

Submit 1 Copy To Appropriate District
Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO. 30-025-42104
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No. A-1320-9
7. Lease Name or Unit Agreement Name Vacuum Glorieta East Unit
8. Well Number 114H
9. OGRID Number 217817
10. Pool name or Wildcat Vacuum; Glorieta

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well ☒ Gas Well ☐ Other	HOBBS OCD
2. Name of Operator ConocoPhillips Company	SEP 08 2015
3. Address of Operator 600 N. Dairy Ashford Rd, P10-3096; Houston, TX 77079	RECEIVED
4. Well Location Unit Letter <u>L</u> : <u>1896</u> feet from the <u>South</u> line and <u>28</u> feet from the <u>West</u> line Section <u>27</u> Township <u>17S</u> Range <u>35E</u> NMPM LEA County	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3940' GL	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☒	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
CLOSED-LOOP SYSTEM ☐			
OTHER: ☐		OTHER: ☐	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

ConocoPhillips Company respectfully requests approval to change the approved plan. An additional review of our directional plan, with other wells in the vicinity, has resulted in the need to adjust our bottom-hole location and directional plan. The new bottom-hole location is: 1030' FNL and 2207' FEL, UL B, Sec. 33, T17S, R35E

Attached are the following documents.

- Revised directional well plan
- Revised wellbore schematic (includes changes to casing set depth, use of external packer, and increases sacks of cement planned)

Spud Date: 09/06/15

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Susan B. Maunder TITLE Sr. Regulatory Specialist DATE 8/31/15

Type or print name Susan B. Maunder E-mail address: Susan.B.Maunder@cop.com PHONE: 281-206-5281

For State Use Only

APPROVED BY: [Signature] TITLE Petroleum Engineer DATE 09/08/15
Conditions of Approval (if any):

SL: 09 2015

jm

WELL: Vacuum Glorietta East Unit 114H

SURFACE LOC: UL - L - S27 - T17S - R35E 1896' FSL 28' FWL
BH LOC: UL - B - S33 - T17S - R35E 1030' FNL 2207' FEL

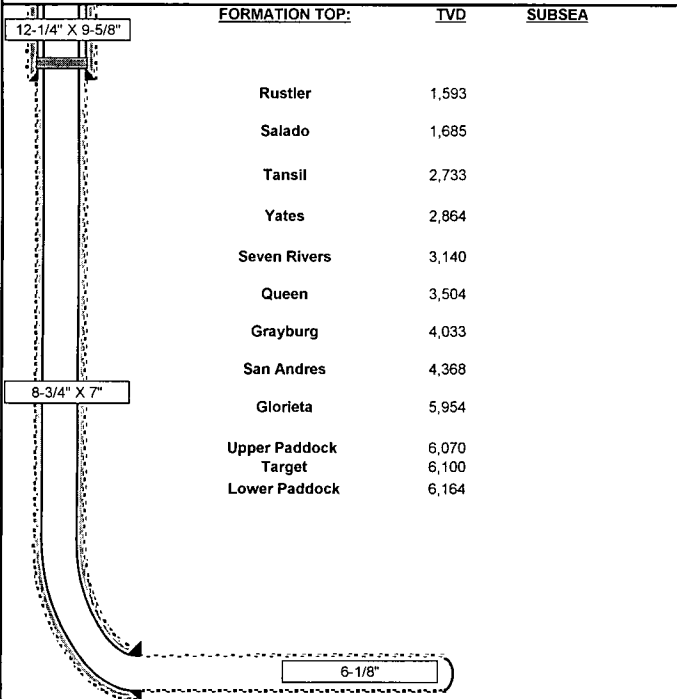
COUNTY, STATE:

API No.:
NDIC Permit:
BLM Permit: N/A

AFE:
Drilling Network No.:
Invoice Handler ID:
COST ESTIMATE
DRILLING
COMPLETION
FACILITIES
TOTAL

