

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*5. Lease Serial No.
NMNM114968

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.

HH CE 35 2 FED 64H

2. Name of Operator

CHEVRON USA INCORPORATED

Contact: DORIAN K FUENTES

E-Mail: DJVO@CHEVRON.COM

9. API Well No.

30-015-44349-00-X1

3a. Address

6301 DEAUVILLE BLVD
MIDLAND, TX 79706

3b. Phone No. (include area code)

Ph: 432-687-7631

10. Field and Pool or Exploratory Area

PURPLE SAGE-WOLFCAMP (GAS)

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 35 T25S R27E NESE 2440FSL 475FEL
32.085642 N Lat, 104.153761 W Lon

11. County or Parish, State

EDDY COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Change to Original A
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	PD

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

Chevron respectfully request a variance from the original directional plan, which will change the first/last points and bottom hole location. The original directional plan was bi-directional (N&S), but with the updated targets given by CVX geologist, the well path will be drilled to the South.

Chevron also respectfully request well name & number change from HH CE 25 2 FED 64H to HH CE 35 2 FED 006 4H as referenced on the Sundry.

320468

BHL from 280 S & 330 E to 180 S & 1590 E
FTP from 330 N & 330 E to 2654 S & 1590 E
LTP from 2640 S & 430 E to 330 S & 1590 E

Please refer to the attached.

Carlsbad Field Office
OCD Artesia**BUREAU OF LAND CONSERVATION**
ARTESIA DISTRICT

NOV 29 2017

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #386742 verified by the BLM Well Information System

For CHEVRON USA INCORPORATED, sent to the Carlsbad

Committed to AFMSS for processing by PRISCILLA PEREZ on 10/02/2017 (18PP0017SE)

Name (Printed/Typed) DORIAN K FUENTES

Title REGULATORY SPECIALIST

Signature (Electronic Submission)

Date 08/30/2017

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By ZOTA STEVENS

Title PETROLEUM ENGINEER

Date 11/19/2017

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

Office Carlsbad

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

(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

RUP 12-5-17

Additional data for EC transaction #386742 that would not fit on the form

32. Additional remarks, continued

Should questions arise please contact me @ djvo@chevron.com or Rod @ 281-413-9794.

Delaware Basin Changes to APD for Federal Well



HH CE 35 2 FED 006	1H	30-015-44347
HH CE 35 2 FED 006	2H	30-015- 44346
HH CE 35 2 FED 006	3H	30-015- 44350
HH CE 35 2 FED 006	4H	30-015- 44349
HH CE 35 2 FED 006	5H	30-015- 44345
HH CE 35 2 FED 006	6H	30-015- 44348

CHEVRON CONTACT:

RODERICK MILLIGAN
DRILLING ENGINEER
1400 SMITH ST.
HOUSTON, TX 77002

DESK: HOU140/43-130
CELL: 281-413-9794
EMAIL: RODERICK.MILLIGAN@CHEVRON.COM

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-44349	Pool Code 98220	Pool Name Purple Sage - Wilcox (Gas)
Property Code 312938 320468	Property Name HH CE 35 02 FED 006	Well Number 4H
GRID No 4323	Operator Name CHEVRON U.S.A. INC.	Elevation 3145'

Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	35	25 SOUTH	27 EAST, N.M.P.M.		2440'	SOUTH	475'	EAST	EDDY

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
O	2	26 SOUTH	27 EAST, N.M.P.M.		180'	SOUTH	1590'	EAST	EDDY

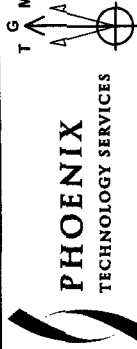
Dedicated Acres 640	Consolidation Code	Order No.
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No allowable well be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division

PROPOSED FIRST TAKE POINT X= 554,656 NAD 27 Y= 395,096 LAT 32 08 11.13 LONG 104 15 58.56 X= 595,840 NAD83 Y= 395,154 LAT 32 08 23.5 LONG 104 15 73.48 MID POINT X= 554,608 NAD 27 Y= 392,442 LAT 32 07 58.16 LONG 104 15 70.23 X= 595,792 NAD83 Y= 392,499 LAT 32 07 59.39 LONG 104 15 75.15 PROPOSED LAST TAKE POINT X= 554,551 NAD 27 Y= 387,402 LAT 32 06 49.62 LONG 104 15 72.03 X= 595,745 NAD83 Y= 387,460 LAT 32 06 50.84 LONG 104 15 76.95	HH CE 35 02 FED 006 NO 4H WELL X= 555,767 NAD 27 Y= 394,882 LAT 32 08 11.19 LONG 104 15 32.69 X= 595,951 NAD83 Y= 394,941 LAT 32 08 56.42 LONG 104 15 37.6 ELEVATION = 3145 NAD 88 CORNER ORIGINATE TABLE NAD 27 A = 397,933 Z X= 553,702 88 B = 397,443 Z X= 556,293 47 C = 392,440 45 X= 553,545 40 D = 392,443 11 X= 556,191 44 E = 387,033 64 X= 553,461 53 F = 387,127 2 X= 556,148 39 PROPOSED BOTTOM HOLE LOCATION X= 554,559 NAD 27 Y= 387,252 LAT 32 06 45.49 LONG 104 15 72.09 X= 595,744 NAD83 Y= 387,339 LAT 32 06 46.72 LONG 104 15 77.00	Proposed First Take Point 2654 FSL 1590' FEL Sec 35 S 0° 00' 22" W 2,654.76 N 79° 05' 47" W 1,131.84 475' 2440' T25S-R27E T26S-R27E Mid Point Sec 2 Proposed Last Take Point 330 FSL 1590' FEL 180' 1590'	OPERATOR 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. Signature: <i>[Signature]</i> Printed Name: <i>[Name]</i> Date of Survey: <i>11-10-2016</i> Signature and Seal of Professional Surveyor: <i>[Signature]</i> Date of Survey: <i>8-22-2017</i> Certificate Number: <i>23006</i>
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Project: Eddy County, NM (NAD27 NME)
Site: HH CE 35 02 Fed 006
Well: 4H
Wellbore: OH
Design: Plan 3 11-06-17
Rig:



