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

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

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

HOBBS OCD

AMENDED REPORT

AUG 10 2015

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-42104	² Pool Code 62160	³ Pool Name Vacuum; Glorieta
⁴ Property Code 31257	⁵ Property Name VGEU	⁶ Well Number 114H
⁷ OGRD No. 217817	⁸ Operator Name ConocoPhillips Company	⁹ Elevation 3939.9'

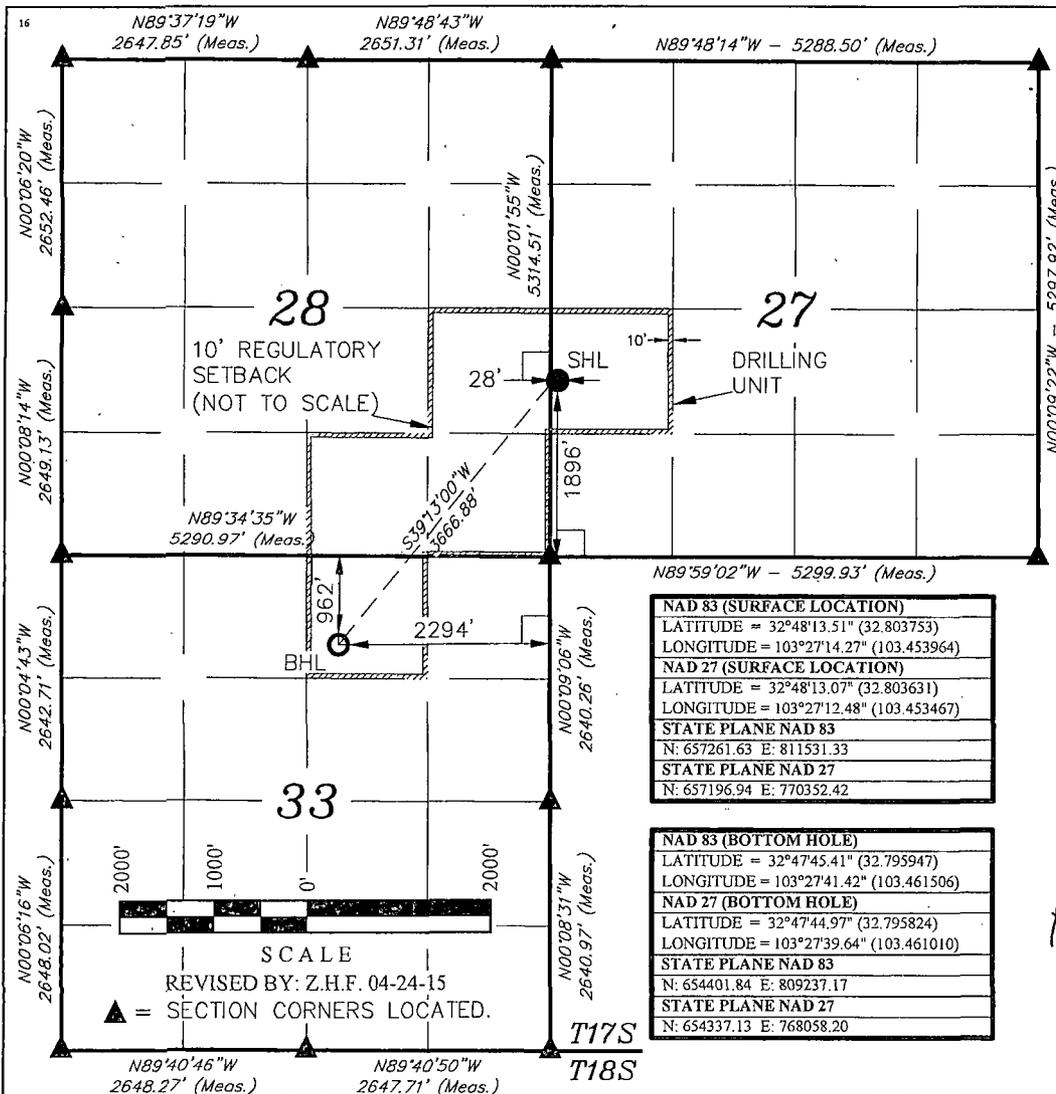
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	27	17S	35E		1896	SOUTH	28	WEST	LEA

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	33	17S	35E		962	NORTH	2294	EAST	LEA
¹² Dedicated Acres 200	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

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.