ELEVATIONS: GL 3,939.9'
KB -14' Rig - PD194

WH Coord.: LAT 32° 48' 13.07"
(NAD-27) LON 103° 27' 12.48"



Objective

Notes

Goals

CONTACTS

Drilling Engineer:
Geologist:
Onsite Drilling Rep.:

Drilling Supt.:

Office

Cell

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

DRILLING FLUID:	Type	Interval (MD)	Density (ppg)	Vis (sec/qt)	PV (cP)	YP (#/100R2)	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"X9-5/8"	1,640'	1,640'		452	272	TOC Surface
Intermediate:	8-3/4"X7"	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 Haliburton 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
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FORMATION EVALUATION:

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

Correlation Well:

OUR WORK IS NEVER SO URGENT OR IMPORTANT THAT WE CANNOT TAKE THE TIME TO DO IT SAFELY!



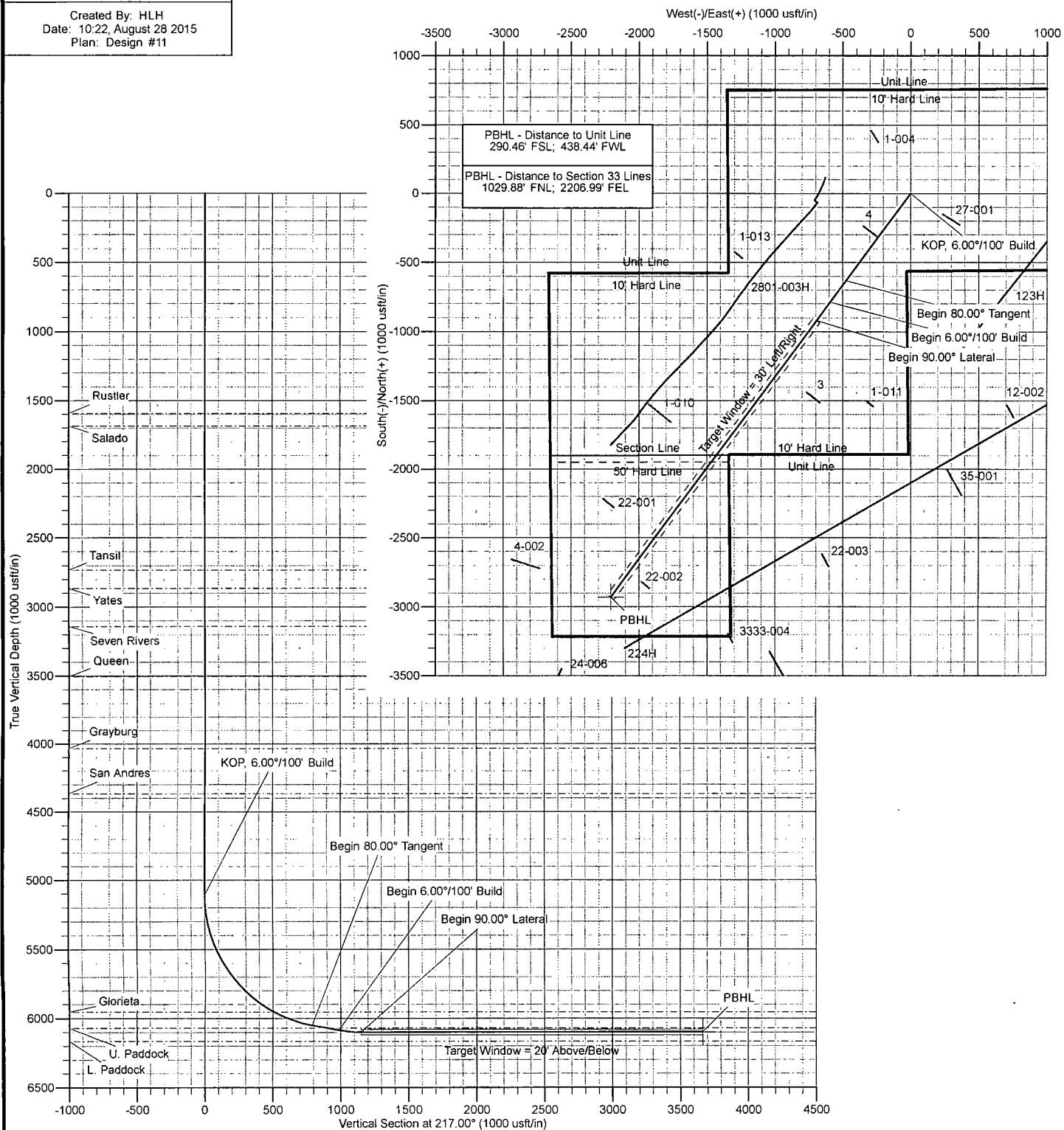
Azimuths to Grid North
 True North: -0.48°
 Magnetic North: 6.69°
 Magnetic Field
 Strength: 48553.4snT
 Dip Angle: 60.70°
 Date: 09/01/2015
 Model: BGGM2015