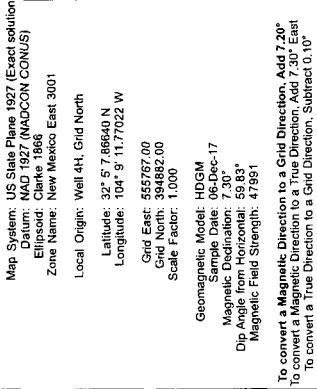
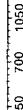
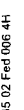
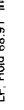
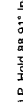
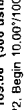
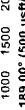
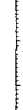
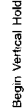
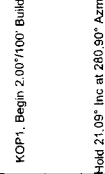
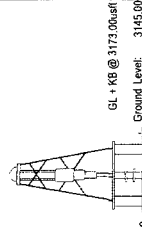
Azimuths to Grid North
True North: -0.10°
Magnetic North: 7.20°

Magnetic Field
Strength: 47990.5snT
Dip Angle: 59.83°
Date: 12/6/2017
Model: HDGM

	+NL-S	+EL-W	Northing	Ground Level:	3145.
	0.00	0.00	394882.00	Easting	3
					555767.00

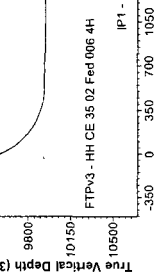
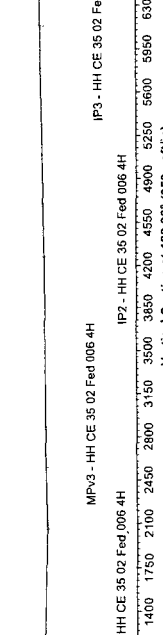
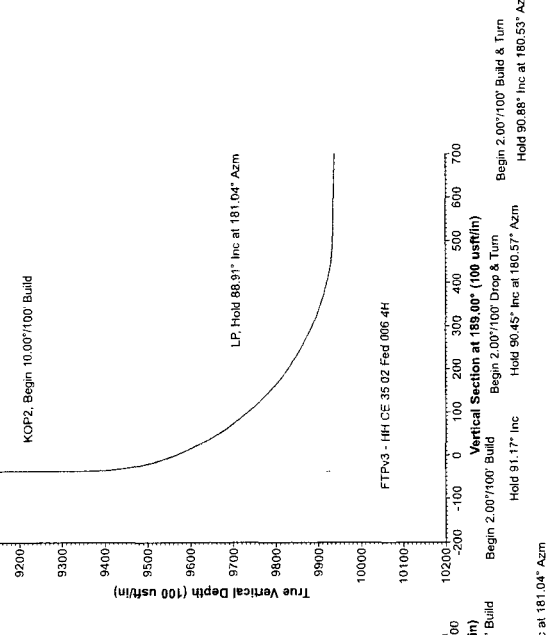
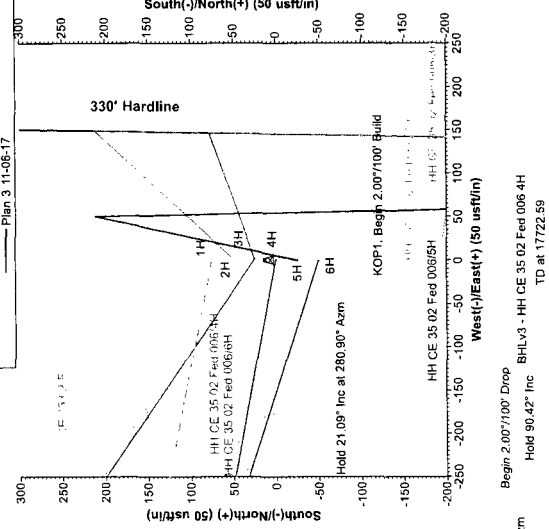
Sec	MD	Inc	Azi	TPO	+W/S	+E/W	Dwg	Trace
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	3904.62	21.09	280.90	303.96	36.30	-188.47	2.00	280.90
3	2055.61	0.00	0.00	2000.00	0.00	0.00	0.00	0.00
4	5131.87	21.09	280.90	4983.04	177.70	-392.53	0.00	0.00
5	6168.49	0.00	0.00	6000.00	214.00	-111.00	2.00	160.00
6	9540.28	88.31	181.04	9383.54	214.95	-111.00	0.00	0.00
7	10325.28	88.31	181.04	9965.02	-185.90	-114.92	10.00	181.04
8	11296.48	88.31	181.04	9965.02	-200.16	-115.16	2.00	-0.02
9	12304.39	91.17	181.04	9959.00	-239.58	-158.19	0.00	0.00
10	12837.07	90.45	181.07	9959.00	-239.58	-158.19	0.00	0.00
11	13234.07	90.45	180.57	9944.70	-178.93	-178.65	0.00	-140.00
12	13722.57	90.45	180.57	9944.70	-153.51	-178.65	2.00	-5.31
13	14245.69	90.38	180.53	9943.75	-193.11	-178.64	2.00	-5.31
14	16136.87	90.42	180.53	9947.94	-604.38	-1193.32	2.00	61.61
15	17234.57	90.42	180.53	9947.94	-604.38	-1193.32	2.00	179.93
16	17722.57	90.42	180.53	9903.00	-765.00	-1208.00	0.00	0.00
17	17722.57	90.42	180.53	9903.00	-765.00	-1208.00	0.00	0.00

