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

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
Revised July 18, 2013

HOBBS OCD ☐ AMENDED REPORT

JUL 30 2015

D

RECEIVED

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address	2. OGRID Number
ConocoPhillips Company 600 N. Dairy Ashford Rd Houston, Texas 77079	217817
	3. API Number 30-025- 42716

4. Property Code	5. Property Name	6. Well No.
31172	East Vacuum Grayburg San Andres Unit 2721	527W

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
N	27	17S	35E		1168	South	2141	West	Lea

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
N	27	17S	35E		1015	South	2250	West	Lea

9. Pool Information

Pool Name	Pool Code
Vacuum; Grayburg San Andres	62180

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	I	Rotary	State	3938' GL
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	5098' MD/5090' TVD	Grayburg/San Andres		12/01/2015

Depth to Ground water	Distance from nearest fresh water well	Distance to nearest surface water

☒ **We will be using a closed-loop system in lieu of lined pits**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	12.25"	8.625"	24	1620'	875	0'
Production	7.875"	5.50"	15.5	5080'	735	0'

Casing/Cement Program: Additional Comments

Production csg cement volumes may be adjusted based on log results. External packer (TDAP) is an option between surf and production casing, set at ~250' shallower than previous casing shoe. Cement to be pumped in one stage.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular/Double Ram	3000/3000	Annular 70% or 2100 /3000 Dbl Ram	Shaffer/Shaffer

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☐, if applicable.
Signature: Susan B. Maunder

Printed name: Susan B. Maunder

Title: Sr. Regulatory Specialist

E-mail Address: Susan.B.Maunder@conocophillips.com

Date: 7/27/15 Phone: 281-206-5281

OIL CONSERVATION DIVISION

Approved By:

Title: Petroleum Engineer

Approved Date: 08/01/15 Expiration Date: 08/01/17

Conditions of Approval Attached

AUG 04 2015

CONDITIONS OF APPROVAL

API #	Operator	Well name & Number
30-025-42716	CONOCOPHILLIPS COMPANY	EAST VACUUM (GSA) UNIT # 527

Applicable conditions of approval marked with XXXXXX

Administrative Orders Required

XXXXXXXX	Will require administrative order for injection or disposal prior to injection or disposal

Other wells

Drilling

XXXXXXX	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string

Casing

XXXXXXX	SURFACE CASING - Cement must circulate to surface --
XXXXXXX	PRODUCTION CASING - Cement must circulate to surface --
XXXXXXX	If cement does not circulate to surface, must run temperature survey or other log to determine top of cement
	South Area
XXXXXXX	Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water

Completion & Production

XXXXXXX	Must notify Hobbs OCD office prior to conducting MIT (575) 393-6161 ext. 114
XXXXXXX	Must conduct & pass MIT prior to any injection

Lost Circulation

XXXXXXX	Must notify OCD Hobbs Office if lost circulation is encountered at 575-370-3186

Stage Tool

XXXXXXX	Must notify OCD Hobbs Office prior to running Stage Tool at 575-370-3186
XXXXXXX	If using Stage Tool on Surface casing, Stage Tool must be greater than 350' and a minimum 200 feet above surface shoe.
XXXXXXX	When using a Stage Tool on Intermediate or Production Casing Stage must be a minimum of 50 feet below previous casing shoe.

ConocoPhillips

Planning Report

Database:	Dbase Nov0914	**Local Co-ordinate Reference:**	Well Well 2721-W527
Company:	ConocoPhillips	**TVD Reference:**	RKB=3937+14 @ 3951.00usft (PD 194)
Project:	Lea County, New Mexico	**MD Reference:**	RKB=3937+14 @ 3951.00usft (PD 194)
Site:	East Vacuum GBSA Unit	**North Reference:**	Grid
Well:	Well 2721-W527	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original hole		
Design:	rev1		

Project Lea County, New Mexico

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

Site East Vacuum GBSA Unit

Site Position:		**Northing:**	652,841.86 usft	**Latitude:**	32° 47' 30.449677 N
From:	Map	**Easting:**	764,633.16 usft	**Longitude:**	103° 28' 19.901020 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.47 °

