14-383

Form 3160-3
(March 2012)

OCD Hobbs

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. NMLC 031670 (A)

6. If Indian, Allotee or Tribe Name: N/A

7. If Unit or CA Agreement, Name and No.: Southeast Monument Unit

8. Lease Name and Well No.: SEMU 245 <31670>

9. API Well No.: 30-025- 42017

10. Field and Pool, or Exploratory KZ: Skaggs; Grayburg <57380>

11. Sec., T. R. M. or Blk. and Survey or Area: UL J, Sec. 19, T20S, R38E

12. County or Parish: Lea County

13. State: NM

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

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

2. Name of Operator: ConocoPhillips Company <217817>

3a. Address: 600 N. Dairy Ashford Rd, Office P10-4054 ~~Houston, TX 77079-1175~~

3b. Phone No. (include area code): (281)206-5281

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4. Location of Well (Report location clearly and in accordance with any State requirements.*)
At surface 1528' FSL & 2204' FEL; UL J, Sec. 19, T20S, R38E
At proposed prod. zone 1275' FSL & 2587' FWL; UL N, Sec. 19, T20S, R38E

14. Distance in miles and direction from nearest town or post office*: Approximately 10 miles southwest of Hobbs, NM.

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any): 1275'

16. No. of acres in lease: 641.68

17. Spacing Unit dedicated to this well: 40 acres

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: about 600'

19. Proposed Depth: 4197' TVD/4296' MD

20. BLM/BIA Bond No. on file: ES0085

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 3536' GL

22. Approximate date work will start*: 06/07/2014

23. Estimated duration: 7 days

24. Attachments

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

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

25. Signature: Susan B. Maunder | Name (Printed/Typed): Susan B. Maunder | Date: 1/16/14

Title: Senior Regulatory Specialist

Approved by (Signature): Steve Caffey | Name (Printed/Typed): | Date: AUG - 4 2014

Title: FIELD MANAGER | Office: CARLSBAD FIELD OFFICE

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

APPROVAL FOR TWO YEARS

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

(Continued on page 2)

*(Instructions on page 2)

Lea County Controlled Water Basin

<D>

KZ 08/05/14

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Approval Subject to General Requirements & Special Stipulations Attached

AUG 07 2014

JM

Operator Certification

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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.

Susan B Maunder   Date: 1/16/14

Susan B. Maunder
Senior Regulatory Specialist

Drilling Plan
ConocoPhillips Company
SEMU; Grayburg

HOBBS OCD

SEMU #245

AUG 0 5 2014

Lea County, New Mexico

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1. Estimated tops of geological markers and estimated depths to water, oil, or gas formations:

The datum for these depths is RKB (which is 13' above Ground Level).

Formations	Top Depth FT TVD	Top Depths FT MD	Contents
Quaternary	Surface	Surface	Fresh Water
Rustler	1364	1364	Anhydrite
Salado (top of salt)	1457	1457	Salt
Tansill (base of salt)	2539	2540	Gas, Oil and Water
Yates	2654	2656	Gas, Oil and Water
Seven Rivers	2900	2905	Gas, Oil and Water
Queen	3473	3502	Gas, Oil and Water
Penrose	3614	3654	Gas, Oil and Water
Grayburg	3762	3815	Gas, Oil and Water
San Andres	3997	4075	Gas, Oil and Water
Deepest estimated perforation	3997	4075	Deepest estimated perf. is above Top of San Andres
Total Depth (maximum)	4197	4296	200' below deepest estimated perforation

All of the water bearing formations identified above will be protected by setting of the 8-5/8" surface casing 25' – 70' into the Rustler formation and circulating of cement from casing shoe to surface in accordance with the provisions of Onshore Oil and Gas Order No. 2 and New Mexico Oil Conservation Division Title 19.

The targeted oil and gas bearing formations identified above will be protected by setting of the 5-1/2" production casing 10' off bottom of TD and circulating of cement from casing shoe to surface in accordance with the provisions of Onshore Oil and Gas Order No. 2 and New Mexico Oil Conservation Division Title 19.

2. **Proposed casing program:**

See COA

Type	Hole Size	Interval MD RKB (ft)		OD	Wt	Gr	Conn	MIY	Col	Jt Str	Safety Factors Calculated per ConocoPhillips Corporate Criteria		
	(in)	From	To	(inches)	(lb/ft)			(psi)	(psi)	(klbs)	Burst DF	Collapse DF	Jt Str DF (Tension) Dry/Buoyant
Cond	20	0	40' – 85' (30' – 75' BGL)	16	0.5" wall	B	Line Pipe	N/A	N/A	N/A	NA	NA	NA
Alt. Cond	20	0	40' – 85' (30' – 75' BGL)	13-3/8	48#	H-40	PE	1730	740	N/A	NA	NA	NA
Surf	12-1/4	0	~~1380' – 1434'~~ 1430'	8-5/8	24#	J-55	STC	2950	1370	244	1.38	2.15	3.05
Prod	7-7/8	0	4241' – 4286'	5-1/2	17#	L-80	LTC	7740	6290	338	3.47	4.89	2.68

The casing will be suitable for H_2S Service. All casing will be new.

The surface and production casing will be set approximately 10' off bottom and we will drill the hole with a 45' range uncertainty for casing set depth to fit the casing string so that the cementing head is positioned at the floor for the cement job.

The production casing will be set 155' to 200' below the deepest estimated perforation to provide rathole for the pumping completion and for the logs to get deep enough to log the interval of interest.

Casing Safety Factors - BLM Criteria:

Type	Depth	Wt	MIY	Col	Jt Str	Drill Fluid	Burst	Collapse	Tensile-Dry	Tens-Bouy
Surface Casing	1434	24	2950	1370	244000	8.5	4.65	2.16	7.1	8.1
Production Casing	4286	17	7740	6290	338000	10	3.47	2.82	4.64	5.47

Casing Safety Factors – Additional ConocoPhillips Criteria:

ConocoPhillips casing design policy establishes Corporate Minimum Design Factors (see table below) and requires that service life load cases be considered and provided for in the casing design.

ConocoPhillips Corporate Criteria for Minimum Design Factors

	Burst	Collapse	Axial
Casing Design Factors	1.15	1.05	1.4

Type	Depth	Wt	MIY	Col	Jt Str	Pipe Yield	MW	Burst	Col	Ten
Conductor	85	65	35000	-	-	432966	-	-	-	-
Surface Casing (8-5/8" 24# J-55 STC)	~~1434~~	24	2950	1370	244000	381000	8.5	1.38	2.15	3.05
Production Casing (5-1/2" 17# L-80 LTC)	4286	17	7740	6290	338000	397000	10	3.47	4.89	2.68

Burst – ConocoPhillips Required Load Cases

The maximum internal (burst) load on the Surface Casing occurs when the surface casing is tested to 1500 psi (as per BLM Onshore Order 2 - II. Requirements).
The maximum internal (burst) load on the Production Casing occurs during the fracture stimulation where the maximum allowable working pressure (MAWP) is the pressure that would fit ConocoPhillips Corporate Criteria for Minimum Factors.