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	217.00	6050.76	-630.21	-474.90	789.11	789.11	Begin 80.00° Tangent
6643.67	80.00	217.00	6085.49	-787.51	-593.43	986.07	986.07	Begin 6.00°/100' Build
6810.34	90.00	217.00	6100.00	-919.94	-693.23	1151.89	1151.89	Begin 90.00° Lateral
9324.78	90.00	217.00	6100.00	-2928.06	-2206.45	3666.33	3666.33	PBHL

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

Created By: HLH
 Date: 10/22, August 28 2015
 Plan: Design #11





ConocoPhillips

Lea County, New Mexico (NAD 27)

VGEU

114H

Wellbore #1

Plan: Design #11

Standard Planning Report

28 August, 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 #11		

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 #11
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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	217.00

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	217.00	6,050.76	-630.21	-474.90	6.00	6.00	0.00	217.00	
6,643.67	80.00	217.00	6,085.49	-787.51	-593.43	0.00	0.00	0.00	0.00	
6,810.34	90.00	217.00	6,100.00	-919.94	-693.23	6.00	6.00	0.00	0.00	
9,324.78	90.00	217.00	6,100.00	-2,928.06	-2,206.45	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:	VGEU	North Reference:	Grid
Well:	114H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #11		

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:	VGEU	North Reference:	Grid
Well:	114H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #11		