Well Well 2721-W527

Well Position	**+N/-S**	3,644.58 usft	**Northing:**	656,486.44 usft	**Latitude:**	32° 48' 5.869473 N
	+E/-W	7,838.59 usft	**Easting:**	772,471.75 usft	**Longitude:**	103° 26' 47.725726 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**		**Ground Level:**	3,937.00 usft

Wellbore Original hole

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	User Defined	4/22/2014	7.34	60.66	48,729

Design rev1

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00
Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**	
	0.00	0.00	0.00	143.98	

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,078.94	4.79	143.98	3,078.38	-16.18	11.76	1.00	1.00	30.06	143.98	
5,097.61	4.79	143.98	5,090.00	-152.51	110.87	0.00	0.00	0.00	0.00	EV GBSU 2721-W527

Database:	Dbase Nov0914	**Local Co-ordinate Reference:**	Well Well 2721-W527
Company:	ConocoPhillips	**TVD Reference:**	RKB=3937+14 @ 3951.00usft (PD 194)
Project:	Lea County, New Mexico	**MD Reference:**	RKB=3937+14 @ 3951.00usft (PD 194)
Site:	East Vacuum GBSA Unit	**North Reference:**	Grid
Well:	Well 2721-W527	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original hole		
Design:	rev1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,595.00	0.00	0.00	1,595.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,695.00	0.00	0.00	1,695.00	0.00	0.00	0.00	0.00	0.00	0.00
Salado									
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP Begin 1°/100' build									
2,700.00	1.00	143.98	2,699.99	-0.71	0.51	0.87	1.00	1.00	0.00
2,730.01	1.30	143.98	2,730.00	-1.19	0.87	1.47	1.00	1.00	0.00
Tansil									
2,800.00	2.00	143.98	2,799.96	-2.82	2.05	3.49	1.00	1.00	0.00
2,860.09	2.60	143.98	2,860.00	-4.77	3.47	5.90	1.00	1.00	0.00
Yates									
2,900.00	3.00	143.98	2,899.86	-6.35	4.62	7.85	1.00	1.00	0.00
3,000.00	4.00	143.98	2,999.68	-11.29	8.21	13.96	1.00	1.00	0.00
3,078.94	4.79	143.98	3,078.38	-16.18	11.76	20.01	1.00	1.00	0.00
Begin 4.79° tangent section									
3,100.00	4.79	143.98	3,099.37	-17.60	12.80	21.76	0.00	0.00	0.00
3,135.76	4.79	143.98	3,135.00	-20.02	14.55	24.75	0.00	0.00	0.00
Seven Rivers									
3,200.00	4.79	143.98	3,199.02	-24.36	17.71	30.11	0.00	0.00	0.00
3,300.00	4.79	143.98	3,298.67	-31.11	22.62	38.46	0.00	0.00	0.00
3,400.00	4.79	143.98	3,398.32	-37.86	27.53	46.81	0.00	0.00	0.00
3,500.00	4.79	143.98	3,497.97	-44.62	32.44	55.16	0.00	0.00	0.00
3,600.00	4.79	143.98	3,597.62	-51.37	37.35	63.51	0.00	0.00	0.00
3,686.68	4.79	143.98	3,684.00	-57.22	41.60	70.75	0.00	0.00	0.00
Queen									
3,700.00	4.79	143.98	3,697.27	-58.12	42.25	71.86	0.00	0.00	0.00