Surface Casing Test Pressure = 1500 psi
Surface Rated Working Pressure (BOPE) = 3000 psi
Field SW = 10 ppg
Predicted Pore Pressure at TD (PPTD) = 8.55 ppg
Predicted Frac Gradient at Shoe (CSFG) = 19.23 ppg

Surface Casing Burst Safety Factor = API Burst Rating / Maximum Predicted Surface Pressure (MPSP) 'OR' Maximum Allowable Surface Pressure (MASP)
Production Casing MAWP for the Fracture Stimulation = API Burst Rating / Corporate Minimum Burst Design Factor

Surface Casing Burst Safety Factor:

Case #1. MPSP (MWhyd next section) = 1434 x 0.052 x 10 = 746
Case #2. MPSP (Field SW @ Bullhead$_{CSFG}$ + 200 psi) = 1434 x 0.052 x 19.23 - 746 + 200 = 888
Case #3. MPSP (Kick Vol @ next section TD) = 4286 x 0.052 x 8.55 - 285.2 - 634 = 987
Case #4. MPSP (PPTD - GG) = 4286 x 0.052 x 8.55 - 428.6 = 1477
Case #3 & #4 Limited to MPSP (CSFG + 0.2 ppg) = 1434 x 0.052 x (19.23 + 0.2) = 1449
MASP (MWhyd + Test Pressure) = 1434 x 0.052 x 8.5 + 1500 = 2134
Burst Safety Factor (Max. MPSP or MASP) = 2950 / 2134 = 1.38

Production Casing Burst Safety Factor:

Case #1. MPSP (MWhyd TD) = 4286 x 0.052 x 10 = 2228.72
Case #4. MPSP (PPTD - GG) = 4286 x 0.052 x 8.55 - 428.6 = 1477
Burst Safety Factor (Max. MPSP) = 7740 / 2229 = 3.47
MAWP for the Fracture Stimulation (Corporate Criteria) = 7740 / 1.15 = 6730

Collapse – ConocoPhillips Required Load Cases

The maximum collapse load on the Surface Casing occurs when cementing to surface, 1/3 evacuation to the next casing setting depth, or deepest depth of exposure (full evacuation).
The maximum collapse load on the Production Casing occurs when cementing to surface, or 1/3 evacuation to the deepest depth of exposure; and therefore, the external pressure profile for the evacuation cases should be equal to the pore pressure of the horizons on the outside of the casing which we assumed to be PPTD.

Surface Casing Collapse Safety Factor = API Collapse Rating / Full Evacuation 'OR' Cement Displacement during Cementing to Surface
Production Casing Collapse Safety Factor = API Collapse Rating / Maximum Predicted Surface Pressure 'OR' Cement Displacement during Cementing to Surface

Cement Displacement Fluid (FW) = 8.34 ppg
Surface Cement Lead = 13.6 ppg
Surface Cement Tail = 14.8 ppg
Top of Surface Tail Cement = 350 ft
Top of Cement = Cement to Surface
Prod Cement Lead = 11.5 ppg
Prod Cement Tail = 14 ppg
Top of Prod Tail Cement = 3000 ft

Surface Casing Collapse Safety Factor:

Full Evacuation Diff Pressure = 1434 x 0.052 x 8.55 = 638
Cementing Diff Lift Pressure = [(1084 x 0.052 x 13.6) + (350 x 0.052 x 14.8) - 622] = 414
Collapse Safety Factor = 1370 / 638 = 2.15

Production Casing Collapse Safety Factor:

1/3 Evacuation Diff Pressure = [(4286 x 0.052 x 8.55) - (4286 / 3 x 0.052 x 8.34)] = 1286
Cementing Diff Lift Pressure = [(1286 x 0.052 x 11.5) + (3000 x 0.052 x 14) - 1859] = 1094
Collapse Safety Factor = 6290 / 1286 = 4.89

Tensial Strength – ConocoPhillips Required Load Cases

The maximum axial (tension) load occurs if casing were to get stuck and pulled on to try to get it unstuck.

Maximum Allowable Axial Load for Pipe Yield = API Pipe Yield Strength Rating / Corporate Minimum Axial Design Factor
Maximum Allowable Axial Load for Joint = API Joint Strength Rating / Corporate Minimum Axial Design Factor
Maximum Allowable Hook Load (Limited to 75% of Rig Max Load) = Maximum Allowable Axial Load
Maximum Allowable Overpull Margin = Maximum Allowable Hook Load - Bouyant Wt of the String
Tensial Safety Factor = API Pipe Yield 'OR' API Joint Strength 'OR' Rig Max Load Rating / (Bouyant Wt of String + Minimum Overpull Required)

Rig Max Load (300,000 lbs) x 75% = 225000 lbs
Minimum Overpull Required = 50000 lbs

Surface Casing Tensial Strength Safety Factor:

Air Wt = 34416
Bouyant Wt = 34416 x 0.870 = 29950
Max. Allowable Axial Load (Pipe Yield) = 381000 / 1.40 = 272143
Max. Allowable Axial Load (Joint) = 244000 / 1.40 = 174286
Max. Allowable Hook Load (Limited to 75% of Rig Max Load) = 174286
Max. Allowable Overpull Margin = 174286 - (34416 x 0.870) = 144336
Tensial Safety Factor = 244000 / (29950 + 50000) = 3.05

Production Casing Tensial Strength Safety Factor:

Air Wt = 72862
Bouyant Wt = 72862 x 0.847 = 61738
Max. Allowable Axial Load (Pipe Yield) = 397000 / 1.40 = 283571
Max. Allowable Axial Load (Joint) = 338000 / 1.40 = 241429
Max. Allowable Hook Load (Limited to 75% of Rig Max Load) = 225000
Max. Allowable Overpull Margin = 225000 - (72862 x 0.847) = 163262
Tensial Safety Factor = 300000 / (61738 + 50000) = 2.68

Compression Strength – ConocoPhillips Required Load Cases

The maximum axial (compression) load for the well is where the surface casing is landed on the conductor with a support of a plate or landing ring. The surface casing is also calculated to bear 60% of the load but not limited. Any other axial loads such as a snubbing unit or other would need to be added to the load.

Compression Safety Factor = API Axial Joint Strength Rating 'OR' API Axial Pipe Yield Rating / Maximum Predicted Load

Wellhead Load = 3000 lbs

Conductor & Surface Compression Safety Factor

Surf Casing Wt (Bouyant) = (34416 x 0.870) = 29950
Prod Casing Wt (Bouyant) = (72862 x 0.847) = 61738
Tubing Wt (Air Wt) = 4286 x 6.5 = 27859
Tubing Fluid Wt = 4286 x 0.052 x 6.55 x 0.7854 x 2.441 ^2 = 6832
Load on Conductor = 3000 + 29950 + 61738 + 27859 + 6832 = 129378
Conductor Compression Safety Factor = 432966 / 129378 = 3.35
Load on Surface Casing = 129378 x 60% = 77627
Surface Casing Compression Safety Factor = 244000 / 77627 = 3.14

3. Proposed cementing program:

16" or 13-3/8" Conductor:

Cement to surface with rathole mix, ready mix or Class C Neat cement.
(Note: The gravel used in the cement is not to exceed 3/8" diameter)
TOC at surface.

8-5/8" Surface Casing Cementing Program:

The intention for the cementing program for the Surface Casing is to:

- Place the Tail Slurry from the casing shoe to 350' above the casing shoe,
- Bring the Lead Slurry to surface.

Spacer: 20 bbls Fresh Water

Slurry		Intervals Ft MD		Weight ppg	Sx	Vol Cuft	Additives	Yield ft^3/sx
Lead	Class C	Surface	1039' – 1084'	13.6	450	765	+ 2% Extender + 2% $CaCl_2$ + 0.125 lb/sx Lost Circulation Control Agent + 0.2% Defoamer Excess =200% based on gauge hole volume	1.70
Tail	Class C	1039' – 1084'	1430' ~~1389' – 1434'~~	14.8	300	402	1% CaCl2 Excess = 100% based on gauge hole volume	1.34

Displacement: Fresh Water.

Note: In accordance with the Pecos District Conditions of Approval, we will Wait on Cement (WOC) for a period of not less than 18 hrs after placement or until at least 500 psi compressive strength has been reached in both the Lead Slurry and Tail Slurry cements on the Surface Casing, whichever is greater.

5-1/2" Production Casing Cementing Program – Single Stage Cementing Option:

The intention for the cementing program for the Production Casing – Single Stage Cementing Option is to:

- Place the Tail Slurry from the casing shoe to above the top of the Grayburg,
- Bring the Lead Slurry to surface.