DESIGN TARGET DATE	DESIGN TARGET DATE		TVD	DESIGN TARGET DATE	
	+N+S	+E+W		+N+S	+E+W
1980	7930.00	1080.00	9803.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
1981	7930.00	1080.00	9810.00		
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1982	7930.00	1080.00	9810.00		
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1989	7930.00	1080.00	9810.00		
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1990	7930.00	1080.00	9810.00		
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1991	7930.00	1080.00	9810.00		
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Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2034	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
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Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
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Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
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Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2057	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2058	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2059	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2060	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2061	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2062	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2063	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2064	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2065	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2066	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2067	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2068	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2069	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2070	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2071	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2072	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2073	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2074	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2075	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2076	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2077	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2078	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2079	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2080	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2081	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2082	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2083	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2084	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00
2085	7930.00	1080.00	9810.00		
Bkt/V3 - HH CE 35.02 Fed 006 4H					387252.00



FORMATION TOP DETAILS

LEGEND





Chevron

Eddy County, NM (NAD27 NME)

HH CE 35 02 Fed 006

4H

OH

Plan: Plan 3 11-06-17

Standard Planning Report

06 November, 2017





Phoenix Technology Services LP

Planning Report



Database: Compass 5000 GCR
Company: Chevron
Project: Eddy County, NM (NAD27 NME)
Site: HH CE 35 02 Fed 006
Well: 4H
Wellbore: OH
Design: Plan 3 11-06-17

Local Co-ordinate Reference: Well 4H
TVD Reference: GL + KB @ 3173.00usft
MD Reference: GL + KB @ 3173.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project	Eddy County, NM (NAD27 NME)		
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 HH CE 35 02 Fed 006

Site Position:
From: Map
Position Uncertainty: 0.00 usft

Northing: 394,831.98 usft
Easting: 555,766.00 usft
Slot Radius: 13-3/16 "

Latitude: 32° 5' 7.37145 N
Longitude: 104° 9' 11.78281 W
Grid Convergence: 0.10 °

Well 4H

Well Position +N/-S 50.01 usft
 +E/-W 1.00 usft
Position Uncertainty 0.00 usft

Northing: 394,882.00 usft
Easting: 555,767.00 usft
Wellhead Elevation: 0.00 usft

Latitude: 32° 5' 7.86640 N
Longitude: 104° 9' 11.77022 W
Ground Level: 3,145.00 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	12/6/2017	7.30	59.83	47,991

Design Plan 3 11-06-17

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	189.00

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	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,054.62	21.09	280.90	3,030.96	36.30	-188.47	2.00	2.00	0.00	280.90	
5,131.87	21.09	280.90	4,969.04	177.70	-922.53	0.00	0.00	0.00	0.00	
6,186.49	0.00	0.00	6,000.00	214.00	-1,111.00	2.00	-2.00	0.00	180.00	
9,550.19	0.00	0.00	9,363.70	214.00	-1,111.00	0.00	0.00	0.00	0.00	
10,439.28	88.91	181.04	9,936.55	-347.95	-1,121.16	10.00	10.00	-20.13	181.04	
11,985.46	88.91	181.04	9,966.00	-1,893.60	-1,149.12	0.00	0.00	0.00	0.00	IP1 - HH CE 35 02
12,098.39	91.17	181.04	9,965.93	-2,006.50	-1,151.16	2.00	2.00	0.00	-0.02	
12,487.39	91.17	181.04	9,958.00	-2,395.36	-1,158.19	0.00	0.00	0.00	0.00	MPv3 - HH CE 35 C
12,530.03	90.45	180.57	9,957.40	-2,437.99	-1,158.79	2.00	-1.68	-1.09	-146.89	
14,224.17	90.45	180.57	9,944.00	-4,131.99	-1,175.63	0.00	0.00	0.00	0.00	IP2 - HH CE 35 02
14,245.69	90.88	180.53	9,943.75	-4,153.51	-1,175.84	2.00	1.99	-0.19	-5.31	
16,113.99	90.88	180.53	9,915.00	-6,021.51	-1,193.11	0.00	0.00	0.00	0.00	IP3 - HH CE 35 02
16,136.87	90.42	180.53	9,914.74	-6,044.38	-1,193.32	2.00	-2.00	0.00	179.93	
17,722.59	90.42	180.53	9,903.00	-7,630.00	-1,208.00	0.00	0.00	0.00	0.00	BHLv3 - HH CE 35



Phoenix Technology Services LP

Planning Report



Database: Compass 5000 GCR
Company: Chevron
Project: Eddy County, NM (NAD27 NME)
Site: HH CE 35 02 Fed 006
Well: 4H
Wellbore: OH
Design: Plan 3 11-06-17