Database:	Dbase Nov0914	**Local Co-ordinate Reference:**	Well Well 2721-W527
Company:	ConocoPhillips	**TVD Reference:**	RKB=3937+14 @ 3951.00usft (PD 194)
Project:	Lea County, New Mexico	**MD Reference:**	RKB=3937+14 @ 3951.00usft (PD 194)
Site:	East Vacuum GBSA Unit	**North Reference:**	Grid
Well:	Well 2721-W527	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original hole		
Design:	rev1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,800.00	4.79	143.98	3,796.92	-64.88	47.16	80.21	0.00	0.00	0.00
3,900.00	4.79	143.98	3,896.58	-71.63	52.07	88.56	0.00	0.00	0.00
4,000.00	4.79	143.98	3,996.23	-78.38	56.98	96.91	0.00	0.00	0.00
4,043.93	4.79	143.98	4,040.00	-81.35	59.14	100.58	0.00	0.00	0.00
Grayburg									
4,100.00	4.79	143.98	4,095.88	-85.14	61.89	105.26	0.00	0.00	0.00
4,200.00	4.79	143.98	4,195.53	-91.89	66.80	113.61	0.00	0.00	0.00
4,300.00	4.79	143.98	4,295.18	-98.64	71.71	121.96	0.00	0.00	0.00
4,355.01	4.79	143.98	4,350.00	-102.36	74.41	126.55	0.00	0.00	0.00
San Andres									
4,400.00	4.79	143.98	4,394.83	-105.40	76.62	130.31	0.00	0.00	0.00
4,500.00	4.79	143.98	4,494.48	-112.15	81.53	138.65	0.00	0.00	0.00
4,600.00	4.79	143.98	4,594.13	-118.90	86.44	147.00	0.00	0.00	0.00
4,700.00	4.79	143.98	4,693.78	-125.66	91.35	155.35	0.00	0.00	0.00
4,800.00	4.79	143.98	4,793.43	-132.41	96.26	163.70	0.00	0.00	0.00
4,900.00	4.79	143.98	4,893.08	-139.16	101.17	172.05	0.00	0.00	0.00
5,000.00	4.79	143.98	4,992.73	-145.92	106.08	180.40	0.00	0.00	0.00
5,097.61	4.79	143.98	5,090.00	-152.51	110.87	188.55	0.00	0.00	0.00
PBHL/TD									

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
EV GBSU 2721-W527 C - plan misses target center by 87.58usft at 4052.27usft MD (4048.31 TVD, -81.91 N, 59.55 E) - Circle (radius 150.00)	0.00	0.00	4,041.00	-152.51	110.87	656,333.93	772,582.62	32° 48' 4.351297 N	103° 26' 46.441896 W
EV GBSU 2721-W527 P - plan hits target center - Point	0.00	0.00	5,090.00	-152.51	110.87	656,333.93	772,582.62	32° 48' 4.351297 N	103° 26' 46.441896 W

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,625.00	1,625.00	8 5/8" Suf Casing @ 1625 TVD	8-5/8	12-1/4

Database:	Dbase Nov0914	**Local Co-ordinate Reference:**	Well Well 2721-W527
Company:	ConocoPhillips	**TVD Reference:**	RKB=3937+14 @ 3951.00usft (PD 194)
Project:	Lea County, New Mexico	**MD Reference:**	RKB=3937+14 @ 3951.00usft (PD 194)
Site:	East Vacuum GBSA Unit	**North Reference:**	Grid
Well:	Well 2721-W527	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Original hole		
Design:	rev1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,595.00	1,595.00	Rustler		0.00	
1,695.00	1,695.00	Salado		0.00	
2,730.01	2,730.00	Tansil		0.00	
2,860.09	2,860.00	Yates		0.00	
3,135.76	3,135.00	Seven Rivers		0.00	
3,686.68	3,684.00	Queen		0.00	
4,043.93	4,040.00	Grayburg		0.00	
4,355.01	4,350.00	San Andres		0.00	

TDAP

(Thermally Deformable Annulus Packer)

The TDAP is a tool developed by BiSN Oil Tools which serves the same function as a traditional inflatable annulus casing packer. The tool has been developed to specifically target wells prone to annulus gas migration.

Composition:

- Tool is made of a bismuth, tin, and lead alloy
- Has a low melting temperature of ~190°F
- Unaffected by H_2S, CO_2, HCl
- Expands during solidification, ensuring a tight metal-to-metal seal
- Has cement ports to allow cement to be pumped through the tool
- Springs contained on the inside and outside of tool, which when the tool is melted, break the channels of cement through the tool

Seals:

- Rubber seals on the inside create positive seal on production casing
- Rubber seals on the outside create positive seal against inside of surface casing
- Seals have been tested for effectiveness on straight pipe with no joints, as well as over the gap in pipe with a joint (representing a connection in the surface casing)
- Outside seals still create a vacuum after being run through the equivalent of 7,200'+ of smooth casing and 1560+ connection gaps (representing the number of connections in 60,000' of casing)