Spacer: 20 bbls Fresh Water

Slurry		Intervals Ft MD		Weight ppg	Sx	Vol Cuft	Additives	Yield ft^3/sx
Lead	C Gas Tight Slurry	Surface	3000'	11.5	400	1292	Class C 94 lb/sx 6% Extender 10% Gas Migration Control 2% Sodium Metasilicate (dry) 1% Cement Bonding Agent 3% Aluminum Silicate 0.125 lb/sx Cello Flake 3 lb/sx LCM-1	3.23
Tail	Poz/C Gas Tight Slurry	3000'	4241' – 4286'	14.0	320	438	(35:65) Poz:C 33 lb/sx 1% Sodium Metasilicate (dry) 1.5% Fluid Loss Control,	1.37

Displacement: Fresh Water with approximately 250 ppm gluteraldehyde biocide.

5-1/2" Production Casing Cementing Program – Two-Stage Cementing Option (Shallow Flow):

ConocoPhillips Company respectfully requests the options to our cementing program. The intention for the cementing program for the Production Casing – Two-Stage Cementing Option is to:

- Provide a contingency plan for using a Stage Tool and Annulus Casing Packer(s) to isolate shallow saltwater or gas flow if either of these events occurs while drilling the well.
- Place the Stage 1 Cement from the casing shoe to surface.
- Proceed with Stage 2 Cement only if cement returns are contaminated or flow was observed after pumping 1st stage.

Spacer: 20 bbls Fresh Water

Stage 1 - Slurry		Intervals Ft MD		Weight ppg	Sx	Vol Cuft	Additives	Yield ft^3/sx
Lead	C Gas Tight Slurry	Surface	3000'	11.5	400	1292	Class C 94 lb/sx 6% Extender 10% Gas Migration Control 2% Sodium Metasilicate (dry) 1% Cement Bonding Agent 3% Aluminum Silicate 0.125 lb/sx Cello Flake 3 lb/sx LCM-1	3.23
Tail	Poz/C Gas Tight Slurry	3000'	4241' – 4286'	14.0	320	438	(35:65) Poz:C 33 lb/sx 1% Sodium Metasilicate (dry) 1.5% Fluid Loss Control,	1.37

1st stage displacement: FW followed by Weighted Spacer

Spacer: Remaining Weighted Spacer in cementing lines from the 1st stage displacement

Stage 2 - Slurry		Intervals Ft MD		Weight ppg	Sx	Vol Cuft	Additives	Yield ft^3/sx
Tail	Class C	Surface	Stage Tool ~1450'	14.8	300	402	1% CaCl2 Excess = 100% based on gauge hole volume	1.34

2nd stage displacement: Fresh Water

5-1/2" Production Casing Cementing Program – Two-Stage Cementing Option (Lower Zone Losses or Waterflow):

ConocoPhillips Company respectfully requests the options to our cementing program. The intention for the cementing program for the Production Casing – Two-Stage Cementing Option is to:

- Provide a contingency plan for using a Stage Tool and Annulus Casing Packer(s) to isolate losses or waterflow if either of these events occurs while drilling the well.
- Place the Stage 1 Cement from the casing shoe to the stage tool,
- Bring Stage 2 Cement from the stage tool to surface.

See COA

Spacer: 20 bbls Fresh Water

Stage 1 – Slurry		Intervals Ft MD		Weight ppg	Sx	Vol Cuft	Additives	Yield ft^3/sx
Lead	Poz/C Gas Tight Slurry	Stage Tool ~2900'	4241' – 4286'	14.0	320	438	(35:65) Poz:C 33 lb/sx 1% Sodium Metasilicate (dry) 1.5% Fluid Loss Control,	1.37

1st stage displacement: FW followed by Brine

Spacer: 20 bbls Fresh Water

Stage 2 - Slurry		Intervals Ft MD		Weight ppg	Sx	Vol Cuft	Additives	Yield ft^3/sx
Lead	C Gas Tight Slurry	Surface	Stage Tool ~2900'	11.5	400	1292	Class C 94 lb/sx 6% Extender 10% Gas Migration Control 2% Sodium Metasilicate (dry) 1% Cement Bonding Agent 3% Aluminum Silicate 0.125 lb/sx Cello Flake 3 lb/sx LCM-1	3.23

Displacement: Fresh Water

Proposal for Option to Adjust Production Casing Cement Volumes:

See COA

The production casing cement volumes for the proposed single stage and two-stage option presented above are estimates based on gauge hole. We will adjust these volumes based on the caliper log data for each well and our trends for amount of cement returns to surface. Also, if no caliper log is available for any particular well, we would propose an option to possibly increase the production casing cement volume to account for any uncertainty in regard to the hole volume.

4. **Pressure Control Equipment:**

A 11" 3M system will be installed, used, maintained, and tested accordingly as described in Onshore Oil and Gas Order No. 2.

Our BOP equipment will be:
- o Rotating Head
- o Annular BOP, 11" 3M
- o Blind Ram, 11" 3M
- o Pipe Ram, 11" 3M

After nippling up, and every 30 days thereafter or whenever any seal subject to test pressure is broken followed by related repairs, blowout 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 done by an independent service company and recorded on the daily drilling reports. BOP will be tested using a test plug to isolate BOP stack from casing. BOP test will include a low pressure test from 250 to 300 psi for a minimum of 10 minutes or until requirements of test are met, whichever is longer. Ram type preventers and associated equipment will be tested to the approved stack working pressure of 3000 psi isolated by test plug. Annular type preventers will be tested to 50 percent of rated working pressure, and therefore will be tested to 1500 psi. Pressure will be held for at least 10 minutes or until provisions of test are met, whichever is longer. Valve on casing head below test plug will be open during testing of BOP stack. BOP will comply with all provisions of Onshore Oil and Gas Order No. 2 as specified. **See Attached BOPE Schematic.** A variance is respectfully requested to allow for the use of flexible hose. The variance request is included as a separate enclosure with attachments. See COA

5. **Proposed Mud System:**

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

DEPTH	TYPE	Density ppg	FV sec/qt	API Fluid Loss cc/30 min	pH	Vol bbl
0 – Surface Casing Point	Fresh Water or Fresh Water Native Mud in Steel Pits	8.5 – 9.0	28 – 40	N.C.	N.C.	150 – 300
Surface Casing Point to TD	Brine (Saturated $NaCl_2$) in Steel Pits	10	29	N.C.	10 – 11	300 – 1000
Conversion to Mud at TD	Brine Based Mud ($NaCl_2$) in Steel Pits	10	33 – 40	5 – 10	10 – 11	0 – 1000

Gas detection equipment and pit level flow monitoring equipment will be on location. A flow paddle will be installed in the flow line to monitor relative amount of mud flowing in the non-pressurized return line. Mud probes will be installed in the individual tanks to monitor pit volumes of the drilling fluid with a pit volume totalizer. Gas detecting equipment and H2S monitor alarm will be installed in the mud return system and will be monitored. A mud gas separator will be installed and operable before drilling out from the Surface Casing. The gases shall be piped into the flare system. Drilling mud containing H2S shall be degassed in accordance with API RP-49, item 5.14.

In the event that the well is flowing from a waterflow, then we would discharge excess drilling fluids from the steel mud pits through a fas-line into steel frac tanks at an offset location for containment. Depending on the rate of waterflow, excess fluids will be hauled to an approved disposal facility, or if in suitable condition, may be reused on the next well.

No reserve pit will be built.

Proposal for Option to Not Mud Up at TD:
FW, Brine, and Mud volume presented above are estimates based on gauge 12-1/4" or 7-7/8" holes. We will adjust these volume based on hole conditions. We do not plan to keep any weighting material at the wellsite. Also, we propose an option to not mud up leaving only brine in the hole if we have good hole stability.

