

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 PROPOSALS.)

1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐

2. Name of Operator
ConocoPhillips Company

3. Address of Operator
600 N. Dairy Ashford Rd, P10-3096; Houston, TX 77079

4. Well Location
Unit Letter L : 1896 feet from the South line and 28 feet from the West line
Section 27 Township 17S Range 35E 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 sidetrack this well due to hole sticking issues. Your office was notified by Fred Ahmadi Fard, Drilling Engineer. Per your request the following information is provided:

- Sticking occurred at 6885' MD
- Top of fish is 6730' MD; approx. 155' of fish left in hole with 10 ppg brine.
- Pullback depth to start sidetrack, without cement plug, is 6381' MD
- The new bottom-hole location is: 968' FNL and 2267' FEL, UL B, Sec. 33, T17S, R35E (NAD 27)

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: Sidetrack spud date 09/28/15

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 9/28/15

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: Petroleum Engineer TITLE Petroleum Engineer DATE 09/28/15
Conditions of Approval (if any):

SEP 29 2015



Company: ConocoPhillips
Site: VGEU
Well: 114H
Project: Lea County, New Mexico (NAD 27)
Rig: Precision 194



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

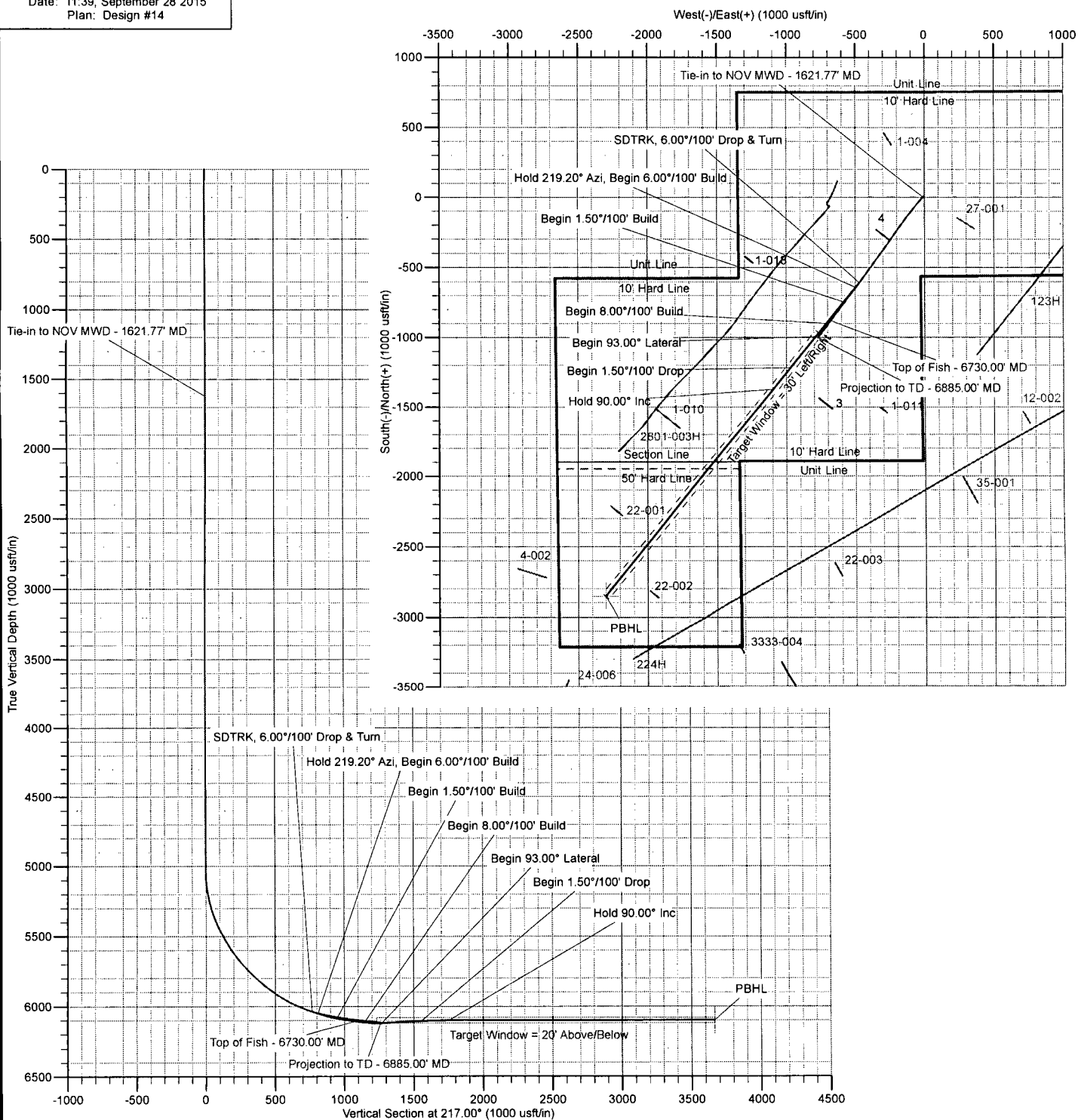
Magnetic Field
Strength: 48553.4snT
Dip Angle: 60.70°
Date: 09/01/2015
Model: BGM2015