¹⁷ OPERATOR CERTIFICATION

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

Susan B. Maunder 7/14/15
Signature Date

Susan B. Maunder
Printed Name

Susan.B.Maunder@cop.com
E-mail Address

¹⁸ SURVEYOR CERTIFICATION

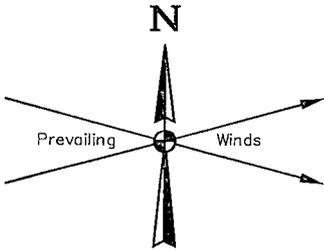
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

July 09, 2014

Date of Survey
Signature and Seal of Professional Surveyor:

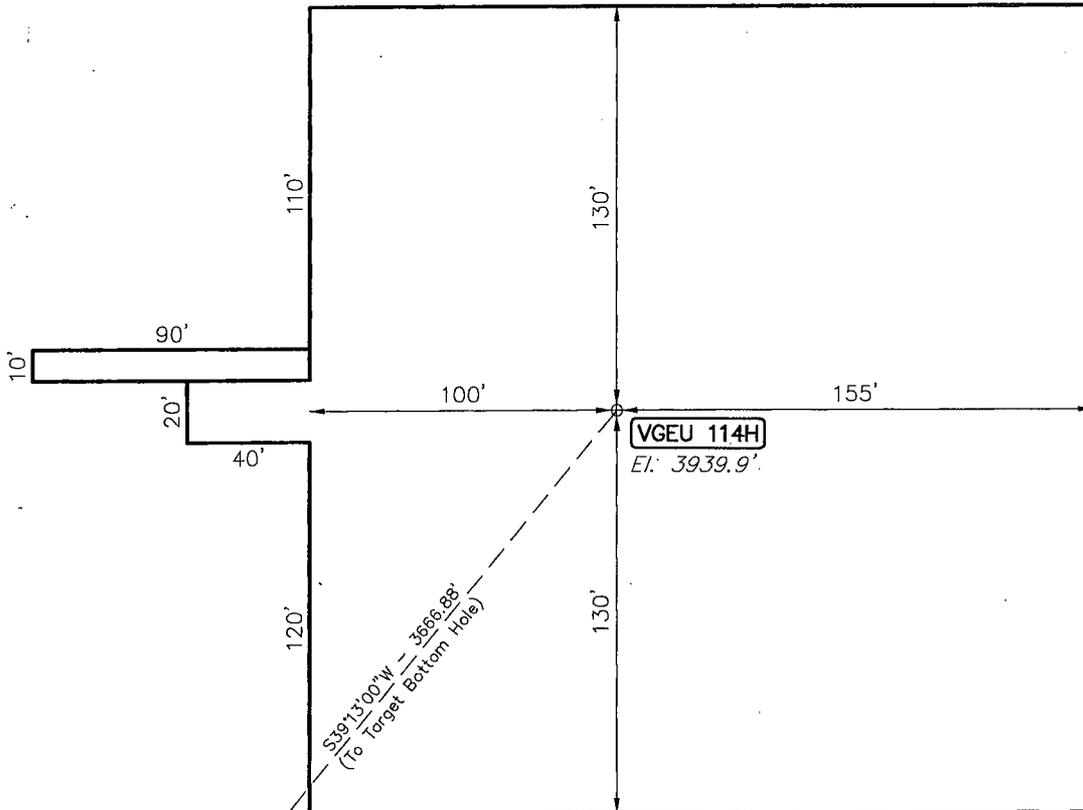


Certificate Number:



EI. 3940.2'
 (NAD 83)
 Lat: 32.804108°
 Long: 103.454292°

EI. 3940.0'
 (NAD 83)
 Lat: 32.804114°
 Long: 103.453461°



EI. 3940.0'
 (NAD 83)
 Lat: 32.803394°
 Long: 103.454286°

EI. 3939.8'
 (NAD 83)
 Lat: 32.803400°
 Long: 103.453456°

ELEV. UNGRADED GOUND AT LOC. STAKE = 3939.9'

NOTES:

ConocoPhillips Company

VGEU 114H
 SECTION 27, T17S, R35E, N.M.P.M.
 1896' FSL 28' FWL

DRAWN BY: JJ.	DATE DRAWN: 07-09-14
SCALE: 1" = 60'	REVISED: 04-27-15 Z.H.F.
LOCATION LAYOUT	FIGURE #1



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

WELL: Vacuum Glorieta East Unit 114H COUNTY, STATE:
 SURFACE LOC: UL - L - S27 - T17S - R35E 1896' FSL 28' FWL API No.:
 BH LOC: UL - B - S33 - T17S - R35E 962' FNL 2294' FEL NDIC Permit:
 ELEVATIONS: GL 3,939.9' WH Coord.: LAT 32° 48' 13.07"
 KB ~14' Rig - PD194 (NAD-27) LON 103° 27' 12.48"
 AFE:
 Drilling Network No.:
 Invoice Handler ID:
 COST ESTIMATE
 DRILLING
 COMPLETION
 FACILITIES
 TOTAL

FORMATION TOP:	TVD	SUBSEA
12-1/4" X 9-5/8"		
Rustler	1,593	
Salado	1,685	
Tansil	2,733	
Yates	2,864	
Seven Rivers	3,140	
Queen	3,504	
Grayburg	4,033	
San Andres	4,368	
Glorieta	5,954	
Upper Paddock	6,070	
Target	6,100	
Lower Paddock	6,164	

8-3/4" X 7"

6-1/8"

Objective

Notes

Goals

Offset logs indicate the presence of the Dunham, Pine, Opeche, and Charles Salts.

CONTACTS

	Office	Cell
Drilling Engineer:		
Geologist:		
Onsite Drilling Rep.:		
Drilling Supt.:		

DRILLING FLUID:	Type	Interval (MD)	Density (ppg)	Vis (sec/qt)	PV (cP)	YP (#/100ft ²)	pH	FL (mL)	LGS (% by vol)	Cl (k mg/L)	NaCl (ppb sol)	Remarks
Surface:	Fresh Water/WBM	Surface-1,655'	8.4-8.9									
Intermediate:	Brine	1,655' - 6,825'	10									
Production:	Brine	6,825' - 9,325'	9.0-10.0									

Reference Baroid Drilling Fluids Program

CASING:	Hole	TOP (MD)	BTM (MD)	Length	Size	Wt	Grade	Connection	BOP:	Working	Test
Surface:	12-1/4"	0'	1,640'	1,640'	9-5/8"	36.00	J55	LTC	Annular	3000 psi	2100 psi
Intermediate:	8-3/4"	0'	6,810'	6,810'	7"	23.00	L80	BTC	Double Ram	3000 psi	3000 psi
Production:	6-1/8"	6,810'	9,325'	2,515'				Open Hole			

7" x 9-5/8" Annulus Casing packer will be set ~100' above surface casing shoe in casing annulus

Wellhead:

Reference Drilling Procedure for details on float equipment, centralizers, and liner equipment.

CEMENT:	Hole	MD	TVD	Spacer	Lead	Tail	COMMENTS
Surface:	12-1/4" X 9-5/8"	1,640'	1,640'		452	272	TOC Surface
Intermediate:	8-3/4" X 7"	6,810'	6100'		425	593	TOC Surface

Cement Volume will be adjusted based on hole conditions or logs depending on what is well specific.

Reference Halliburton Cementing Recommendation

DIRECTIONAL PLAN:	Comments	MD (ft)	INC (deg)	AZI (deg)	TVD (ft)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100')	SEC-T-R	Section Line Distance

FORMATION EVALUATION:

Mud Logging - One-Man: Correlation Well:
 Mud Logging - Two-Man:
 Open Hole -
 Cased Hole - GR/CBL
 MWD - GR



ConocoPhillips

Lea County, New Mexico (NAD 27)

VGEU

114H

Wellbore #1

Plan: Design #8

Standard Planning Report

25 June, 2015

Database:	EDM 5000.1 Conroe DB	Local Co-ordinate Reference:	Well 114H
Company:	ConocoPhillips	TVD Reference:	WELL @ 3954.00usft (Precision 194)
Project:	Lea County, New Mexico (NAD 27)	MD Reference:	WELL @ 3954.00usft (Precision 194)
Site:	VGEU	North Reference:	Grid
Well:	114H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #8		

Project	Lea County, New Mexico (NAD 27)		
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		

Well	114H					
Well Position	+N/-S	657,196.94 usft	Northing:	657,196.94 usft	Latitude:	32° 48' 13.075 N
	+E/-W	770,352.42 usft	Easting:	770,352.42 usft	Longitude:	103° 27' 12.484 W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	3,940.00 usft