6. **Logging, Coring, and Testing Program:**
   a. No drill stem tests will be done
   b. Remote gas monitoring planned for the production hole section (optional).
   c. No whole cores are planned
   d. The open hole electrical logging program is planned to be as follows:
      - Total Depth to 1700' MD: Spectral Gamma Ray, PE, Resistivity (laterologs), Bulk Density, and Sonic
      - Total Depth to surface Casing Shoe: Caliper
      - Total Depth to surface, Total Gamma Ray and Neutron
      - Total Depth to 2350' MD ; Mud Log (optional)
      - Total Depth to 2350' MD ; Dielectric Scanner (optional)
      - Formation pressure data (XPT) on electric line if needed (optional)
      - Rotary Sidewall Cores on electric line if needed (optional)
      - FMI (Formation MicroImager) if needed (optional)
      - UBI (Ultrasonic Borehole Imager) if needed (optional)
   e. Cement Bond Log (optional).

7. **Abnormal Pressures and Temperatures:**

- No abnormal pressures are expected to be encountered.

- Loss of circulation is a possibility in the horizons below the Top of Grayburg. We expect that normal Loss of Circulation Material will be successful in healing any such loss of circulation events.

  - The bottom hole pressure is expected to be 7.8 ppg gradient.
  - The expected Bottom Hole Temperature is 100 degrees F.

- The estimated H_2S concentrations and ROE calculations for the gas in the zones to be penetrated are presented in the table below for the various producing horizons in this area:

FORMATION / ZONE	H2S (PPM)	Gas Rate (MCFD)	ROE 100 PPM	ROE 500 PPM
Seven Rivers	**6**	**50 - 100 MCFD**	0	0
Grayburg / San Andres	**18360**	**20 - 50 MCFD**	95	43

ConocoPhillips will comply with the provisions of Oil and Gas Order # 6, Hydrogen Sulfide Operations. Also, ConocoPhillips will provide an H2S Contingency Plan (please see copy attached) and will keep this plan updated and posted at the wellsite during the drilling operation.

8. **Anticipated starting date and duration of operations:**

Well pad and road constructions will begin as soon as all agency approvals are obtained. Anticipated date to drill these wells is mid-2014 after receiving approval of the APD.

Attachments:

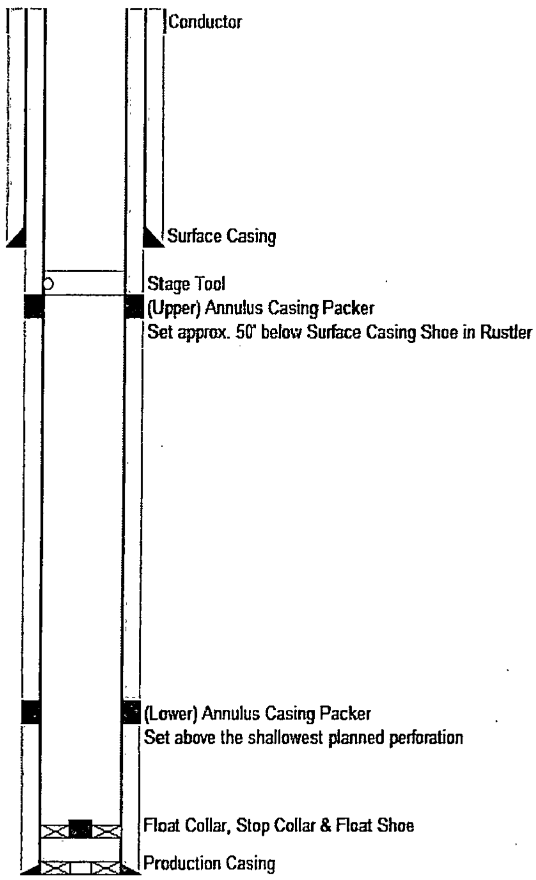
- Attachment # 1 ...... Two-stage Cementing Schematic
- Attachment # 2 .... BOP and Choke Manifold Schematic – 3M System
- Attachment # 3 .... Diagram of Choke Manifold Equipment

Contact Information:

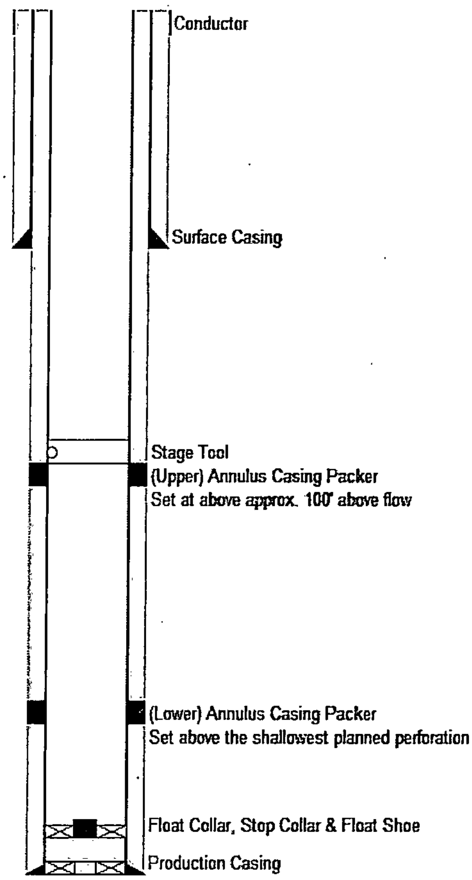
Proposed 9 January 2014 by:
Steven Herrin
Drilling Engineer, ConocoPhillips Company
Phone (281) 206-5115
Cell (432) 209-7558

Attachment # 1

Two-Stage Cementing (Alternative for Shallow Gas / Salt Water / Gas & Water Flow)
Provide contingency plan for using two-stage cementing for the production casing cement job if gas flow occurs during the drilling operations. See APD Drill Plan Section 3. Proposed cementing program.



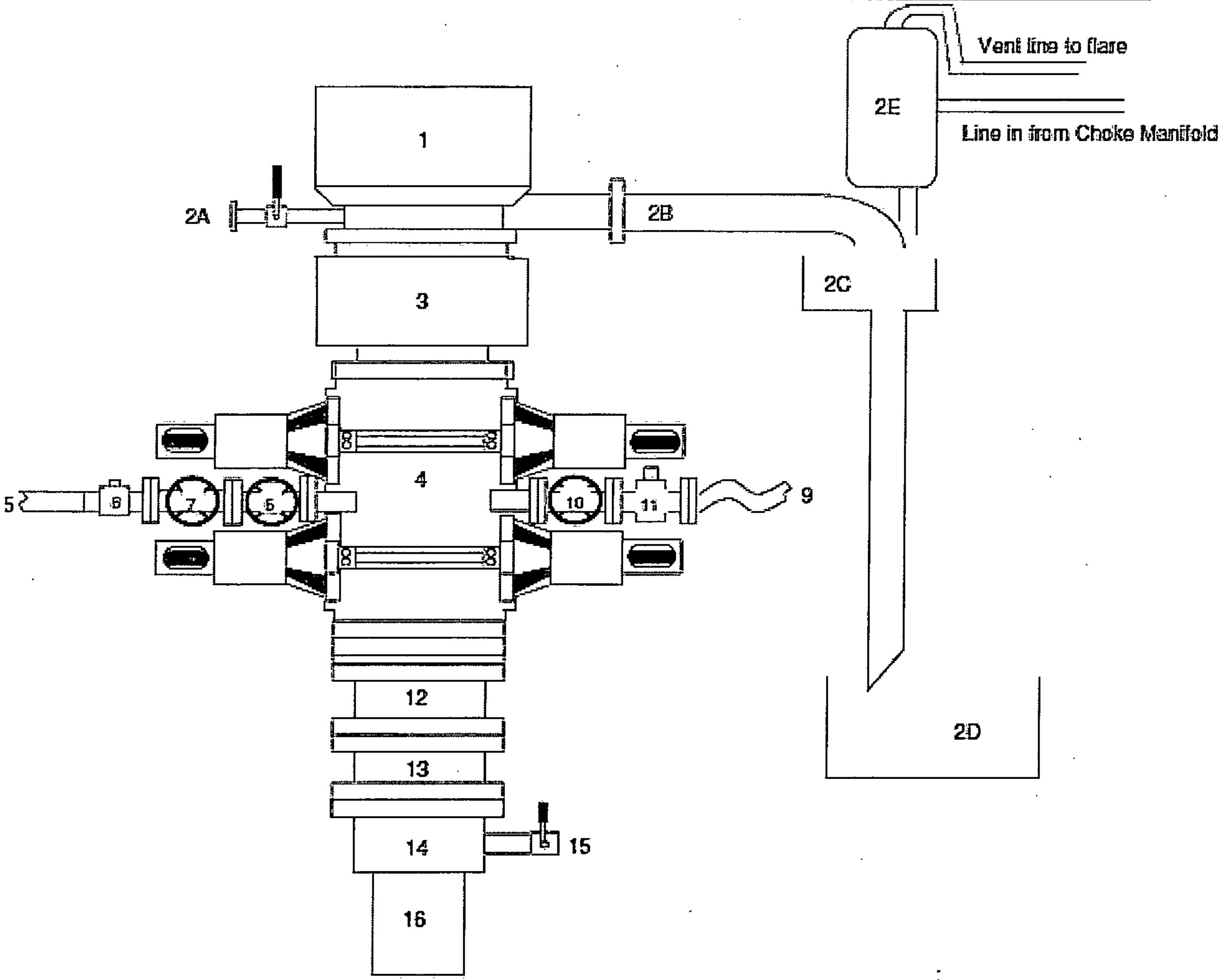
Two-Stage Cementing (Alternative for Oil / Water / Gas & Water Flow)
Provide contingency plan for using two-stage cementing for the production casing cement job if oil or water flow occurs during the drilling operations. See APD Drill Plan Section 3. Proposed cementing program.