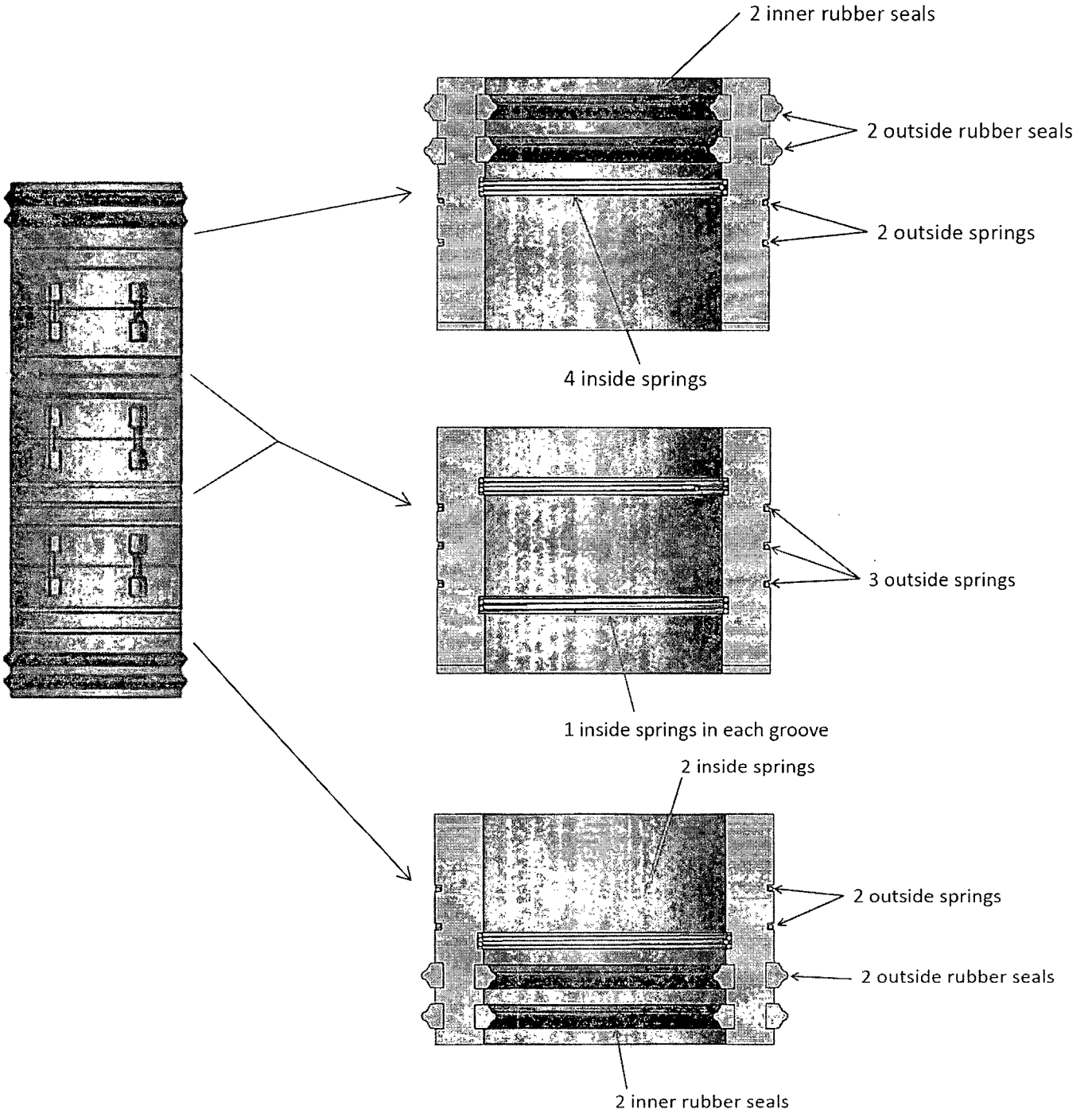
Heater:

- Wireline conveyed
- Composed of a thermite mixture with a 10-30 minute heating time
- Initiated by a voltage applied to a nickel resistor igniter

Running Procedure:

- Joint containing the tool is made up to the casing string and run downhole with centralizers immediately above and below the tool
- Tool is positioned in the surface casing by production casing annulus
- Cement job is performed and cement flows through the tool during displacement
- After the well is completed, the drilling rig moves off location
- After the cement is set and prior to completions activity (days after rig release), the heater is lowered on wireline to the position of the tool
- The heater is ignited, melting the tool
- The springs contained in the tool are released, breaking the cement channels

