accommodate the terrain to minimize the initial disturbance and erosion concerns. The project area will have the required interim reclamation and reseeding for the unused portion of the well site not needed for production operations. The interim reclamation will occur shortly after completion operation and facility installation has happened.

11. Surface Ownership
Bureau of Land Management
620 E. Greene Street
Carlsbad, New Mexico 88220

#### 12. Other Information

- A. The area that would be impacted by the well site and access road has been surveyed for cultural resources. The Archaeological Survey Report has been mailed to the BLM by Lone Mountain Archaeological Services, Inc.
- B. ConocoPhillips Company will be responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites or for collecting artifacts.

If historic or archaeological materials are uncovered, ConocoPhillips Company will suspend all operations that might further disturb such materials and immediately contact the Authorized Officer, Bureau of Land Management.

Within five (5) working days the Authorized Officer will inform ConocoPhillips Company as to whether the materials appear eligible for the National Register of Historic Places; the mitigation measures the operator will likely have to undertake before the site can be used (assuming in site preservation is not necessary); and a time frame for the Authorized officer to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the Authorized Officer are correct and that mitigation is appropriate.

- C. ConocoPhillips Company will protect, in place, all public land survey monuments, private property corner, and Forest service boundary markers. In the event that any such land markers or monuments are destroyed in the exercise of their rights, depending on the type of monument destroyed, the operator shall see that they are reestablished or referenced in accordance with (1) the procedures outlined in the "Manual of Instructions for the Survey of the Public Land of the United States", (2) the specifications of the county surveyor, or (3) the specification of the BLM.
- D. ConocoPhillips Company will comply with the additional Conditions of Approval provided by the BLM.

# PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:
LEASE NO.:
UC068282A
WELL NAME & NO.:
SURFACE HOLE FOOTAGE:
BOTTOM HOLE FOOTAGE
LOCATION:
COUNTY:
CONOCOPHILLIPS
LC068282A
1H-STAMPEDE FEDERAL WC COM 34
250' FSL & 380' FWL
330' FNL & 380' FWL (SEC. 27)
SECTION 34, T. 26 S., R 31 E., NMPM
EDDY COUNTY, NEW MEXICO

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### I. GENERAL PROVISIONS

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

#### II. PERMIT EXPIRATION

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

## III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

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

#### IV. NOXIOUS WEEDS

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

# V. SPECIAL REQUIREMENT(S)

## **Communitization Agreement**

A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales. In addition, the well sign shall include the surface and bottom hole lease numbers. If the Communitization Agreement number is known, it shall also be on the sign. If not, it shall be placed on the sign when the sign is replaced.

#### 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 stockpile the topsoil in a low profile manner in order to prevent wind/water erosion of the topsoil. The topsoil to be stripped is approximately inches in depth. The topsoil will be used 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**

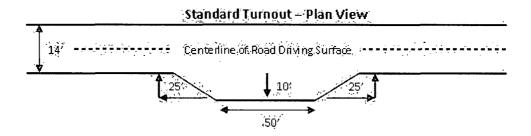
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

#### Ditching

Ditching shall be required on the uphill side 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 be constructed on all blind curves. Turnouts shall conform to the following diagram:

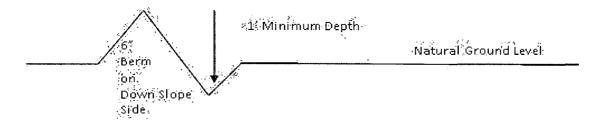


#### Drainage

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

# **Culvert Installations**

Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

#### **Cattleguards**

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road 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 cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

### Fence Requirement

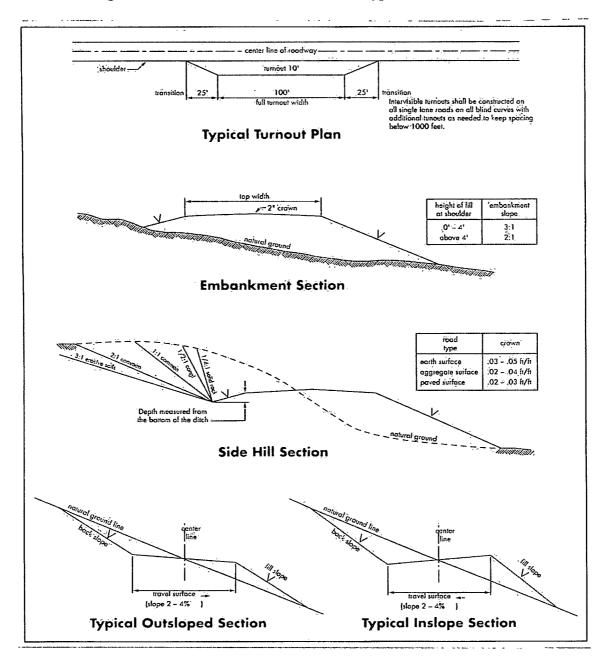
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

#### **Public Access**

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

Figure 1 – Cross Sections and Plans For Typical Road Sections



#### 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. 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.
- 4. 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. 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.).

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

Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. IF OPERATOR DOES NOT HAVE THE WELL SPECIFIC CEMENT DETAILS ONSITE PRIOR TO PUMPING THE CEMENT FOR EACH CASING STRING, THE WOC WILL BE 30 HOURS. See individual casing strings for details regarding lead cement slurry requirements.

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

Abnormal pressures may occur in the Wolfcamp. Possible water flows in the Salt and the Castile. Possible lost circulation in the Delaware.

- 1. The 13-3/8 inch surface casing shall be set at approximately 1025 feet (in a competent bed below the Magenta Dolomite, a Member of the Rustler) and cemented to the surface.
  - 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 (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.

| 2.             | The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:                                                                                                                                                                                                                                                                                 |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                | ☐ Cement to surface. If cement does not circulate see B.1.a, c-d above.                                                                                                                                                                                                                                                                                           |
| Te<br>po<br>pr | ormation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. est to be done as a mud equivalency test using the mud weight necessary for the ore pressure of the formation below the shoe (not the mud weight required to event dissolving the salt formation) and the mud weight for the bottom of the ble. Report results to BLM office. |
| 3.             | The minimum required fill of cement behind the 7 inch production casing is:                                                                                                                                                                                                                                                                                       |
| _              | perator has proposed DV tool at depth of 8300'. Operator is to submit sundry if V tool depth varies by more than 100' from approved depth.                                                                                                                                                                                                                        |
|                | 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.                                                                                                                                                                                                                                            |
| 4.             | The minimum required fill of cement behind the 4-1/2 inch production liner is:                                                                                                                                                                                                                                                                                    |

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.

Cement to top of liner. Operator shall provide method of verification.

#### 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 RP 53 Sec. 17.
- 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. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface 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.

#### **CRW 022014**

# 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 1½ 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 1½ 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. 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 1, for Loamy 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 regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (small/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 |
|--------------------------------------------|-----|---------|
| Plains lovegrass (Eragrostis intermedia)   | 0.5 |         |
| Sand dropseed (Sporobolus cryptandrus)     | 1.0 |         |
| Sideoats grama (Bouteloua curtipendula)    | 5.0 |         |
| Plains bristlegrass (Setaria macrostachya) | 2.0 |         |

<sup>\*</sup>Pounds of pure live seed:

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