Attachment # 2

BLOWOUT PREVENTER ARRANGEMENT

3M System per Onshore Oil and Gas Order No. 2 utilizing 3M and 5M Rated Equipment



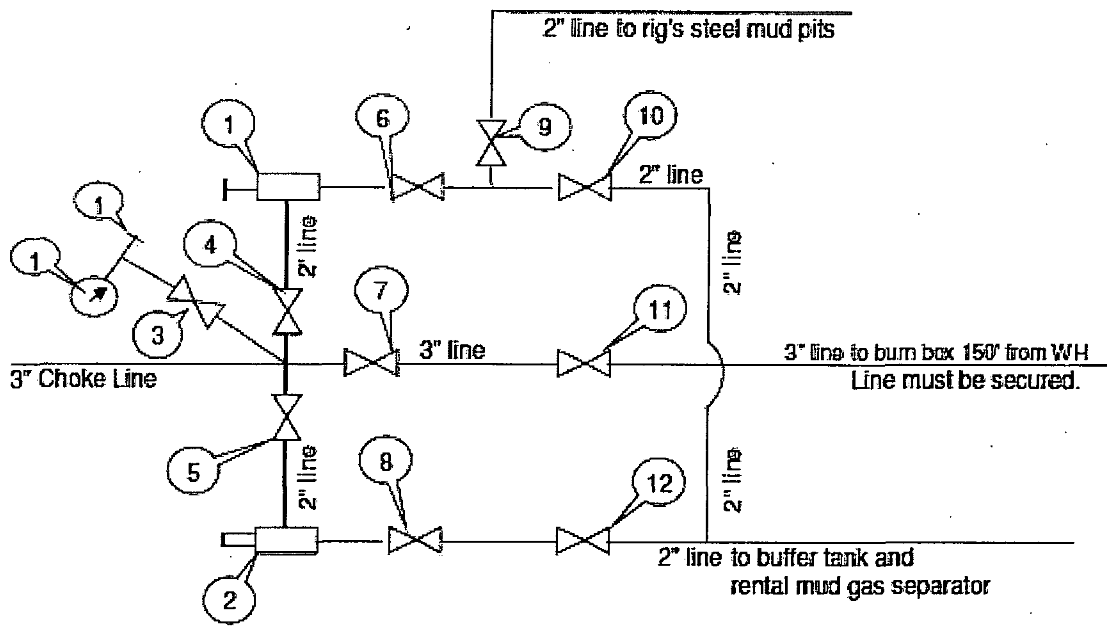
Item	Description
1	Rotating Head, 11"
2A	Fill up Line and Valve
2B	Flow Line (10")
2C	Shale Shakers and Solids Settling Tank
2D	Cuttings Bins for Zero Discharge
2E	Rental Mud Gas Separator with vent line to flare and return line to mud system
3	Annular BOP (11", 3M)
4	Double Ram (11", 3M, equipped with Blind Rams and Pipe Rams)
5	Kill Line (2" flexible hose, 3000 psi WP)
6	Kill Line Valve, Inner (3-1/8", 3000 psi WP)
7	Kill Line Valve, Outer (3-1/8", 3000 psi WP)
8	Kill Line Check Valve (2-1/16", 3000 psi WP
9	Choke Line (5M Stainless Steel Coflex Line, 3-1/8" 3M API Type 6B, 3000 psi WP)
10	Choke Line Valve, Inner (3-1/8", 3000 psi WP)
11	Choke Line Valve, Outer, (Hydraulically operated, 3-1/8", 3000 psi WP)
12	Adapter Flange (11" 5M to 11" 3M)
13	Spacer Spool (11", 5M)
14	Casing Head (11" 5M)
15	Ball Valve and Threaded Nipple on Casing Head Outlet, 2" 5M
16	Surface Casing

Submitted by: Steven Harris, Drilling Engineer, Mid-Continent Business Unit, ConocoPhillips Company, 03-Jan-2014

Attachment # 3

CHOKE MANIFOLD ARRANGEMENT

3M System per Onshore Oil and Gas Order No. 2 utilizing 3M and 5M Equipment



All Tees must be targeted

Item	Description
1	Manual Adjustable Choke, 2-1/16", 3M
2	Remote Controlled Hydraulically Operated Adjustable Choke, 2-1/16", 3M
3	Gate Valve, 2-1/16" 5M
4	Gate Valve, 2-1/16" 5M
5	Gate Valve, 2-1/16" 5M
6	Gate Valve, 2-1/16" 5M
7	Gate Valve, 3-1/8" 3M
8	Gate Valve, 2-1/16" 5M
9	Gate Valve, 2-1/16" 5M
10	Gate Valve, 2-1/16" 5M
11	Gate Valve, 3-1/8" 3M
12	Gate Valve, 2-1/16" 5M
13	Pressure Gauge
14	2" hammer union tie-in point for BOP Tester

We will test each valve to 3000 psi from the upstream side.

Submitted by:
Steven Herrin
Drilling Engineer, Mid-Continent Business Unit, ConocoPhillips Company
Date: 3-January-2014

ConocoPhillips MCBU

Buckeye
SEMU
SEMU 245

SEMU 245

Plan: Plan Design

Standard Planning Report - Geographic

06 December, 2013

ConocoPhillips
Planning Report - Geographic

Database:	EDM Central Planning	**Local Co-ordinate Reference:**	Well SEMU 245
Company:	ConocoPhillips MCBU	**TVD Reference:**	RKB @ 3549.0usft (PD 822)
Project:	Buckeye	**MD Reference:**	RKB @ 3549.0usft (PD 822)
Site:	SEMU	**North Reference:**	Grid
Well:	SEMU 245	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	SEMU 245		
Design:	Plan Design		

Project	Buckeye, Lea County, NM		
Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		Using geodetic scale factor

Site	SEMU, New Mexico, East				
Site Position:		**Northing:**	574,584.87 usft	**Latitude:**	32° 34' 29.280 N
From:	Lat/Long	**Easting:**	839,762.30 usft	**Longitude:**	103° 13' 49.440 W
Position Uncertainty:	3.5 usft	**Slot Radius:**	8 "	**Grid Convergence:**	0.59 °

Well	SEMU 245, Deviated Well					
Well Position	**+N/-S**	0.0 usft	**Northing:**	567,667.63 usft	**Latitude:**	32° 33' 19.400 N
	+E/-W	0.0 usft	**Easting:**	853,538.02 usft	**Longitude:**	103° 11' 9.352 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**		**Ground Level:**	3,536.0 usft