Wellbore	Wellbore #1				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2015	09/01/15	7.17	60.70	48,553

Design	Design #8				
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Audit Notes:					
Version:		Phase:	PROTOTYPE	Tie On Depth:	0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	218.74

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	
5,110.34	0.00	0.00	5,110.34	0.00	0.00	0.00	0.00	0.00	0.00	
6,443.67	80.00	218.74	6,050.76	-615.52	-493.79	6.00	6.00	0.00	218.74	PBHL v8 - VGEU 1
6,643.67	80.00	218.74	6,085.49	-769.15	-617.04	0.00	0.00	0.00	0.00	
6,810.34	90.00	218.74	6,100.00	-898.50	-720.80	6.00	6.00	0.00	0.00	
9,324.78	90.00	218.74	6,100.00	-2,859.81	-2,294.22	0.00	0.00	0.00	0.00	PBHL v8 - VGEU 1

Database:	EDM 5000.1 Conroe DB	Local Co-ordinate Reference:	Well 114H
Company:	ConocoPhillips	TVD Reference:	WELL @ 3954.00usft (Precision 194)
Project:	Lea County, New Mexico (NAD 27)	MD Reference:	WELL @ 3954.00usft (Precision 194)
Site:	VGEU	North Reference:	Grid
Well:	114H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #8		

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
1,593.00	0.00	0.00	1,593.00	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
1,685.00	0.00	0.00	1,685.00	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
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,733.00	0.00	0.00	2,733.00	0.00	0.00	0.00	0.00	0.00	0.00
Tansil									
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,864.00	0.00	0.00	2,864.00	0.00	0.00	0.00	0.00	0.00	0.00
Yates									
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,140.00	0.00	0.00	3,140.00	0.00	0.00	0.00	0.00	0.00	0.00
Seven Rivers									
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,504.00	0.00	0.00	3,504.00	0.00	0.00	0.00	0.00	0.00	0.00
Queen									
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00

Database:	EDM 5000.1 Conroe DB	Local Co-ordinate Reference:	Well 114H
Company:	ConocoPhillips	TVD Reference:	WELL @ 3954.00usft (Precision 194)
Project:	Lea County, New Mexico (NAD 27)	MD Reference:	WELL @ 3954.00usft (Precision 194)
Site:	VEGU	North Reference:	Grid
Well:	114H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #8		