Local Co-ordinate Reference: Well 4H
TVD Reference: GL + KB @ 3173.00usft
MD Reference: GL + KB @ 3173.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP1, Begin 2.00°/100' Build									
2,100.00	2.00	280.90	2,099.98	0.33	-1.71	-0.06	2.00	2.00	0.00
2,200.00	4.00	280.90	2,199.84	1.32	-6.85	-0.23	2.00	2.00	0.00
2,300.00	6.00	280.90	2,299.45	2.97	-15.41	-0.52	2.00	2.00	0.00
2,400.00	8.00	280.90	2,398.70	5.27	-27.38	-0.93	2.00	2.00	0.00
2,500.00	10.00	280.90	2,497.47	8.23	-42.74	-1.45	2.00	2.00	0.00
2,600.00	12.00	280.90	2,595.62	11.84	-61.47	-2.08	2.00	2.00	0.00
2,700.00	14.00	280.90	2,693.06	16.10	-83.56	-2.83	2.00	2.00	0.00
2,800.00	16.00	280.90	2,789.64	20.99	-108.97	-3.69	2.00	2.00	0.00
2,900.00	18.00	280.90	2,885.27	26.52	-137.68	-4.66	2.00	2.00	0.00
3,000.00	20.00	280.90	2,979.82	32.68	-169.65	-5.75	2.00	2.00	0.00
3,054.62	21.09	280.90	3,030.96	36.30	-188.47	-6.38	2.00	2.00	0.00
Hold 21.09° Inc at 280.90° Azm									
3,100.00	21.09	280.90	3,073.30	39.39	-204.51	-6.93	0.00	0.00	0.00
3,200.00	21.09	280.90	3,166.60	46.20	-239.85	-8.12	0.00	0.00	0.00
3,300.00	21.09	280.90	3,259.90	53.01	-275.18	-9.32	0.00	0.00	0.00
3,400.00	21.09	280.90	3,353.20	59.81	-310.52	-10.52	0.00	0.00	0.00
3,500.00	21.09	280.90	3,446.50	66.62	-345.86	-11.72	0.00	0.00	0.00
3,600.00	21.09	280.90	3,539.80	73.43	-381.20	-12.91	0.00	0.00	0.00
3,700.00	21.09	280.90	3,633.10	80.23	-416.54	-14.11	0.00	0.00	0.00
3,800.00	21.09	280.90	3,726.40	87.04	-451.87	-15.31	0.00	0.00	0.00
3,900.00	21.09	280.90	3,819.70	93.85	-487.21	-16.50	0.00	0.00	0.00
4,000.00	21.09	280.90	3,913.00	100.65	-522.55	-17.70	0.00	0.00	0.00
4,100.00	21.09	280.90	4,006.30	107.46	-557.89	-18.90	0.00	0.00	0.00
4,200.00	21.09	280.90	4,099.60	114.27	-593.22	-20.10	0.00	0.00	0.00
4,300.00	21.09	280.90	4,192.90	121.07	-628.56	-21.29	0.00	0.00	0.00
4,400.00	21.09	280.90	4,286.20	127.88	-663.90	-22.49	0.00	0.00	0.00
4,500.00	21.09	280.90	4,379.50	134.69	-699.24	-23.69	0.00	0.00	0.00
4,600.00	21.09	280.90	4,472.80	141.49	-734.58	-24.88	0.00	0.00	0.00
4,700.00	21.09	280.90	4,566.10	148.30	-769.91	-26.08	0.00	0.00	0.00
4,800.00	21.09	280.90	4,659.40	155.11	-805.25	-27.28	0.00	0.00	0.00
4,900.00	21.09	280.90	4,752.70	161.91	-840.59	-28.47	0.00	0.00	0.00
5,000.00	21.09	280.90	4,846.00	168.72	-875.93	-29.67	0.00	0.00	0.00
5,100.00	21.09	280.90	4,939.30	175.53	-911.26	-30.87	0.00	0.00	0.00
5,131.87	21.09	280.90	4,969.04	177.70	-922.53	-31.25	0.00	0.00	0.00
Begin 2.00°/100' Drop									
5,200.00	19.73	280.90	5,032.89	182.19	-945.86	-32.04	2.00	-2.00	0.00
5,300.00	17.73	280.90	5,127.59	188.26	-977.39	-33.11	2.00	-2.00	0.00
5,400.00	15.73	280.90	5,223.35	193.71	-1,005.65	-34.07	2.00	-2.00	0.00
5,500.00	13.73	280.90	5,320.06	198.52	-1,030.62	-34.91	2.00	-2.00	0.00
5,600.00	11.73	280.90	5,417.60	202.68	-1,052.25	-35.65	2.00	-2.00	0.00
5,700.00	9.73	280.90	5,515.84	206.21	-1,070.54	-36.26	2.00	-2.00	0.00
5,800.00	7.73	280.90	5,614.68	209.08	-1,085.44	-36.77	2.00	-2.00	0.00
5,900.00	5.73	280.90	5,713.98	211.29	-1,096.94	-37.16	2.00	-2.00	0.00
6,000.00	3.73	280.90	5,813.64	212.85	-1,105.04	-37.43	2.00	-2.00	0.00
6,100.00	1.73	280.90	5,913.52	213.75	-1,109.72	-37.59	2.00	-2.00	0.00
6,186.49	0.00	0.00	6,000.00	214.00	-1,111.00	-37.64	2.00	-2.00	0.00
Begin Vertical Hold									
9,550.19	0.00	0.00	9,363.70	214.00	-1,111.00	-37.64	0.00	0.00	0.00
KOP2, Begin 10.00°/100' Build									
9,600.00	4.98	181.04	9,413.44	211.84	-1,111.04	-35.49	10.00	10.00	0.00



Phoenix Technology Services LP

Planning Report



Database: Compass 5000 GCR
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Project: Eddy County, NM (NAD27 NME)
Site: HH CE 35 02 Fed 006
Well: 4H
Wellbore: OH
Design: Plan 3 11-06-17