Wellbore SEMU 245

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	BGGM2013	12/6/2013	7.23	60.49	48,599

Design Plan Design

Audit Notes:					
Version:	1	**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0

Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**
	0.0	0.0	0.0	242.97

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,137.9	0.00	0.00	2,137.9	0.0	0.0	0.00	0.00	0.00	0.00	
3,815.4	25.16	242.97	3,762.0	-164.7	-322.9	1.50	1.50	0.00	242.97	
4,296.0	25.16	242.97	4,197.0	-257.6	-504.9	0.00	0.00	0.00	0.00	

ConocoPhillips

Planning Report - Geographic

Database:	EDM Central Planning	**Local Co-ordinate Reference:**	Well SEMU 245
Company:	ConocoPhillips MCBU	**TVD Reference:**	RKB @ 3549.0usft (PD 822)
Project:	Buckeye	**MD Reference:**	RKB @ 3549.0usft (PD 822)
Site:	SEMU	**North Reference:**	Grid
Well:	SEMU 245	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	SEMU 245		
Design:	Plan Design		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
85.0	0.00	0.00	85.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
Conductor									
100.0	0.00	0.00	100.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
200.0	0.00	0.00	200.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
300.0	0.00	0.00	300.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
400.0	0.00	0.00	400.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
500.0	0.00	0.00	500.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
600.0	0.00	0.00	600.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
700.0	0.00	0.00	700.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
800.0	0.00	0.00	800.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
900.0	0.00	0.00	900.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
1,100.0	0.00	0.00	1,100.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
1,200.0	0.00	0.00	1,200.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
1,300.0	0.00	0.00	1,300.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
1,364.0	0.00	0.00	1,364.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
Rustler									
1,400.0	0.00	0.00	1,400.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
1,434.0	0.00	0.00	1,434.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
Surface									
1,457.0	0.00	0.00	1,457.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
Salado									
1,500.0	0.00	0.00	1,500.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
1,600.0	0.00	0.00	1,600.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
1,700.0	0.00	0.00	1,700.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
1,800.0	0.00	0.00	1,800.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
1,900.0	0.00	0.00	1,900.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
2,000.0	0.00	0.00	2,000.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
2,100.0	0.00	0.00	2,100.0	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
2,137.9	0.00	0.00	2,137.9	0.0	0.0	567,667.63	853,538.02	32° 33' 19.400 N	103° 11' 9.352 W
2,200.0	0.93	242.97	2,200.0	-0.2	-0.4	567,667.40	853,537.57	32° 33' 19.398 N	103° 11' 9.357 W
2,300.0	2.43	242.97	2,300.0	-1.6	-3.1	567,666.06	853,534.96	32° 33' 19.385 N	103° 11' 9.388 W
2,400.0	3.93	242.97	2,399.8	-4.1	-8.0	567,663.54	853,530.02	32° 33' 19.361 N	103° 11' 9.446 W
2,500.0	5.43	242.97	2,499.5	-7.8	-15.3	567,659.83	853,522.74	32° 33' 19.325 N	103° 11' 9.531 W
2,539.7	6.03	242.97	2,539.0	-9.6	-18.8	567,658.03	853,519.21	32° 33' 19.307 N	103° 11' 9.573 W
Tansill									
2,600.0	6.93	242.97	2,598.9	-12.7	-24.9	567,654.94	853,513.15	32° 33' 19.278 N	103° 11' 9.644 W
2,655.6	7.77	242.97	2,654.0	-15.9	-31.2	567,651.71	853,506.82	32° 33' 19.246 N	103° 11' 9.718 W
Yates									
2,700.0	8.43	242.97	2,698.0	-18.8	-36.8	567,648.87	853,501.25	32° 33' 19.219 N	103° 11' 9.784 W
2,800.0	9.93	242.97	2,796.7	-26.0	-51.0	567,641.62	853,487.03	32° 33' 19.149 N	103° 11' 9.951 W
2,900.0	11.43	242.97	2,895.0	-34.4	-67.5	567,633.19	853,470.52	32° 33' 19.067 N	103° 11' 10.144 W
2,905.1	11.51	242.97	2,900.0	-34.9	-68.4	567,632.73	853,469.61	32° 33' 19.062 N	103° 11' 10.155 W
Seven Rivers									
3,000.0	12.93	242.97	2,992.7	-44.0	-86.3	567,623.61	853,451.72	32° 33' 18.974 N	103° 11' 10.365 W
3,100.0	14.43	242.97	3,089.9	-54.8	-107.4	567,612.86	853,430.65	32° 33' 18.870 N	103° 11' 10.613 W
3,200.0	15.93	242.97	3,186.4	-66.7	-130.7	567,600.96	853,407.32	32° 33' 18.755 N	103° 11' 10.887 W
3,300.0	17.43	242.97	3,282.2	-79.7	-156.3	567,587.92	853,381.75	32° 33' 18.628 N	103° 11' 11.187 W
3,400.0	18.93	242.97	3,377.2	-93.9	-184.1	567,573.74	853,353.96	32° 33' 18.491 N	103° 11' 11.514 W
3,500.0	20.43	242.97	3,471.3	-109.2	-214.1	567,558.43	853,323.95	32° 33' 18.343 N	103° 11' 11.866 W
3,501.8	20.46	242.97	3,473.0	-109.5	-214.6	567,558.15	853,323.40	32° 33' 18.340 N	103° 11' 11.873 W
Queen									
3,600.0	21.93	242.97	3,564.6	-125.6	-246.2	567,542.02	853,291.77	32° 33' 18.184 N	103° 11' 12.244 W

Database:	EDM Central Planning	**Local Co-ordinate Reference:**	Well SEMU 245
Company:	ConocoPhillips MCBU	**TVD Reference:**	RKB @ 3549.0usft (PD 822)
Project:	Buckeye	**MD Reference:**	RKB @ 3549.0usft (PD 822)
Site:	SEMU	**North Reference:**	Grid
Well:	SEMU 245	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	SEMU 245		
Design:	Plan Design		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
3,653.5	22.73	242.97	3,614.0	-134.8	-264.3	567,532.79	853,273.67	32° 33' 18.094 N	103° 11' 12.457 W
Penrose									
3,700.0	23.43	242.97	3,656.8	-143.1	-280.6	567,524.49	853,257.42	32° 33' 18.014 N	103° 11' 12.648 W
3,800.0	24.93	242.97	3,748.0	-161.7	-317.1	567,505.88	853,220.93	32° 33' 17.834 N	103° 11' 13.076 W
3,815.4	25.16	242.97	3,762.0	-164.7	-322.9	567,502.92	853,215.12	32° 33' 17.805 N	103° 11' 13.144 W
Grayburg									
3,900.0	25.16	242.97	3,838.6	-181.0	-354.9	567,486.57	853,183.07	32° 33' 17.647 N	103° 11' 13.521 W
4,000.0	25.16	242.97	3,929.1	-200.4	-392.8	567,467.25	853,145.19	32° 33' 17.460 N	103° 11' 13.966 W
4,075.0	25.16	242.97	3,997.0	-214.9	-421.2	567,452.75	853,116.77	32° 33' 17.319 N	103° 11' 14.300 W
San Andres									
4,100.0	25.16	242.97	4,019.6	-219.7	-430.7	567,447.93	853,107.32	32° 33' 17.273 N	103° 11' 14.411 W
4,200.0	25.16	242.97	4,110.1	-239.0	-468.6	567,428.61	853,069.44	32° 33' 17.086 N	103° 11' 14.856 W
4,286.0	25.16	242.97	4,187.9	-255.6	-501.1	567,412.00	853,036.86	32° 33' 16.925 N	103° 11' 15.238 W
Production									
4,296.0	25.16	242.97	4,197.0	-257.6	-504.9	567,410.06	853,033.07	32° 33' 16.906 N	103° 11' 15.283 W