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)	
4,033.00	0.00	0.00	4,033.00	0.00	0.00	0.00	0.00	0.00	0.00	
Grayburg										
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,368.00	0.00	0.00	4,368.00	0.00	0.00	0.00	0.00	0.00	0.00	
San Andres										
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,110.34	0.00	0.00	5,110.34	0.00	0.00	0.00	0.00	0.00	0.00	
KOP, 6.00°/100' Build										
5,150.00	2.38	218.74	5,149.99	-0.64	-0.52	0.82	6.00	6.00	0.00	
5,200.00	5.38	218.74	5,199.87	-3.28	-2.63	4.21	6.00	6.00	0.00	
5,250.00	8.38	218.74	5,249.50	-7.95	-6.38	10.19	6.00	6.00	0.00	
5,300.00	11.38	218.74	5,298.76	-14.64	-11.75	18.77	6.00	6.00	0.00	
5,350.00	14.38	218.74	5,347.49	-23.34	-18.72	29.92	6.00	6.00	0.00	
5,400.00	17.38	218.74	5,395.58	-34.01	-27.28	43.60	6.00	6.00	0.00	
5,450.00	20.38	218.74	5,442.88	-46.62	-37.40	59.77	6.00	6.00	0.00	
5,500.00	23.38	218.74	5,489.28	-61.16	-49.06	78.40	6.00	6.00	0.00	
5,550.00	26.38	218.74	5,534.63	-77.56	-62.22	99.44	6.00	6.00	0.00	
5,600.00	29.38	218.74	5,578.82	-95.80	-76.85	122.81	6.00	6.00	0.00	
5,650.00	32.38	218.74	5,621.73	-115.81	-92.91	148.47	6.00	6.00	0.00	
5,700.00	35.38	218.74	5,663.24	-137.55	-110.35	176.34	6.00	6.00	0.00	
5,750.00	38.38	218.74	5,703.23	-160.95	-129.12	206.35	6.00	6.00	0.00	
5,800.00	41.38	218.74	5,741.59	-185.96	-149.18	238.40	6.00	6.00	0.00	
5,850.00	44.38	218.74	5,778.23	-212.49	-170.47	272.42	6.00	6.00	0.00	
5,900.00	47.38	218.74	5,813.03	-240.49	-192.93	308.31	6.00	6.00	0.00	
5,950.00	50.38	218.74	5,845.91	-269.87	-216.49	345.97	6.00	6.00	0.00	
6,000.00	53.38	218.74	5,876.77	-300.54	-241.11	385.30	6.00	6.00	0.00	
6,050.00	56.38	218.74	5,905.53	-332.44	-266.69	426.20	6.00	6.00	0.00	
6,100.00	59.38	218.74	5,932.12	-365.47	-293.19	468.54	6.00	6.00	0.00	
6,144.75	62.06	218.74	5,954.00	-395.92	-317.62	507.57	6.00	6.00	0.00	
Glorieta										
6,150.00	62.38	218.74	5,956.44	-399.54	-320.52	512.21	6.00	6.00	0.00	
6,200.00	65.38	218.74	5,978.46	-434.55	-348.61	557.10	6.00	6.00	0.00	
6,250.00	68.38	218.74	5,998.09	-470.42	-377.38	603.08	6.00	6.00	0.00	
6,300.00	71.38	218.74	6,015.28	-507.03	-406.76	650.02	6.00	6.00	0.00	
6,350.00	74.38	218.74	6,030.00	-544.30	-436.65	697.80	6.00	6.00	0.00	
6,400.00	77.38	218.74	6,042.20	-582.12	-466.99	746.29	6.00	6.00	0.00	
6,443.67	80.00	218.74	6,050.76	-615.52	-493.79	789.11	6.00	6.00	0.00	
Begin 80.00° Tangent										
6,500.00	80.00	218.74	6,060.54	-658.79	-528.50	844.58	0.00	0.00	0.00	
6,554.46	80.00	218.74	6,070.00	-700.62	-562.06	898.21	0.00	0.00	0.00	
U. Paddock										
6,600.00	80.00	218.74	6,077.91	-735.61	-590.12	943.06	0.00	0.00	0.00	
6,643.67	80.00	218.74	6,085.49	-769.15	-617.04	986.07	0.00	0.00	0.00	
Begin 6.00°/100' Build										

Database:	EDM 5000.1 Conroe DB	Local Co-ordinate Reference:	Well 114H
Company:	ConocoPhillips	TVD Reference:	WELL @ 3954.00usft (Precision 194)
Project:	Lea County, New Mexico (NAD 27)	MD Reference:	WELL @ 3954.00usft (Precision 194)
Site:	VGEU	North Reference:	Grid
Well:	114H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #8		