Local Co-ordinate Reference: Well 4H
TVD Reference: GL + KB @ 3173.00usft
MD Reference: GL + KB @ 3173.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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)
9,700.00	14.98	181.04	9,511.81	194.53	-1,111.35	-18.35	10.00	10.00	0.00
9,800.00	24.98	181.04	9,605.67	160.41	-1,111.97	15.45	10.00	10.00	0.00
9,900.00	34.98	181.04	9,692.18	110.51	-1,112.87	64.88	10.00	10.00	0.00
10,000.00	44.98	181.04	9,768.71	46.35	-1,114.03	128.43	10.00	10.00	0.00
10,100.00	54.98	181.04	9,832.93	-30.12	-1,115.42	204.18	10.00	10.00	0.00
10,200.00	64.98	181.04	9,882.89	-116.59	-1,116.98	289.82	10.00	10.00	0.00
10,300.00	74.98	181.04	9,917.08	-210.41	-1,118.68	382.75	10.00	10.00	0.00
10,400.00	84.98	181.04	9,934.46	-308.74	-1,120.45	480.16	10.00	10.00	0.00
10,439.28	88.91	181.04	9,936.55	-347.95	-1,121.16	519.00	10.00	10.00	0.00
LP, Hold 88.91° Inc at 181.04° Azm									
10,500.00	88.91	181.04	9,937.71	-408.65	-1,122.26	579.12	0.00	0.00	0.00
10,600.00	88.91	181.04	9,939.61	-508.62	-1,124.07	678.14	0.00	0.00	0.00
10,700.00	88.91	181.04	9,941.52	-608.58	-1,125.88	777.16	0.00	0.00	0.00
10,800.00	88.91	181.04	9,943.42	-708.55	-1,127.69	876.17	0.00	0.00	0.00
10,900.00	88.91	181.04	9,945.33	-808.51	-1,129.49	975.19	0.00	0.00	0.00
11,000.00	88.91	181.04	9,947.23	-908.48	-1,131.30	1,074.21	0.00	0.00	0.00
11,100.00	88.91	181.04	9,949.14	-1,008.45	-1,133.11	1,173.23	0.00	0.00	0.00
11,200.00	88.91	181.04	9,951.04	-1,108.41	-1,134.92	1,272.25	0.00	0.00	0.00
11,300.00	88.91	181.04	9,952.95	-1,208.38	-1,136.73	1,371.27	0.00	0.00	0.00
11,400.00	88.91	181.04	9,954.85	-1,308.34	-1,138.53	1,470.28	0.00	0.00	0.00
11,500.00	88.91	181.04	9,956.75	-1,408.31	-1,140.34	1,569.30	0.00	0.00	0.00
11,600.00	88.91	181.04	9,958.66	-1,508.27	-1,142.15	1,668.32	0.00	0.00	0.00
11,700.00	88.91	181.04	9,960.56	-1,608.24	-1,143.96	1,767.34	0.00	0.00	0.00
11,800.00	88.91	181.04	9,962.47	-1,708.20	-1,145.77	1,866.36	0.00	0.00	0.00
11,900.00	88.91	181.04	9,964.37	-1,808.17	-1,147.57	1,965.38	0.00	0.00	0.00
11,985.46	88.91	181.04	9,966.00	-1,893.60	-1,149.12	2,050.00	0.00	0.00	0.00
Begin 2.00°/100' Build									
12,000.00	89.20	181.04	9,966.24	-1,908.14	-1,149.38	2,064.40	2.00	2.00	0.00
12,098.39	91.17	181.04	9,965.93	-2,006.50	-1,151.16	2,161.83	2.00	2.00	0.00
Hold 91.17° Inc									
12,100.00	91.17	181.04	9,965.89	-2,008.11	-1,151.19	2,163.43	0.00	0.00	0.00
12,200.00	91.17	181.04	9,963.86	-2,108.08	-1,153.00	2,262.44	0.00	0.00	0.00
12,300.00	91.17	181.04	9,961.82	-2,208.04	-1,154.80	2,361.46	0.00	0.00	0.00
12,400.00	91.17	181.04	9,959.78	-2,308.00	-1,156.61	2,460.47	0.00	0.00	0.00
12,487.39	91.17	181.04	9,958.00	-2,395.36	-1,158.19	2,547.00	0.00	0.00	0.00
Begin 2.00°/100' Drop & Turn									
12,500.00	90.96	180.90	9,957.77	-2,407.97	-1,158.40	2,559.49	2.00	-1.68	-1.09
12,530.03	90.45	180.57	9,957.40	-2,437.99	-1,158.79	2,589.20	2.00	-1.68	-1.09
Hold 90.45° Inc at 180.57° Azm									
12,600.00	90.45	180.57	9,956.84	-2,507.96	-1,159.48	2,658.42	0.00	0.00	0.00
12,700.00	90.45	180.57	9,956.05	-2,607.95	-1,160.48	2,757.33	0.00	0.00	0.00
12,800.00	90.45	180.57	9,955.26	-2,707.94	-1,161.47	2,856.25	0.00	0.00	0.00
12,900.00	90.45	180.57	9,954.47	-2,807.93	-1,162.47	2,955.17	0.00	0.00	0.00
13,000.00	90.45	180.57	9,953.68	-2,907.92	-1,163.46	3,054.09	0.00	0.00	0.00
13,100.00	90.45	180.57	9,952.89	-3,007.92	-1,164.45	3,153.00	0.00	0.00	0.00
13,200.00	90.45	180.57	9,952.10	-3,107.91	-1,165.45	3,251.92	0.00	0.00	0.00
13,300.00	90.45	180.57	9,951.31	-3,207.90	-1,166.44	3,350.84	0.00	0.00	0.00
13,400.00	90.45	180.57	9,950.52	-3,307.89	-1,167.44	3,449.75	0.00	0.00	0.00
13,500.00	90.45	180.57	9,949.73	-3,407.88	-1,168.43	3,548.67	0.00	0.00	0.00
13,600.00	90.45	180.57	9,948.94	-3,507.88	-1,169.42	3,647.59	0.00	0.00	0.00
13,700.00	90.45	180.57	9,948.15	-3,607.87	-1,170.42	3,746.51	0.00	0.00	0.00
13,800.00	90.45	180.57	9,947.35	-3,707.86	-1,171.41	3,845.42	0.00	0.00	0.00
13,900.00	90.45	180.57	9,946.56	-3,807.85	-1,172.41	3,944.34	0.00	0.00	0.00