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	217.00	5,149.99	-0.66	-0.50	0.82	6.00	6.00	0.00
5,200.00	5.38	217.00	5,199.87	-3.36	-2.53	4.21	6.00	6.00	0.00
5,250.00	8.38	217.00	5,249.50	-8.14	-6.14	10.19	6.00	6.00	0.00
5,300.00	11.38	217.00	5,298.76	-14.99	-11.30	18.77	6.00	6.00	0.00
5,350.00	14.38	217.00	5,347.49	-23.89	-18.00	29.92	6.00	6.00	0.00
5,400.00	17.38	217.00	5,395.58	-34.82	-26.24	43.60	6.00	6.00	0.00
5,450.00	20.38	217.00	5,442.88	-47.74	-35.97	59.77	6.00	6.00	0.00
5,500.00	23.38	217.00	5,489.28	-62.62	-47.18	78.40	6.00	6.00	0.00
5,550.00	26.38	217.00	5,534.63	-79.41	-59.84	99.44	6.00	6.00	0.00
5,600.00	29.38	217.00	5,578.82	-98.08	-73.91	122.81	6.00	6.00	0.00
5,650.00	32.38	217.00	5,621.73	-118.58	-89.35	148.47	6.00	6.00	0.00
5,700.00	35.38	217.00	5,663.24	-140.83	-106.13	176.34	6.00	6.00	0.00
5,750.00	38.38	217.00	5,703.23	-164.80	-124.18	206.35	6.00	6.00	0.00
5,800.00	41.38	217.00	5,741.59	-190.40	-143.47	238.40	6.00	6.00	0.00
5,850.00	44.38	217.00	5,778.23	-217.56	-163.95	272.42	6.00	6.00	0.00
5,900.00	47.38	217.00	5,813.03	-246.23	-185.55	308.31	6.00	6.00	0.00
5,950.00	50.38	217.00	5,845.91	-276.31	-208.21	345.97	6.00	6.00	0.00
6,000.00	53.38	217.00	5,876.77	-307.72	-231.88	385.30	6.00	6.00	0.00
6,050.00	56.38	217.00	5,905.53	-340.38	-256.49	426.20	6.00	6.00	0.00
6,100.00	59.38	217.00	5,932.12	-374.19	-281.97	468.54	6.00	6.00	0.00
6,144.75	62.06	217.00	5,954.00	-405.37	-305.46	507.57	6.00	6.00	0.00
Glorieta									
6,150.00	62.38	217.00	5,956.44	-409.07	-308.26	512.21	6.00	6.00	0.00
6,200.00	65.38	217.00	5,978.46	-444.92	-335.27	557.10	6.00	6.00	0.00
6,250.00	68.38	217.00	5,998.09	-481.64	-362.94	603.08	6.00	6.00	0.00
6,300.00	71.38	217.00	6,015.28	-519.13	-391.19	650.02	6.00	6.00	0.00
6,350.00	74.38	217.00	6,030.00	-557.29	-419.95	697.80	6.00	6.00	0.00
6,400.00	77.38	217.00	6,042.20	-596.01	-449.13	746.29	6.00	6.00	0.00
6,443.67	80.00	217.00	6,050.76	-630.21	-474.90	789.11	6.00	6.00	0.00
Begin 80.00° Tangent									
6,500.00	80.00	217.00	6,060.54	-674.51	-508.28	844.58	0.00	0.00	0.00
6,554.46	80.00	217.00	6,070.00	-717.34	-540.56	898.21	0.00	0.00	0.00
U. Paddock									
6,600.00	80.00	217.00	6,077.91	-753.16	-567.55	943.06	0.00	0.00	0.00
6,643.67	80.00	217.00	6,085.49	-787.51	-593.43	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 #11		