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)	
6,650.00	80.38	218.74	6,086.57	-774.02	-620.94	992.30	6.00	6.00	0.00	
6,700.00	83.38	218.74	6,093.63	-812.62	-651.91	1,041.80	6.00	6.00	0.00	
6,750.00	86.38	218.74	6,098.09	-851.46	-683.07	1,091.59	6.00	6.00	0.00	
6,800.00	89.38	218.74	6,099.94	-890.43	-714.33	1,141.55	6.00	6.00	0.00	
6,810.34	90.00	218.74	6,100.00	-898.50	-720.80	1,151.89	6.00	6.00	0.00	
Begin 90.00° Lateral										
6,900.00	90.00	218.74	6,100.00	-968.44	-776.91	1,241.55	0.00	0.00	0.00	
7,000.00	90.00	218.74	6,100.00	-1,046.44	-839.48	1,341.55	0.00	0.00	0.00	
7,100.00	90.00	218.74	6,100.00	-1,124.44	-902.06	1,441.55	0.00	0.00	0.00	
7,200.00	90.00	218.74	6,100.00	-1,202.44	-964.63	1,541.55	0.00	0.00	0.00	
7,300.00	90.00	218.74	6,100.00	-1,280.44	-1,027.21	1,641.55	0.00	0.00	0.00	
7,400.00	90.00	218.74	6,100.00	-1,358.45	-1,089.78	1,741.55	0.00	0.00	0.00	
7,500.00	90.00	218.74	6,100.00	-1,436.45	-1,152.36	1,841.55	0.00	0.00	0.00	
7,600.00	90.00	218.74	6,100.00	-1,514.45	-1,214.93	1,941.55	0.00	0.00	0.00	
7,700.00	90.00	218.74	6,100.00	-1,592.45	-1,277.51	2,041.55	0.00	0.00	0.00	
7,800.00	90.00	218.74	6,100.00	-1,670.45	-1,340.08	2,141.55	0.00	0.00	0.00	
7,900.00	90.00	218.74	6,100.00	-1,748.46	-1,402.66	2,241.55	0.00	0.00	0.00	
8,000.00	90.00	218.74	6,100.00	-1,826.46	-1,465.24	2,341.55	0.00	0.00	0.00	
8,100.00	90.00	218.74	6,100.00	-1,904.46	-1,527.81	2,441.55	0.00	0.00	0.00	
8,200.00	90.00	218.74	6,100.00	-1,982.46	-1,590.39	2,541.55	0.00	0.00	0.00	
8,300.00	90.00	218.74	6,100.00	-2,060.46	-1,652.96	2,641.55	0.00	0.00	0.00	
8,400.00	90.00	218.74	6,100.00	-2,138.47	-1,715.54	2,741.55	0.00	0.00	0.00	
8,500.00	90.00	218.74	6,100.00	-2,216.47	-1,778.11	2,841.55	0.00	0.00	0.00	
8,600.00	90.00	218.74	6,100.00	-2,294.47	-1,840.69	2,941.55	0.00	0.00	0.00	
8,700.00	90.00	218.74	6,100.00	-2,372.47	-1,903.26	3,041.55	0.00	0.00	0.00	
8,800.00	90.00	218.74	6,100.00	-2,450.47	-1,965.84	3,141.55	0.00	0.00	0.00	
8,900.00	90.00	218.74	6,100.00	-2,528.48	-2,028.41	3,241.55	0.00	0.00	0.00	
9,000.00	90.00	218.74	6,100.00	-2,606.48	-2,090.99	3,341.55	0.00	0.00	0.00	
9,100.00	90.00	218.74	6,100.00	-2,684.48	-2,153.57	3,441.55	0.00	0.00	0.00	
9,200.00	90.00	218.74	6,100.00	-2,762.48	-2,216.14	3,541.55	0.00	0.00	0.00	
9,300.00	90.00	218.74	6,100.00	-2,840.48	-2,278.72	3,641.55	0.00	0.00	0.00	
9,324.78	90.00	218.74	6,100.00	-2,859.81	-2,294.22	3,666.33	0.00	0.00	0.00	
PBHL										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
PBHL v8 - VGEU 114	0.00	218.74	6,100.00	-2,859.81	-2,294.22	654,337.13	768,058.20	32° 47' 44.967 N	103° 27' 39.637 W	
- plan hits target center										
- Rectangle (sides W60.00 H2,514.33 D40.00)										

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
9,324.78	6,100.00	5 1/2"	5-1/2	6

Database:	EDM 5000.1 Conroe DB	Local Co-ordinate Reference:	Well 114H
Company:	ConocoPhillips	TVD Reference:	WELL @ 3954.00usft (Precision 194)
Project:	Lea County, New Mexico (NAD 27)	MD Reference:	WELL @ 3954.00usft (Precision 194)
Site:	VGEU	North Reference:	Grid
Well:	114H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #8		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,593.00	1,593.00	Rustler		0.00	218.74	
1,685.00	1,685.00	Salado		0.00	218.74	
2,733.00	2,733.00	Tansil		0.00	218.74	
2,864.00	2,864.00	Yates		0.00	218.74	
3,140.00	3,140.00	Seven Rivers		0.00	218.74	
3,504.00	3,504.00	Queen		0.00	218.74	
4,033.00	4,033.00	Grayburg		0.00	218.74	
4,368.00	4,368.00	San Andres		0.00	218.74	
6,144.75	5,954.00	Glorieta		0.00	218.74	
6,554.46	6,070.00	U. Paddock		0.00	218.74	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
5,110.34	5,110.34	0.00	0.00	KOP, 6.00°/100' Build	
6,443.67	6,050.76	-615.52	-493.79	Begin 80.00° Tangent	
6,643.67	6,085.49	-769.15	-617.04	Begin 6.00°/100' Build	
6,810.34	6,100.00	-898.50	-720.80	Begin 90.00° Lateral	
9,324.78	6,100.00	-2,859.81	-2,294.22	PBHL	