Phoenix Technology Services LP

Planning Report



Database: Compass 5000 GCR
 Company: Chevron
 Project: Eddy County, NM (NAD27 NME)
 Site: HH CE 35 02 Fed 006
 Well: 4H
 Wellbore: OH
 Design: Plan 3 11-06-17

Local Co-ordinate Reference: Well 4H
 TVD Reference: GL + KB @ 3173.00usft
 MD Reference: GL + KB @ 3173.00usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

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)
14,000.00	90.45	180.57	9,945.77	-3,907.84	-1,173.40	4,043.26	0.00	0.00	0.00
14,100.00	90.45	180.57	9,944.98	-4,007.83	-1,174.40	4,142.18	0.00	0.00	0.00
14,200.00	90.45	180.57	9,944.19	-4,107.83	-1,175.39	4,241.09	0.00	0.00	0.00
14,224.17	90.45	180.57	9,944.00	-4,131.99	-1,175.63	4,265.00	0.00	0.00	0.00
Begin 2.00°/100' Build & Turn									
14,245.69	90.88	180.53	9,943.75	-4,153.51	-1,175.84	4,286.28	2.00	1.99	-0.19
Hold 90.88° Inc at 180.53° Azm									
14,300.00	90.88	180.53	9,942.91	-4,207.81	-1,176.34	4,340.00	0.00	0.00	0.00
14,400.00	90.88	180.53	9,941.37	-4,307.80	-1,177.26	4,438.90	0.00	0.00	0.00
14,500.00	90.88	180.53	9,939.84	-4,407.78	-1,178.19	4,537.79	0.00	0.00	0.00
14,600.00	90.88	180.53	9,938.30	-4,507.77	-1,179.11	4,636.69	0.00	0.00	0.00
14,700.00	90.88	180.53	9,936.76	-4,607.75	-1,180.04	4,735.59	0.00	0.00	0.00
14,800.00	90.88	180.53	9,935.22	-4,707.73	-1,180.96	4,834.49	0.00	0.00	0.00
14,900.00	90.88	180.53	9,933.68	-4,807.72	-1,181.89	4,933.39	0.00	0.00	0.00
15,000.00	90.88	180.53	9,932.14	-4,907.70	-1,182.81	5,032.29	0.00	0.00	0.00
15,100.00	90.88	180.53	9,930.60	-5,007.68	-1,183.74	5,131.19	0.00	0.00	0.00
15,200.00	90.88	180.53	9,929.06	-5,107.67	-1,184.66	5,230.08	0.00	0.00	0.00
15,300.00	90.88	180.53	9,927.53	-5,207.65	-1,185.58	5,328.98	0.00	0.00	0.00
15,400.00	90.88	180.53	9,925.99	-5,307.64	-1,186.51	5,427.88	0.00	0.00	0.00
15,500.00	90.88	180.53	9,924.45	-5,407.62	-1,187.43	5,526.78	0.00	0.00	0.00
15,600.00	90.88	180.53	9,922.91	-5,507.60	-1,188.36	5,625.68	0.00	0.00	0.00
15,700.00	90.88	180.53	9,921.37	-5,607.59	-1,189.28	5,724.58	0.00	0.00	0.00
15,800.00	90.88	180.53	9,919.83	-5,707.57	-1,190.21	5,823.47	0.00	0.00	0.00
15,900.00	90.88	180.53	9,918.29	-5,807.56	-1,191.13	5,922.37	0.00	0.00	0.00
16,000.00	90.88	180.53	9,916.75	-5,907.54	-1,192.06	6,021.27	0.00	0.00	0.00
16,100.00	90.88	180.53	9,915.22	-6,007.52	-1,192.98	6,120.17	0.00	0.00	0.00
16,113.99	90.88	180.53	9,915.00	-6,021.51	-1,193.11	6,134.00	0.00	0.00	0.00
Begin 2.00°/100' Drop									
16,136.87	90.42	180.53	9,914.74	-6,044.38	-1,193.32	6,156.63	2.00	-2.00	0.00
Hold 90.42° Inc									
16,200.00	90.42	180.53	9,914.27	-6,107.51	-1,193.91	6,219.08	0.00	0.00	0.00
16,300.00	90.42	180.53	9,913.53	-6,207.51	-1,194.83	6,317.98	0.00	0.00	0.00
16,400.00	90.42	180.53	9,912.79	-6,307.50	-1,195.76	6,416.89	0.00	0.00	0.00
16,500.00	90.42	180.53	9,912.05	-6,407.49	-1,196.68	6,515.80	0.00	0.00	0.00
16,600.00	90.42	180.53	9,911.31	-6,507.49	-1,197.61	6,614.71	0.00	0.00	0.00
16,700.00	90.42	180.53	9,910.57	-6,607.48	-1,198.53	6,713.61	0.00	0.00	0.00
16,800.00	90.42	180.53	9,909.83	-6,707.47	-1,199.46	6,812.52	0.00	0.00	0.00
16,900.00	90.42	180.53	9,909.09	-6,807.47	-1,200.39	6,911.43	0.00	0.00	0.00
17,000.00	90.42	180.53	9,908.35	-6,907.46	-1,201.31	7,010.34	0.00	0.00	0.00
17,100.00	90.42	180.53	9,907.61	-7,007.45	-1,202.24	7,109.24	0.00	0.00	0.00
17,200.00	90.42	180.53	9,906.87	-7,107.44	-1,203.16	7,208.15	0.00	0.00	0.00
17,300.00	90.42	180.53	9,906.13	-7,207.44	-1,204.09	7,307.06	0.00	0.00	0.00
17,400.00	90.42	180.53	9,905.39	-7,307.43	-1,205.01	7,405.97	0.00	0.00	0.00
17,500.00	90.42	180.53	9,904.65	-7,407.42	-1,205.94	7,504.87	0.00	0.00	0.00
17,600.00	90.42	180.53	9,903.91	-7,507.42	-1,206.87	7,603.78	0.00	0.00	0.00
17,700.00	90.42	180.53	9,903.17	-7,607.41	-1,207.79	7,702.69	0.00	0.00	0.00
17,722.59	90.42	180.53	9,903.00	-7,630.00	-1,208.00	7,725.04	0.00	0.00	0.00
TD at 17722.59									