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	217.00	6,086.57	-792.49	-597.18	992.30	6.00	6.00	0.00
6,700.00	83.38	217.00	6,093.63	-832.02	-626.97	1,041.80	6.00	6.00	0.00
6,750.00	86.38	217.00	6,098.09	-871.78	-656.94	1,091.59	6.00	6.00	0.00
6,800.00	89.38	217.00	6,099.94	-911.68	-687.00	1,141.55	6.00	6.00	0.00
6,810.34	90.00	217.00	6,100.00	-919.94	-693.23	1,151.89	6.00	6.00	0.00
Begin 90.00° Lateral									
6,900.00	90.00	217.00	6,100.00	-991.55	-747.18	1,241.55	0.00	0.00	0.00
7,000.00	90.00	217.00	6,100.00	-1,071.41	-807.37	1,341.55	0.00	0.00	0.00
7,100.00	90.00	217.00	6,100.00	-1,151.27	-867.55	1,441.55	0.00	0.00	0.00
7,200.00	90.00	217.00	6,100.00	-1,231.14	-927.73	1,541.55	0.00	0.00	0.00
7,300.00	90.00	217.00	6,100.00	-1,311.00	-987.91	1,641.55	0.00	0.00	0.00
7,400.00	90.00	217.00	6,100.00	-1,390.86	-1,048.09	1,741.55	0.00	0.00	0.00
7,500.00	90.00	217.00	6,100.00	-1,470.73	-1,108.27	1,841.55	0.00	0.00	0.00
7,600.00	90.00	217.00	6,100.00	-1,550.59	-1,168.45	1,941.55	0.00	0.00	0.00
7,700.00	90.00	217.00	6,100.00	-1,630.46	-1,228.64	2,041.55	0.00	0.00	0.00
7,800.00	90.00	217.00	6,100.00	-1,710.32	-1,288.82	2,141.55	0.00	0.00	0.00
7,900.00	90.00	217.00	6,100.00	-1,790.18	-1,349.00	2,241.55	0.00	0.00	0.00
8,000.00	90.00	217.00	6,100.00	-1,870.05	-1,409.18	2,341.55	0.00	0.00	0.00
8,100.00	90.00	217.00	6,100.00	-1,949.91	-1,469.36	2,441.55	0.00	0.00	0.00
8,200.00	90.00	217.00	6,100.00	-2,029.77	-1,529.54	2,541.55	0.00	0.00	0.00
8,300.00	90.00	217.00	6,100.00	-2,109.64	-1,589.73	2,641.55	0.00	0.00	0.00
8,400.00	90.00	217.00	6,100.00	-2,189.50	-1,649.91	2,741.55	0.00	0.00	0.00
8,500.00	90.00	217.00	6,100.00	-2,269.36	-1,710.09	2,841.55	0.00	0.00	0.00
8,600.00	90.00	217.00	6,100.00	-2,349.23	-1,770.27	2,941.55	0.00	0.00	0.00
8,700.00	90.00	217.00	6,100.00	-2,429.09	-1,830.45	3,041.55	0.00	0.00	0.00
8,800.00	90.00	217.00	6,100.00	-2,508.95	-1,890.63	3,141.55	0.00	0.00	0.00
8,900.00	90.00	217.00	6,100.00	-2,588.82	-1,950.81	3,241.55	0.00	0.00	0.00
9,000.00	90.00	217.00	6,100.00	-2,668.68	-2,011.00	3,341.55	0.00	0.00	0.00
9,100.00	90.00	217.00	6,100.00	-2,748.55	-2,071.18	3,441.55	0.00	0.00	0.00
9,200.00	90.00	217.00	6,100.00	-2,828.41	-2,131.36	3,541.55	0.00	0.00	0.00
9,300.00	90.00	217.00	6,100.00	-2,908.27	-2,191.54	3,641.55	0.00	0.00	0.00
9,324.78	90.00	217.00	6,100.00	-2,928.06	-2,206.45	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
- hit/miss target									
- Shape									
PBHL v11 - VGEU 11:	0.00	217.00	6,100.00	-2,928.06	-2,206.45	654,268.88	768,145.96	32° 47' 44.284 N	103° 27' 38.616 W
- plan hits target center									
- Rectangle (sides W60.00 H2,514.44 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 #11		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,593.00	1,593.00	Rustler		0.00	217.00	
1,685.00	1,685.00	Salado		0.00	217.00	
2,733.00	2,733.00	Tansil		0.00	217.00	
2,864.00	2,864.00	Yates		0.00	217.00	
3,140.00	3,140.00	Seven Rivers		0.00	217.00	
3,504.00	3,504.00	Queen		0.00	217.00	
4,033.00	4,033.00	Grayburg		0.00	217.00	
4,368.00	4,368.00	San Andres		0.00	217.00	
6,144.75	5,954.00	Glorieta		0.00	217.00	
6,554.46	6,070.00	U. Paddock		0.00	217.00	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
5,110.34	5,110.34	0.00	0.00	KOP, 6.00°/100' Build	
6,443.67	6,050.76	-630.21	-474.90	Begin 80.00° Tangent	
6,643.67	6,085.49	-787.51	-593.43	Begin 6.00°/100' Build	
6,810.34	6,100.00	-919.94	-693.23	Begin 90.00° Lateral	
9,324.78	6,100.00	-2,928.06	-2,206.45	PBHL	