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

Created By: HLH
Date: 11:39, September 28 2015
Plan: Design #14

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
6381.00	73.30	217.10	6037.88	-605.96	-470.35	767.00	0.00	SDTRK, 6.00°/100' Drop & Turn
6425.87	71.50	219.20	6051.45	-639.59	-496.76	809.75	42.76	Hold 219.20° Azi, Begin 6.00°/100' Build
6567.53	80.00	219.20	6086.29	-745.89	-583.46	946.83	179.94	Begin 1.50°/100' Build
6767.53	83.00	219.20	6115.84	-899.16	-708.46	1144.47	377.73	Begin 8.00°/100' Build
6892.53	93.00	219.20	6120.20	-995.85	-787.32	1269.14	502.49	Begin 93.00° Lateral
7178.53	93.00	219.20	6105.23	-1217.18	-967.83	1554.54	788.10	Begin 1.50°/100' Drop
7378.53	90.00	219.20	6100.00	-1372.10	-1094.18	1754.30	988.01	Hold 90.00° Inc
9291.97	90.00	219.20	6100.00	-2854.91	-2303.53	3666.33	2901.45	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.



ConocoPhillips

Lea County, New Mexico (NAD 27)

VGEU

114H

Wellbore #2

Plan: Design #14

Standard Planning Report

28 September, 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 #2		
Design:	Design #14		

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

Wellbore	Wellbore #2				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2015	09/01/15	7.17	60.70	48,553

Design	Design #14			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	6,381.00
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
6,381.00	73.30	217.10	6,037.88	-605.96	-470.35	0.00	0.00	0.00	0.00	
6,425.87	71.50	219.20	6,051.45	-639.59	-496.76	6.00	-4.01	4.68	132.28	
6,567.53	80.00	219.20	6,086.29	-745.89	-583.46	6.00	6.00	0.00	0.00	
6,767.53	83.00	219.20	6,115.85	-899.16	-708.46	1.50	1.50	0.00	0.00	
6,892.53	93.00	219.20	6,120.20	-995.85	-787.32	8.00	8.00	0.00	0.00	
7,178.53	93.00	219.20	6,105.23	-1,217.18	-967.83	0.00	0.00	0.00	0.00	
7,378.53	90.00	219.20	6,100.00	-1,372.10	-1,094.18	1.50	-1.50	0.00	-180.00	
9,291.97	90.00	219.20	6,100.00	-2,854.91	-2,303.53	0.00	0.00	0.00	0.00	PBHL v14 - VGEU