- The heater expends all it's fuel and cools
- The heater is brought back to surface and the melted tool cools, forming a true metal-to-metal, gas-tight seal in the casing by casing annulus



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

ConocoPhillips Company
Well: EVGBSAU #527W
Location: Section 27, T17S, R35E
Date: 7/16/2015

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, use a drying pad, build an earthen pit above ground level, nor 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 frac tanks as needed. The intent is as follows:

   - We propose to use the rig's 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 during each tour and any necessary repairs will be made immediately. Any leak in the system will be repaired immediately, 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 the 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
   Phone Number: 575.393.1079

   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 NM1-006.

   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.

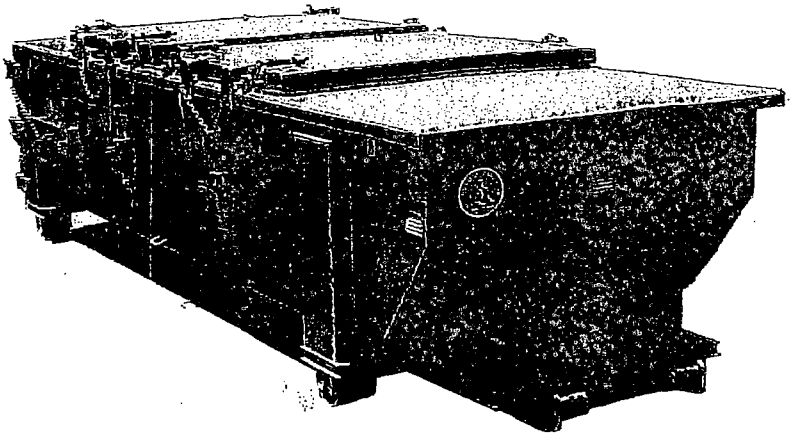
4. Fresh Water and Brine will be hauled off by vacuum truck and disposed of at an authorized salt water disposal well. We propose the following for disposal of fresh water and brine as needed:
   - Nabors Well Services Company, 3221 NW County Rd, Hobbs, NM 88240; P.O. Box 5208 Hobbs, NM, 88241, Phone Number: 575.392.2577; Permit SWD 092.
   - Basic Energy Services, 2404 W Texas Ave, Eunice, NM 88231; P.O. Box 1869, Eunice, NM 88231 Phone Number: 575.394.2545, Facility located at Hwy 18, Mile Marker 19; Eunice, NM.
   - C & C Transport, LLC, P.O. Box 1352, Hobbs, NM 88241 Phone Number: 575.393.0422
   - Sundance Services, Inc., P.O. Box 1737 Eunice, NM 88231 Phone Number: 575.394.2511

Cord Denton
Drilling Engineer, ConocoPhillips Company
Phone: (281) 206-5406
Cell: (832) 754-7363