T G M

Azimuths to Grid North
 True North: -0.48°
 Magnetic North: 6.69°

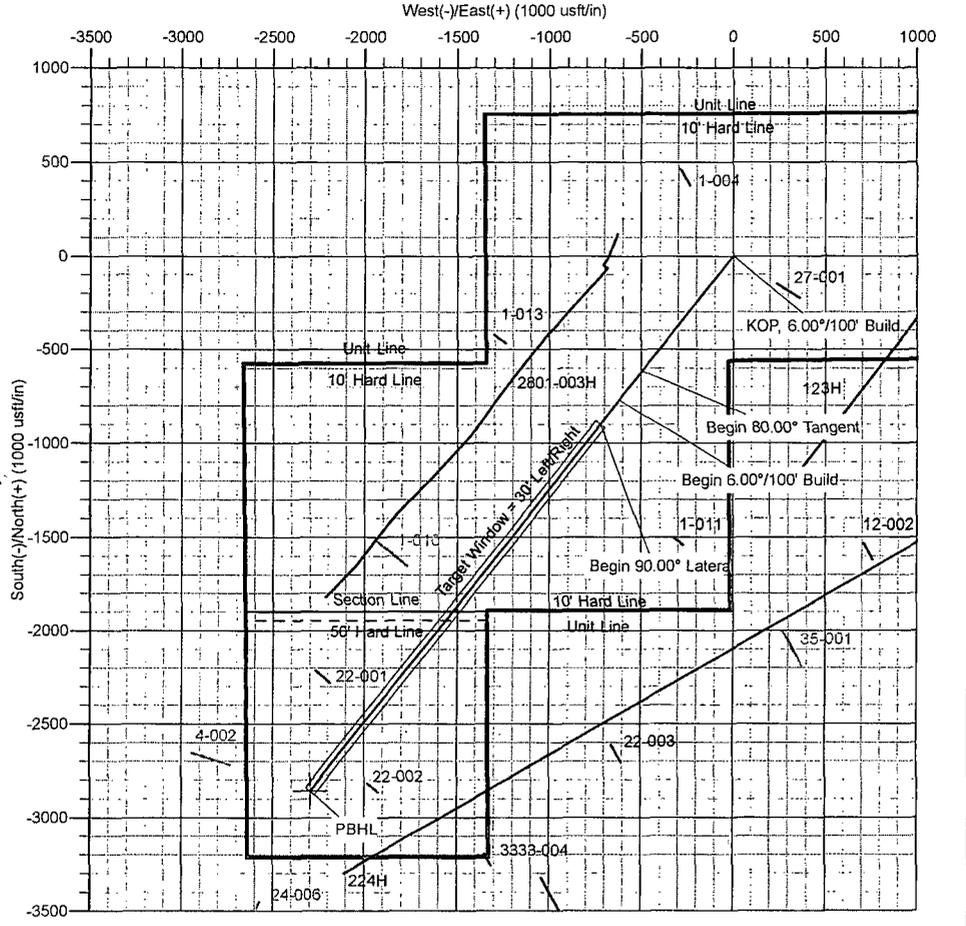
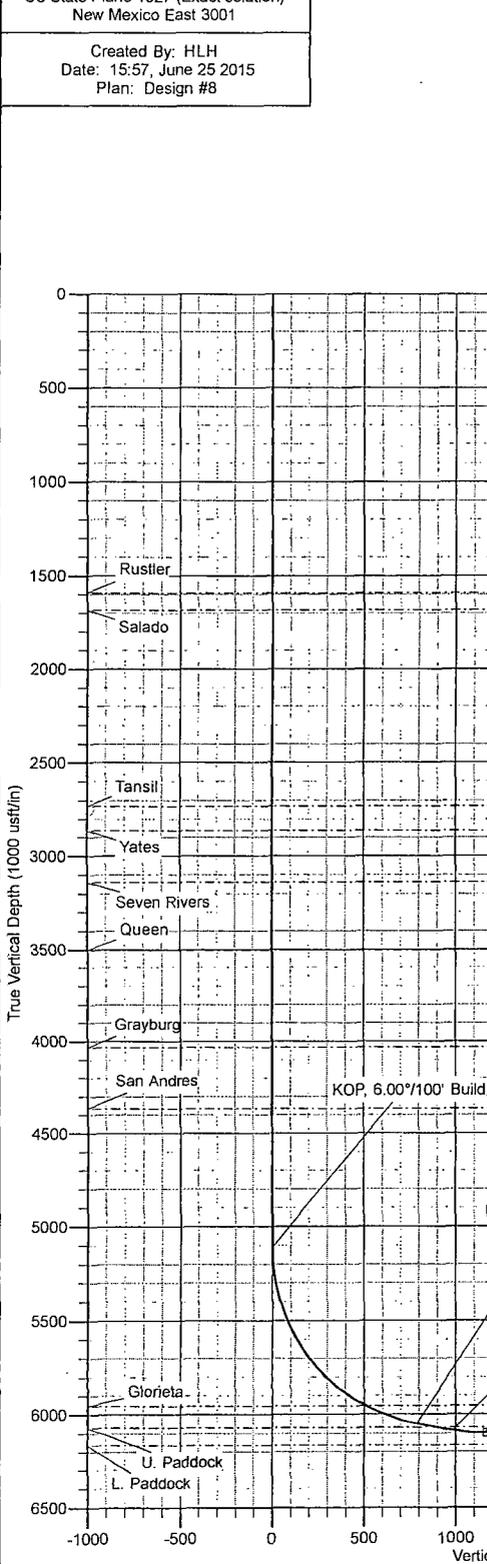
Magnetic Field
 Strength: 48553.4snT
 Dip Angle: 60.70°
 Date: 09/01/2015
 Model: BGGM2015