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 #2		
Design:	Design #14		

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)
6,381.00	73.30	217.10	6,037.88	-605.96	-470.35	767.00	0.00	0.00	0.00
SDTRK, 6.00°/100' Drop & Turn									
6,400.00	72.54	217.98	6,043.46	-620.36	-481.41	785.16	6.00	-4.03	4.65
6,425.87	71.50	219.20	6,051.45	-639.59	-496.76	809.75	6.00	-4.00	4.70
Hold 219.20° Azi, Begin 6.00°/100' Build									
6,450.00	72.95	219.20	6,058.81	-657.40	-511.28	832.72	6.00	6.00	0.00
6,500.00	75.95	219.20	6,072.22	-694.72	-541.72	880.85	6.00	6.00	0.00
6,550.00	78.95	219.20	6,083.08	-732.54	-572.57	929.61	6.00	6.00	0.00
6,567.53	80.00	219.20	6,086.29	-745.89	-583.46	946.83	6.00	6.00	0.00
Begin 1.50°/100' Build									
6,600.00	80.49	219.20	6,091.79	-770.69	-603.69	978.81	1.50	1.50	0.00
6,700.00	81.99	219.20	6,107.02	-847.28	-666.15	1,077.57	1.50	1.50	0.00
6,767.53	83.00	219.20	6,115.85	-899.16	-708.46	1,144.47	1.50	1.50	0.00
Begin 8.00°/100' Build									
6,800.00	85.60	219.20	6,119.07	-924.20	-728.88	1,176.75	8.00	8.00	0.00
6,850.00	89.60	219.20	6,121.17	-962.90	-760.45	1,226.66	8.00	8.00	0.00
6,892.53	93.00	219.20	6,120.20	-995.85	-787.32	1,269.14	8.00	8.00	0.00
Begin 93.00° Lateral									
6,900.00	93.00	219.20	6,119.81	-1,001.63	-792.03	1,276.59	0.00	0.00	0.00
7,000.00	93.00	219.20	6,114.58	-1,079.02	-855.15	1,376.38	0.00	0.00	0.00
7,100.00	93.00	219.20	6,109.34	-1,156.41	-918.27	1,476.17	0.00	0.00	0.00
7,178.53	93.00	219.20	6,105.23	-1,217.18	-967.83	1,554.54	0.00	0.00	0.00
Begin 1.50°/100' Drop									
7,200.00	92.68	219.20	6,104.17	-1,233.80	-981.38	1,575.97	1.50	-1.50	0.00
7,300.00	91.18	219.20	6,100.81	-1,311.24	-1,044.55	1,675.83	1.50	-1.50	0.00
7,378.53	90.00	219.20	6,100.00	-1,372.10	-1,094.18	1,754.30	1.50	-1.50	0.00
Hold 90.00° Inc									
7,400.00	90.00	219.20	6,100.00	-1,388.73	-1,107.75	1,775.75	0.00	0.00	0.00
7,500.00	90.00	219.20	6,100.00	-1,466.23	-1,170.95	1,875.68	0.00	0.00	0.00
7,600.00	90.00	219.20	6,100.00	-1,543.72	-1,234.15	1,975.61	0.00	0.00	0.00
7,700.00	90.00	219.20	6,100.00	-1,621.22	-1,297.36	2,075.53	0.00	0.00	0.00
7,800.00	90.00	219.20	6,100.00	-1,698.71	-1,360.56	2,175.46	0.00	0.00	0.00
7,900.00	90.00	219.20	6,100.00	-1,776.21	-1,423.76	2,275.38	0.00	0.00	0.00
8,000.00	90.00	219.20	6,100.00	-1,853.70	-1,486.97	2,375.31	0.00	0.00	0.00
8,100.00	90.00	219.20	6,100.00	-1,931.20	-1,550.17	2,475.24	0.00	0.00	0.00
8,200.00	90.00	219.20	6,100.00	-2,008.69	-1,613.37	2,575.16	0.00	0.00	0.00
8,300.00	90.00	219.20	6,100.00	-2,086.18	-1,676.58	2,675.09	0.00	0.00	0.00
8,400.00	90.00	219.20	6,100.00	-2,163.68	-1,739.78	2,775.02	0.00	0.00	0.00
8,500.00	90.00	219.20	6,100.00	-2,241.17	-1,802.98	2,874.94	0.00	0.00	0.00
8,600.00	90.00	219.20	6,100.00	-2,318.67	-1,866.18	2,974.87	0.00	0.00	0.00
8,700.00	90.00	219.20	6,100.00	-2,396.16	-1,929.39	3,074.79	0.00	0.00	0.00
8,800.00	90.00	219.20	6,100.00	-2,473.66	-1,992.59	3,174.72	0.00	0.00	0.00
8,900.00	90.00	219.20	6,100.00	-2,551.15	-2,055.79	3,274.65	0.00	0.00	0.00
9,000.00	90.00	219.20	6,100.00	-2,628.65	-2,119.00	3,374.57	0.00	0.00	0.00
9,100.00	90.00	219.20	6,100.00	-2,706.14	-2,182.20	3,474.50	0.00	0.00	0.00
9,200.00	90.00	219.20	6,100.00	-2,783.64	-2,245.40	3,574.43	0.00	0.00	0.00
9,291.97	90.00	219.20	6,100.00	-2,854.91	-2,303.53	3,666.33	0.00	0.00	0.00
PBHL - 5.1/2"									

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 #2		
Design:	Design #14		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
PBHL v14 - VGEU 11	0.00	219.20	6,100.00	-2,854.84	-2,303.62	654,342.10	768,048.80	32° 47' 45.017 N	103° 27' 39.747 W
- plan misses target center by 0.11usft at 9291.97usft MD (6100.00 TVD, -2854.91 N, -2303.53 E)									
- Rectangle (sides W60.00 H2,435.36 D40.00)									