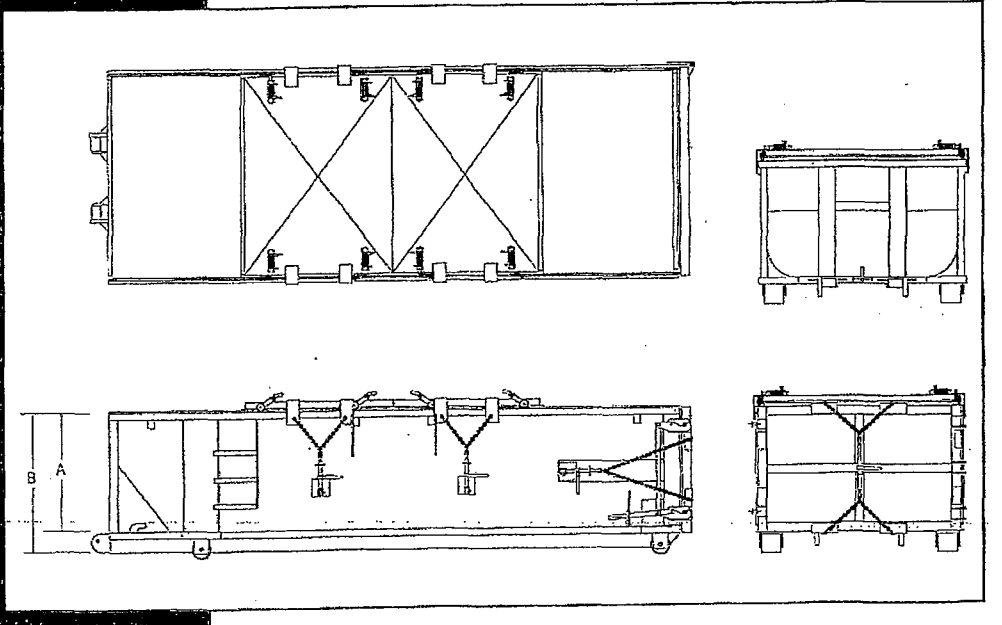
SPECIFICATIONS

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

Heavy Duty Split Metal Rolling Lid



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



ConocoPhillips

H_2S Contingency Plan

H_2S Contingency Plan Holders:

Attached is an H_2S Contingency Plan for COPC Permian Drilling working in the West Texas and Southeastern New Mexico areas operated by ConocoPhillips Company.

If you have any questions regarding this plan, please call Jet Brown at ConocoPhillips Company, 432.688.6849.

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Section

ConocoPhillips

HYDROGEN SULFIDE (H_2S) OPERATIONS

Contingency Plan
For
Permian Drilling Operations

ConocoPhillips Company
Mid-Continent Business Unit
Permian Asset Area

I. PURPOSE

The purpose of this Contingency Plan is to provide an organized plan of action for alerting and protecting the public following the release of a potentially hazardous volume of hydrogen sulfide. This plan prescribes mandatory safety procedures to be followed in the event of a release of H_2S into the atmosphere from exploration and production operations included in the scope of this plan. The extent of action taken will be determined by the supervisor and will depend on the severity and extent of the H_2S release. Release of H_2S must be reported to the Drilling Superintendent and documented on the IADC report 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 in which the 100 ppm radius of exposure is greater than 50' yet less than 3000' and does not include a public area, and in which the 500 ppm radius of exposure does not include a public road. Radius of exposure is defined as the maximum distance from the source of release that a specified calculated average concentration of H_2S could exist under specific weather conditions.

III. PROCEDURES

First Employee on Scene

____ Assess the incident and ensure your own safety.

Note the following:

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

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

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

____ Secure the site.

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

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

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

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

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

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

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

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

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

____ Ensure site security.

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

____ Set roadblocks and staging area as determined.

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

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

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

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

____ Perform a Site Characterization and designate the following:

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

AND

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

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

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

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

Confirming the absence of H_2S and combustible gas throughout the area,

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

Removing all barricades and warning signs,

Allowing evacuees to return to the area, and

Advising all parties previously notified that the emergency has ended.

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

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

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

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

- Company employee receiving occupational injury or illnesses.

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

- Company property that is damaged or lost.

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

- Hazardous Material Spill/Release Report Form

- Emergency Drill Report

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

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

Emergency Procedures
Responsibility

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

1. In an emergency situation, the Drilling Rep. on duty will have complete responsibility and will take whatever action is deemed necessary to ensure 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 which the Drilling Rep. becomes incapacitated.

3. Advise each contractor, service company, and all others entering the site that H2S may be encountered and of 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. The COPC Drilling Rep. 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

DXP Safety International – Odessa, TX 432.580.3770
H_2S monitors
Breathing air including cascade systems
First aid and medical supplies
Safety equipment
H2S Specialist

EnerSafe Inc. – Odessa, TX 432.550.0600
H_2S monitors (personal and fixed)
Breathing air including cascade systems
First aid and medical supplies
Safety equipment

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

Emergency Equipment and Maintenance (continued)

General Information

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

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

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

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

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

H2S Safety Equipment and Monitoring Systems

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

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

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

2 – Windsocks that are clearly visible.