Phoenix Technology Services LP

Planning Report



Database: Compass 5000 GCR
Company: Chevron
Project: Eddy County, NM (NAD27 NME)
Site: HH CE 35 02 Fed 006
Well: 4H
Wellbore: OH
Design: Plan 3 11-06-17

Local Co-ordinate Reference: Well 4H
TVD Reference: GL + KB @ 3173.00usft
MD Reference: GL + KB @ 3173.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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
BHLv3 - HH CE 35 02 - plan hits target center - Point	0.00	0.00	9,903.00	-7,630.00	-1,208.00	387,252.00	554,559.00	32° 3' 52.37530 N 104° 9' 25.95660 W	
LTPv3 - HH CE 35 02 - plan misses target center by 0.61usft at 17572.58usft MD (9904.11 TVD, -7479.99 N, -1206.61 E) - Point	0.00	0.00	9,904.11	-7,480.00	-1,206.00	387,402.00	554,561.00	32° 3' 53.85975 N 104° 9' 25.93052 W	
IP3 - HH CE 35 02 Fe - plan hits target center - Point	0.00	0.00	9,915.00	-6,021.51	-1,193.11	388,860.49	554,573.89	32° 4' 8.29361 N 104° 9' 25.75305 W	
FTPv3 - HH CE 35 02 - plan misses target center by 229.91usft at 10000.00usft MD (9768.71 TVD, 46.35 N, -1114.03 E) - Point	0.00	0.00	9,926.00	214.00	-1,111.00	395,096.00	554,656.00	32° 5' 10.00244 N 104° 9' 24.68025 W	
IP2 - HH CE 35 02 Fe - plan hits target center - Point	0.00	0.00	9,944.00	-4,131.99	-1,175.63	390,750.01	554,591.37	32° 4' 26.99311 N 104° 9' 25.51403 W	
MPv3 - HH CE 35 02 - plan hits target center - Point	0.00	0.00	9,958.00	-2,395.36	-1,158.19	392,486.64	554,608.81	32° 4' 44.17951 N 104° 9' 25.27835 W	
IP1 - HH CE 35 02 Fe - plan hits target center - Point	0.00	0.00	9,966.00	-1,893.60	-1,149.12	392,988.40	554,617.88	32° 4' 49.14507 N 104° 9' 25.16340 W	