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SEMU 245 (Target)	0.00	0.00	3,762.0	-209.6	-411.0	567,457.98	853,127.02	32° 33' 17.370 N	103° 11' 14.179 W

- plan misses target center by 89.5usft at 3857.5usft MD (3800.1 TVD, -172.8 N, -338.8 E)
- Circle (radius 100.0)

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
85.0	85.0	Conductor	16	20
1,434.0	1,434.0	Surface	8-5/8	12-1/4
4,286.0	4,187.9	Production	5-1/2	7-7/8

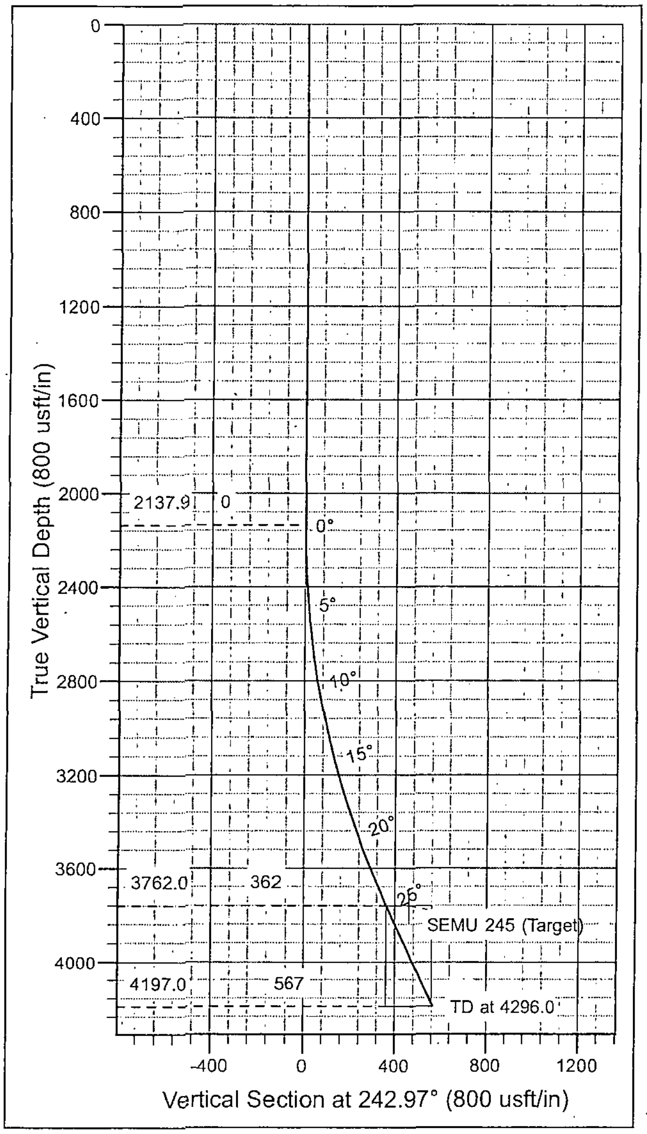
Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,364.0	1,364.0	Rustler		0.00	
1,457.0	1,457.0	Salado		0.00	
2,539.7	2,539.0	Tansill		0.00	
2,655.6	2,654.0	Yates		0.00	
2,905.1	2,900.0	Seven Rivers		0.00	
3,501.8	3,473.0	Queen		0.00	
3,653.5	3,614.0	Penrose		0.00	
3,815.4	3,762.0	Grayburg		0.00	
4,075.0	3,997.0	San Andres		0.00	

Database:	EDM Central Planning	**Local Co-ordinate Reference:**	Well SEMU 245
Company:	ConocoPhillips MCBU	**TVD Reference:**	RKB @ 3549.0usft (PD 822)
Project:	Buckeye	**MD Reference:**	RKB @ 3549.0usft (PD 822)
Site:	SEMU	**North Reference:**	Grid
Well:	SEMU 245	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	SEMU 245		
Design:	Plan Design		

ConocoPhillips

Proposed Directional Well Plan

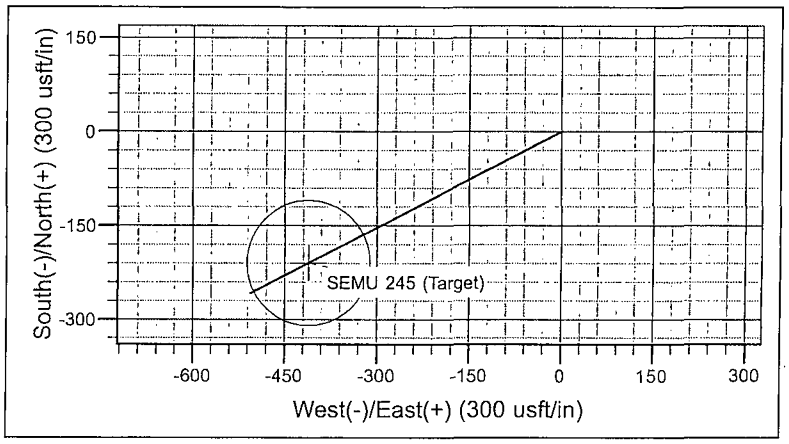


Project: Buckeye
Site: SEMU
Well: SEMU 245
Wellbore: SEMU 245
Design: Plan Design

WELL DETAILS: SEMU 245					
			Ground Level:	3536.0	
+N/-S	+E/-W	Northing	Easting	Latittude	Longitude
0.0	0.0	567667.62	853538.02	32° 33' 19.400 N	103° 11' 9.352 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2137.9	0.00	0.00	2137.9	0.0	0.0	0.00	0.00	0.0	
3	3815.4	25.16	242.97	3762.0	-164.7	-322.9	1.50	242.97	362.5	
4	4296.0	25.16	242.97	4197.0	-257.6	-504.9	0.00	0.00	566.8	

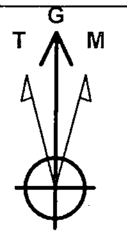


CASING DETAILS

TVD	MD	Name	Size
85.0	85.0	Conductor	16
1434.0	1434.0	Surface	8-5/8
4187.9	4286.0	Production	5-1/2

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1364.0	1364.0	Rustler
1457.0	1457.0	Salado
2539.0	2539.7	Tansill
2654.0	2655.6	Yates
2900.0	2905.1	Seven Rivers
3473.0	3501.8	Queen
3614.0	3653.5	Penrose
3762.0	3815.4	Grayburg
3997.0	4075.0	San Andres



Azimuths to Grid North
True North: -0.62°
Magnetic North: 6.61°

Magnetic Field
Strength: 48599.2snT
Dip Angle: 60.49°
Date: 12/6/2013
Model: BGGM2013

Request for Variance

ConocoPhillips Company
Lease Number: NMLC031670 (A)
Well: SEMU #245
Location: Sec. 19, T20S, R38E
Date: 1/9/2014

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:
Steven Herrin
Drilling Engineer, ConocoPhillips Company
Phone: (281) 206-5115
Cell: (432) 209-7558
Date: 2 January 2014

Attachment # 1

Reliance Eliminator Choke & Kill

This hose can be used as a choke hose which connects the BOP stack to the bleed-off manifold or a kill hose which connects the mud stand pipe to the BOP kill valve.

The Reliance Eliminator Choke & Kill hose contains a specially bonded compounded cover that replaces rubber covered Asbestos, Fibreglass and other fire retardant materials which are prone to damage. This high cut and gouge resistant cover overcomes costly repairs and downtime associated with older designs.

The Reliance Eliminator Choke & Kill hose has been verified by an independent engineer to meet and exceed EUB Directive 36 (700°C for 5 minutes).