1 – Audible warning system located on rig floor

2 – Visual warning systems (Beacon Lights)
- 1 – located at the rig floor
- 1 – located in the mud mixing room

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

2 - Briefing areas clearly marked
- 2 - SCBA's at each briefing area
- 1- SCBA located at the Drilling Rep's office

Note:
1. **All SCBA's must be positive pressure type only.**
2. **All SCBA's must be either Scott or Drager brand.**
3. **All SCBA's face pieces should be size large, unless otherwise specified by the Drilling Supervisor.**

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

1 – Tri or Quad gas monitor located at the Drilling Rep's office. This will be used to determine if the work area is 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
Sam Hyden Permian Drilling Supt.	432.688.9163	432.561.9958	432.557.1999
Tim Garrett **Jerry Moore** **Terry Brumley** Permian Drilling Field Supt.	432.688.9057 432.688.9057 432.688.6850		505.330.5638 806.683.6852 432.238.9069
Jet Brown WSER	432.688.6849		432.638.0509
R.E. (Gene) True Operations Manager, Permian Conventional Asset	432.688.9050	281.546.1034	281.217.8492
Kyle O'Dell Safety and Environmental Coordinator	432.688.9051		432.250.4912
Gene Schwall Drilling Mngr.	281.206.5159	281.579.2914	713.301.7590

EMERGENCY CALL LIST: State Officials

Regulatory Agencies

Texas Railroad Commission 512.463.6838
1701 N. Congress 24 Hour Emergency: 512.463.6788
Austin, TX 78701

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

Bureau of Land Management
Carlsbad Field Office Office: 575.234.5972
620 E. Greene St. Fax: 575.885.9264
Carlsbad, NM 88220 BLM 24 Hr on call # Lea County: 575-393-3612

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)

ConocoPhillips Emergency Call List and Location Information Sheet

ConocoPhillips- 281-293-3600

Drilling Superintendent	Sam Hyden	Office: 432-688-9163 Cell: 432-557-1999
Safety (WSER)	Jet Brown	Office: 432-688-6849 Cell: 432-638-0509
Drilling Engineer	Cord Denton Stephanie Basse Nancy Luo	Office: 281-206-5406 Cell: 832-754-7363 Office: 281-206-5239 Cell: 832-231-1159 Office: 281-206-5280 Cell: 281-546-8154
Regulatory Contact	Susan Maunder	Office: 432-688-6913 Cell: 432-269-4378

Emergency Numbers

Hospital: Lea Co. Regional Medical Center (Hobbs) 575-492-5000
Ambulance: Hobbs Fire Dept. 575-397-9308
Air Ambulance: Care Star 888-624-3571
Aero Star 800-627-2376
Fire Dept. (Hobbs) 575-397-9308
(Maljamar non-emerg) 575-676-4100
State Police (Artesia) 575-748-9718
(Hobbs) 575-392-5580
Sheriff (Lovington)..... 575-396-3611
Police (Lovington) 575-396-2811
NMOCD 575-393-6161
(Emerg) 575-370-3186
BLM Switchboard.....575-393-3612
BLM 24 Hr on Call, Lea County.....575-393-3612
New Mexico Emergency Response Comm (Santa Fe) 505-476-9600
New Mexico State Emerg Ops Ctr 505-476-9635
National Emergency Response Center 800-424-8802

Number of Residences within 1 mile of Well: There are no residences within one mile of the well to be drilled.

VI. Public Media Relations

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

The Public Information Officer confers with Houston Office's Human Relations Representative, who is responsible for assisting in the coordination of local public relations duties.

If you are the Public Information Officer, answer media questions honestly and **only with facts,** do not speculate about the cause, amount of damage, or the potential impact of the incident on the community, company, employees, or environment. (This information will be formally determined in the incident investigation.)

If you are not 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 is."
- "It is under investigation."

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

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

VII. Public Notification/Evacuation

Alert and/or Evacuate People within the Exposure Area

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

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

2. Evacuation Procedures – Evacuation will proceed upwind from the source of the release of H_2S. Extreme caution should be exercised in order to avoid any depressions or low-lying areas in the terrain. The public area within the radius of exposure should be evacuated in a southwesterly and southeasterly direction so as to avoid the prevailing southern wind direction.

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

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

VIII. FORMS & REPORTS

I. Incident Log

II. Preliminary Emergency Information Sheet

III. Emergency Drill Report

IV. Onshore Hazardous Material Spill/Release Report Form

V. Immediate Report of Occupational Injury or Illness
Report of Accident-Public Contractor
Report of Loss or Damage to Company Property
Report of Automotive Incident