Plan Annotations

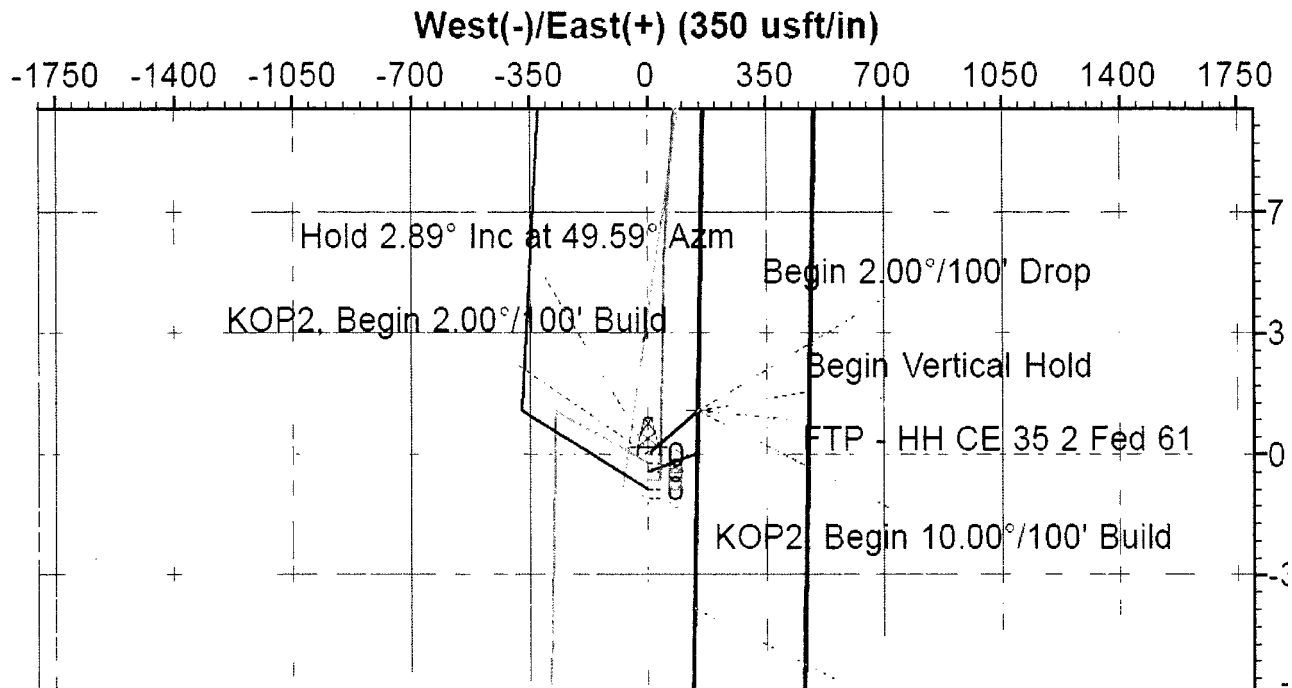
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,000.00	2,000.00	0.00	0.00	KOP1, Begin 2.00°/100' Build
3,054.62	3,030.96	36.30	-188.47	Hold 21.09° Inc at 280.90° Azm
5,131.87	4,969.04	177.70	-922.53	Begin 2.00°/100' Drop
6,186.49	6,000.00	214.00	-1,111.00	Begin Vertical Hold
9,550.19	9,363.70	214.00	-1,111.00	KOP2, Begin 10.00°/100' Build
10,439.28	9,936.55	-347.95	-1,121.16	LP, Hold 88.91° Inc at 181.04° Azm
11,985.46	9,966.00	-1,893.60	-1,149.12	Begin 2.00°/100' Build
12,098.39	9,965.93	-2,006.50	-1,151.16	Hold 91.17° Inc
12,487.39	9,958.00	-2,395.36	-1,158.19	Begin 2.00°/100' Drop & Turn
12,530.03	9,957.40	-2,437.99	-1,158.79	Hold 90.45° Inc at 180.57° Azm
14,224.17	9,944.00	-4,131.99	-1,175.63	Begin 2.00°/100' Build & Turn
14,245.69	9,943.75	-4,153.51	-1,175.84	Hold 90.88° Inc at 180.53° Azm
16,113.99	9,915.00	-6,021.51	-1,193.11	Begin 2.00°/100' Drop
16,136.87	9,914.74	-6,044.38	-1,193.32	Hold 90.42° Inc
17,722.59	9,903.00	-7,630.00	-1,208.00	TD at 17722.59

Summary of Changes to Directional Plan Submission

Chevron respectfully request a variance from the original directional plan, which will change the first take points/last take points.

Directional Plan – Section 35

Summary: The original directional plan was bi-directional (north & south), but with the updated targets given by Chevron geologist, the well path will be drilled to the south.



Chevron respectfully request a variance from the original directional plan, to drill all six wells to the south.

#REF!

13 3/8	surface csg in a	17 1/2	inch hole.	Design Factors				SURFACE	
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight	
"A"	54.50	K 55	ST&C	22.30	5.56	0.61	450	24,525	
"B"							0	0	
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,500				Tail Cmt	does	circ to sfc.	Totals:	450	24,525
<u>Comparison of Proposed to Minimum Required Cement Volumes</u>									
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd	Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE	Hole-Cplg
17 1/2	0.6946	356	473	367	29	8.70	2466	3M	1.56

Burst Frac Gradient(s) for Segment(s) A, B = , b All > 0.70, OK.

9 5/8	casing inside the	13 3/8	Design Factors				INTERMEDIATE		
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight	
"A"	43.50	L 80	LT&C	2.07	1.29	0.98	9,015	392,153	
"B"							0	0	
w/8.4#/g mud, 30min Sfc Csg Test psig:						Totals:	9,015	392,153	
The cement volume(s) are intended to achieve a top of				0	ft from surface or a		450	overlap.	
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd	Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE	Hole-Cplg
12 1/4	0.3132	look	0	2864		9.50	4252	5M	0.81
D V Tool(s):			2100			sum of sx	Σ CuFt	Σ%excess	
t by stage % :		91	22				2361	5004	75

Class 'H' tail cmt yld > 1.20

Burst Frac Gradient(s) for Segment(s): A, B, C, D = 0.7, b, c, d All > 0.70, OK.

Tail cmt									
5 1/2	casing inside the	9 5/8			<u>Design Factors</u>		<u>PRODUCTION</u>		
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	Weight	
"A"	20.00	P 110	BUTT	3.24	1.79	1.96	9,550	191,000	
"B"	20.00	P 110	BUTT	8.27	1.58	1.97	8,173	163,460	
w/8.4#/g mud, 30min Sfc Csg Test psig: 2,101						Totals:		17,723	354,460
B	would be:			90.81	1.72	if it were a vertical wellbore.			
No Pilot Hole Planned		MTD	Max VTD	Csg VD	Curve KOP	Dogleg°	Severity°	MEOC	
		17723	9903	9903	9550	90	10	10439	
The cement volume(s) are intended to achieve a top of				7015	ft from surface or a		2000	overlap.	
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd	Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE	Hole-Cplg
8 3/4	0.2526	3153	3788	2711	40	12.50			1.33