US State Plane 1927 (Exact solution)
 New Mexico East 3001

Created By: HLH
 Date: 15:57, June 25 2015
 Plan: Design #8

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
5110.34	0.00	0.00	5110.34	0.00	0.00	0.00	0.00	KOP, 6.00°/100' Build
6443.67	80.00	218.74	6050.76	-615.52	-493.79	789.11	789.11	Begin 80.00° Tangent
6643.67	80.00	218.74	6085.49	-769.15	-617.04	986.07	986.07	Begin 6.00°/100' Build
6810.34	90.00	218.74	6100.00	-898.50	-720.80	1151.89	1151.89	Begin 90.00° Lateral
9324.78	90.00	218.74	6100.00	-2859.81	-2294.22	3666.33	3666.33	PBHL



The customer should only rely on this document after independently verifying all paths, targets, coordinates, lease and hard lines represented. Any decisions made or wells drilled utilizing this or any other information supplied by MS Energy are at the sole risk and responsibility of the customer. MS Energy is not responsible for the accuracy of this schematic or the information contained herein.



H₂S Contingency Plan

H₂S Contingency Plan Holders:

Attached is an H₂S 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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II. Scope

III. Procedures

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H2S Safety Equipment and Monitoring Systems

V. Emergency Call List

VI. Public/Media Relations

VII. Public Notification/Evacuation

VIII. Forms/Reports



HYDROGEN SULFIDE (H₂S) 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 H₂S 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 H₂S release. Release of H₂S 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 H₂S 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 H₂S radius of exposure (ROE). All manned barricades must be equipped with an H₂S 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 H₂S. 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 H₂S 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

H ₂ S monitors	432.580.3770
Breathing air including cascade systems	
First aid and medical supplies	
Safety equipment	
H ₂ S Specialist	

EnerSafe Inc. – Odessa, TX

H ₂ S monitors (personal and fixed)	432.550.0600
Breathing air including cascade systems	
First aid and medical supplies	
Safety equipment	

Indian Fire & Safety – Hobbs, NM

H ₂ S monitors	575.393.3093
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 H₂S 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 H₂S areas shall have received training on the hazards, characteristics, and properties of H₂S, and on procedures and safety equipment applicable for use in H₂S 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	432.688.9057		505.330.5638
Jerry Moore	432.688.9057		806.683.6852
Terry Brumley Permian Drilling Field Supt.	432.688.6850		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

1701 N. Congress
Austin, TX 78701

512.463.6838
24 Hour Emergency: 512.463.6788

New Mexico Oil Conservation Commission

P. O. Box 1980
Hobbs, New Mexico 88240-1980

Office: 575.393.6161

Bureau of Land Management

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

Office: 575.234.5972
Fax: 575.885.9264
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 H₂S. 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. H₂S 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