Casing Points				
Measured Depth	Vertical Depth	Name	Casing Diameter	Hole Diameter
(usft)	(usft)		(")	(")
9,291.97	6,100.00	5 1/2"	5-1/2	6

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
6,381.00	6,037.88	-605.96	-470.35	SDTRK, 6.00°/100' Drop & Turn
6,425.87	6,051.45	-639.59	-496.76	Hold 219.20° Azi, Begin 6.00°/100' Build
6,567.53	6,086.29	-745.89	-583.46	Begin 1.50°/100' Build
6,767.53	6,115.85	-899.16	-708.46	Begin 8.00°/100' Build
6,892.53	6,120.20	-995.85	-787.32	Begin 93.00° Lateral
7,178.53	6,105.23	-1,217.18	-967.83	Begin 1.50°/100' Drop
7,378.53	6,100.00	-1,372.10	-1,094.18	Hold 90.00° Inc
9,291.97	6,100.00	-2,854.91	-2,303.53	PBHL

Vacuum Glorieta East Unit 01-14H Wellbore Schematic_Sidetracked Hole

Wellbore Section	Formation Characteristics				EMW		Mud Properties		Wellbore Design		
	Formation	MD (DF)	TVD (DF)	Hazards	Predicted Pore Press EMW	Predicted Frac EMW			Hole Size	Casing Profile	Casing/Cement/FIT
COND											
SURFACE							Native	8.4 PPG	12-1/4"		16" set to 60' TOC @ Surface (9-5/8" Csg)
	Rustler	1,593	1,593		8.33 ppg	19.23 ppg					12-1/4" TD @ 1,655' TVD 9-5/8" 36# J-55 LTC @ 1,640', FIT @ 12.0 PPG EMW
INTERMEDIATE	Salado	1,685	1,685		8.94 ppg	13.50 ppg					
	Tansil	2,733	2,733		8.94 ppg	13.50 ppg					
	Yates	2,864	2,864	Anticipated Gas Flow	8.94 ppg	13.50 ppg					
	Seven Rivers	3,140	3,140		8.94 ppg	13.50 ppg					
	Queen	3,504	3,504		8.94 ppg	13.50 ppg					
	Grayburg	4,033	4,033	Co2 & Water flood ~4100'-5100'	8.94 ppg	13.50 ppg					
	San Andres KOP	4,368 5,082	4,368 5,082	Loss Circulation ~4400' to 6100' Differential sticking	7.04 ppg	13.26 ppg					
	Glorieta	6,185	5,954		7.42 ppg	11.54 ppg					
	U. Paddock	6,516	6,070	Potential H2S	7.29 ppg	11.54 ppg					
							Brine / Salt Mud	10 ppg	8-3/4"		
	Top of Fish	6,730	6,098	83.0 deg Inc.							
	Hole Depth	6,885	6,117	85.1 deg @ bit							
	New LP	6,892	6,120								

Directional Survey - Original Hole		
KOP	5,082' MD	DLS 6°/100 ft.
EOBR-1	6,650 ft. MD/ 6,089ft. TVD	80 deg tangent
Tagent	6,650 ft. MD/ 6,087ft. TVD	80 deg tangent
BR2	6836 ft. MD/ 6,087ft. TVD	DLS 6°/100 ft.
TOF	6,730 ft. MD/ 6,098 ft. TVD	83.0°
Hole Depth	6,885 ft. MD/ 6,117 ft. TVD	85.1°

Directional Survey - Sidetracked Hole		
KOP	6,381' MD/ 6,037' TVD	BR1 6°/100'
EOBR-1	6,426' MD/ 6,051' TVD	Inclination ≈ 71.5°
Start BR2	6,426' MD/ 6,051' TVD	BR2 6°/100'
EOBR2	6,567' MD/ 6,086' TVD	Inclination ≈ 80.0°
Start Tangent	6,567 ft. MD/ 6,086' TVD	BR3 1.5°/100'
EOBR3	6,767' MD/ 6,116' TVD	Inclination ≈ 83.0°
Start BR4	6,767' MD/ 6,116' TVD	BR4 8°/100'
LP	6,892' MD/ 6,120' TVD	Inclination ≈ 93.0°
Hold Inclination	6,892' MD/ 6,120' TVD	BR5 0°/100'
EOBR5	7,178' MD/ 6,105' TVD	Inclination ≈ 93.0°
Start BR6	7,178' MD/ 6,105' TVD	BR6 -1.5°/100'
EOBR6	7,378' MD/ 6,100' TVD	Inclination ≈ 90.0°
Hold Inclination to	9,292' MD/ 6,100' TVD	Hold 90° to TD