Nom. ID		Nom OD		Weight		Min Bend Radius		Max WP	
in.	mm.	in.	mm	lb/ft	kg/m	in.	mm.	psi	Mpa
3	76.2	5.11	129.79	14.5	21.46	48	1219.2	5000	34.47
3-1/2	88.9	5.79	147.06	20.14	29.80	54	1371.6	5000	34.47

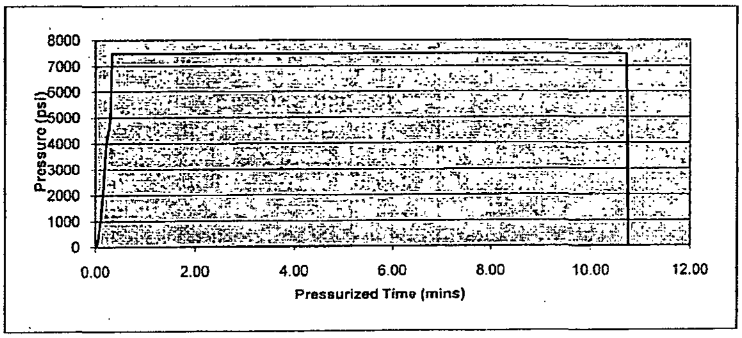
Fittings	Flanges	Hammer Unions	Other
RC4X5055	R35 - 3-1/8 5000# API Type 6B	All Union Configurations	LP Threaded Connectio
RC3X5055	R31 - 3-1/8 3000# API Type 6B		Graylock
RC4X5575			Custom Ends

Attachment # 2

RELIANCE
Industrial Products USA, Ltd.
2030 E. 8th Street, Suite B • Greeley, CO 80631
Ph: (970) 346-3751 • Fax: (970) 353-3168 • *Toll Free:* (866) 771-9739

T E S T   C E R T I F I C A T E

Customer:	PRECISION DRILLING	Cert No.:	27792
P.O. #:	RIG 822	Date:	9/21/2012
Invoice #:	27792		
Material:	3 1/2" FIREGUARD		
Description:	3 1/2" X 10'		
Coupling 1:	3 1/2" FLANGE R31		
" Serial:			
" Quality:			
Coupling 2:	3 1/2" FLOATING R31		
" Serial:			
" Quality:			
Working Pressure :	3000		
Test Pressure:	7500		
Duration (mins):	10		



Conducted By: FLORES M,
Test Technician

☑ Acceptable
☐ Not Acceptable

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

ConocoPhillips Company
Well: SEMU #245
Location: Sec. 19, T20S, R38E
Date: 1/9/2014

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

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

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

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

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

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

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

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

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

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

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

4. Fresh Water and Brine will be hauled off by vacuum truck and disposed of at an authorized salt water disposal well. We propose the following for disposal of fresh water and brine as needed:

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

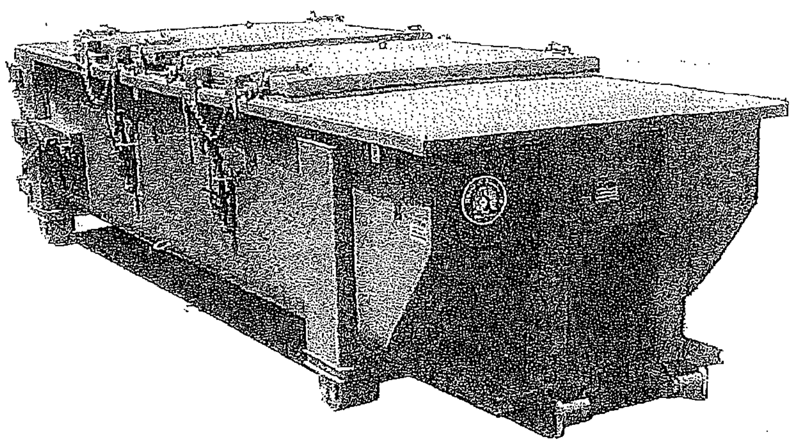
   - Basic Energy Services, P.O. Box 1869; Eunice, NM 88231 Phone Number: 575.394.2545, Facility located at Hwy 18, Mile Marker 19; Eunice, NM.

Steven Herrin
Drilling Engineer, ConocoPhillips Company
Phone (281) 206-5115
Cell (432) 209-7558

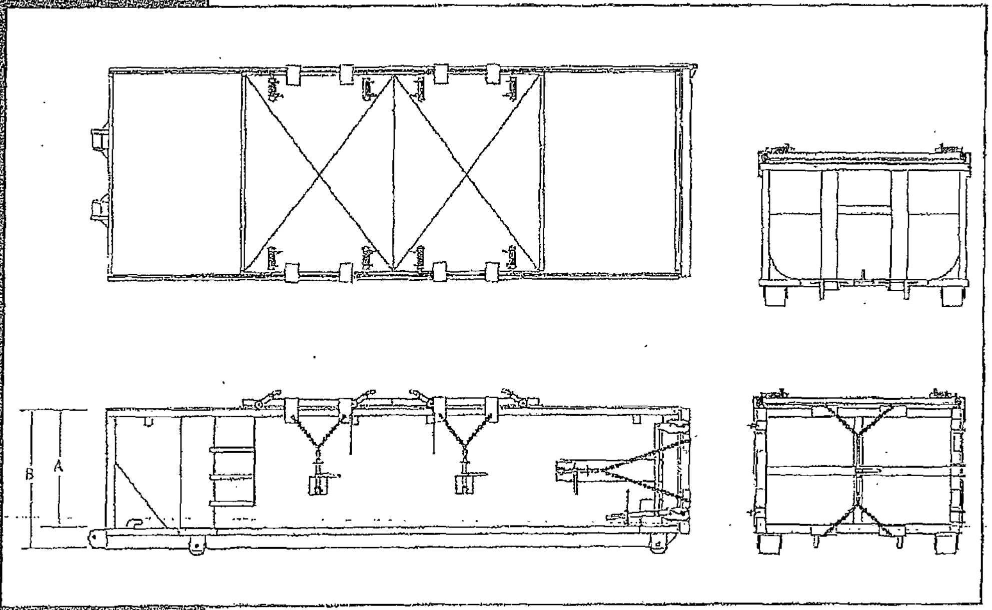
SPECIFICATIONS

Heavy Duty Split Metal Rolling Lid

FLOOR: 3/16" PL one piece
CROSS MEMBER: 3 x 4.1 channel 16" on center
WALLS: 3/16" PL solid welded with tubing top, insi de liner hooks
DOOR: 3/16" PL with tubing frame
FRONT: 3/16" PL slant formed
PICK UP: Standard cable with 2" x 6" x 1/4" rails, gusset at each crossmember
WHEELS: 10 DIA x 9 long with rease fittings
DOOR LATCH: 3 Independent ratchet binders with chains, vertical second latch
GASKETS: Extruded rubber seal with metal retainers
WELDS: All welds continuous except sub-structure crossmembers
FINISH: Coated inside and out with direct to metal, rust inhibiting acrylic enamel color coat
HYDROTESTING: Full capacity static test
DIMENSIONS: 22'-11" long (21'-8" inside), 99" wide (88" inside), see drawing for height
OPTIONS: Steel grit blast and special paint, Amplirol, Heil and Dino pickup
ROOF: 3/16" PL roof panels with tubing and channel support frame
LIDS: (2) 68" x 90" metal rolling lids spring loaded, self raising
ROLLERS: 4" V-groove rollers with delrin bearings and grease fittings
OPENING: (2) 60" x 82" openings with 8" divider centered on container
LATCH: (2) independent ratchet binders with chains per lid
GASKETS: Extruded rubber seal with metal retainers



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



ConocoPhillips

Location Schematic and Rig Layout
for Closed Loop System

(PICTURE NOT TO SCALE)

Reviewed by:
Steven Herrin
Drilling Engineer, ConocoPhillips Company
Date: updated January 2014

NOTE: There are two muster areas depending on the prevailing wind direction, generally south in this area. The muster area that is furthest upwind/ crosswind will be the designated area for briefing and assessing the situation. In the event a full evacuation is deemed necessary, all personnel will exit the location via the access road. If the main access road is blocked off, they will exit via a secondary road (if available) or walk off route in the upwind/crosswind direction.