

NM OIL CONSERVATION

ARTESIA DISTRICT

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-42553	² Pool Code 97494	³ Pool Name Cottonwood Draw; Bone Springs (C)
⁴ Property Code 39726	⁵ Property Name HAYHURST 16 25 27 STATE	
⁷ OGRID No. 4323	⁸ Operator Name CHEVRON U.S.A. INC.	⁶ Well Number 4H
		⁹ Elevation 3187'

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
A	16	25 SOUTH	27 EAST, N.M.P.M.		175'	NORTH	990'	EAST	EDDY

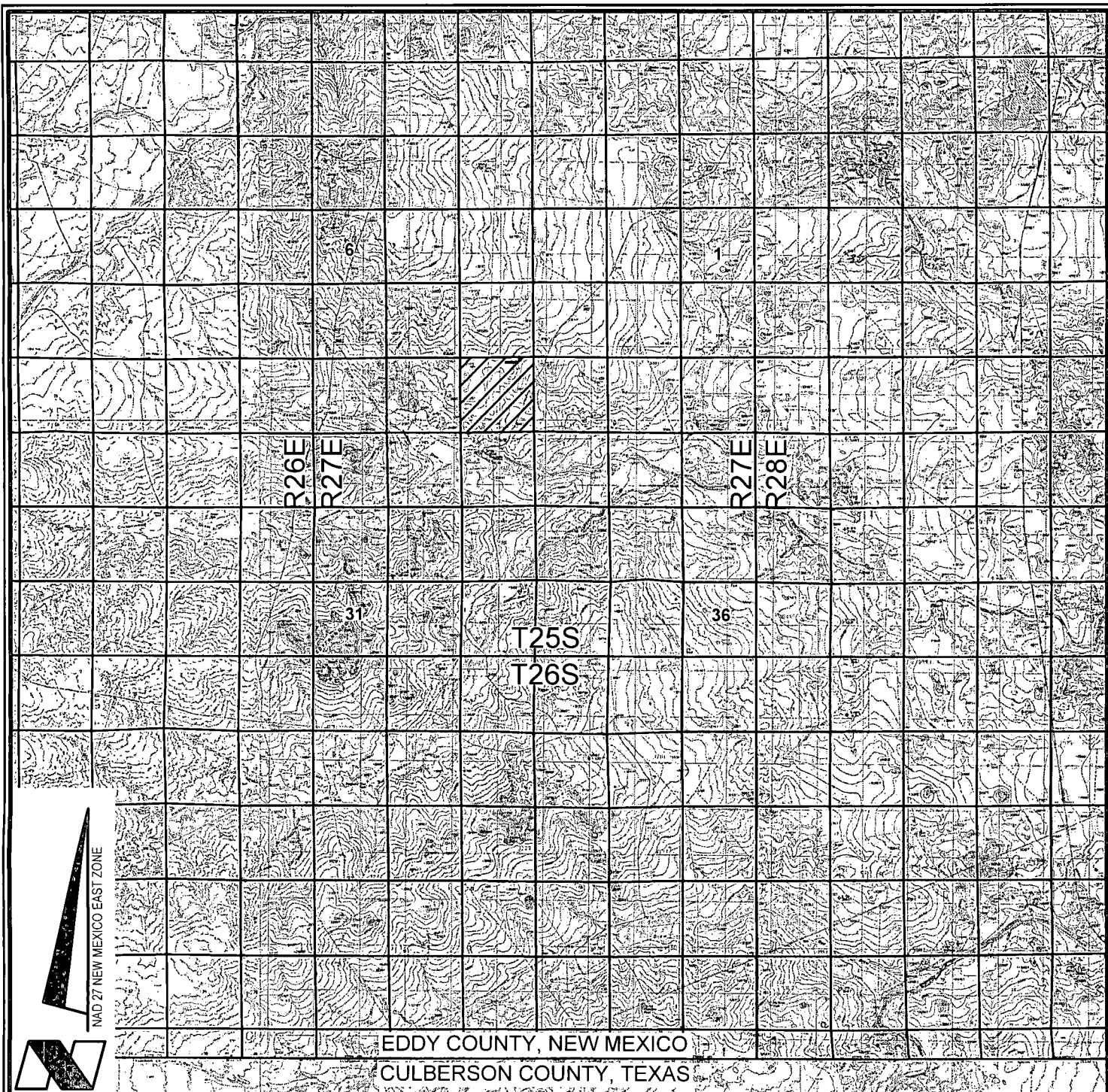
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	16	25 SOUTH	27 EAST, N.M.P.M.		150'	SOUTH	990'	EAST	EDDY

¹² Dedicated Acres 1600	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

¹⁶ <table border="1"> <tr> <th colspan="2">HAYHURST 16 25 27 STATE NO. 4H WELL</th> </tr> <tr> <td>X=</td> <td>544,531 NAD 27</td> </tr> <tr> <td>Y=</td> <td>413,525</td> </tr> <tr> <td>LAT.</td> <td>32.136816</td> </tr> <tr> <td>LONG.</td> <td>104.189470</td> </tr> <tr> <td>X=</td> <td>585,714 NAD83</td> </tr> <tr> <td>Y=</td> <td>413,583</td> </tr> <tr> <td>LAT.</td> <td>32.136937</td> </tr> <tr> <td>LONG.</td> <td>104.189965</td> </tr> <tr> <td colspan="2">ELEVATION +3187' NAVD 88</td> </tr> </table> CORNER COORDINATES TABLE (NAD 27) A - Y=413696.82, X=544197.88 B - Y=413710.86, X=545519.67 C - Y=408409.94, X=544220.85 D - Y=408428.67, X=545544.09 <table border="1"> <tr> <th colspan="2">PROPOSED BOTTOM HOLE LOCATION</th> </tr> <tr> <td>X=</td> <td>544,553 NAD 27</td> </tr> <tr> <td>Y=</td> <td>408,565</td> </tr> <tr> <td>LAT.</td> <td>32.123179</td> </tr> <tr> <td>LONG.</td> <td>104.189417</td> </tr> <tr> <td>X=</td> <td>585,737 NAD83</td> </tr> <tr> <td>Y=</td> <td>408,622</td> </tr> <tr> <td>LAT.</td> <td>32.123300</td> </tr> <tr> <td>LONG.</td> <td>104.189912</td> </tr> </table> Proposed First Take Point 330' FNL & 990' FEL Proposed Last Take Point 330' FSL & 990' FEL Proposed Producing Interval S 00°15'49"E 4960.77' 175' 150' 990'	HAYHURST 16 25 27 STATE NO. 4H WELL		X=	544,531 NAD 27	Y=	413,525	LAT.	32.136816	LONG.	104.189470	X=	585,714 NAD83	Y=	413,583	LAT.	32.136937	LONG.	104.189965	ELEVATION +3187' NAVD 88		PROPOSED BOTTOM HOLE LOCATION		X=	544,553 NAD 27	Y=	408,565	LAT.	32.123179	LONG.	104.189417	X=	585,737 NAD83	Y=	408,622	LAT.	32.123300	LONG.	104.189912	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. Signature: Denise Pinkerton Date: 08/05/2014 Printed Name: Denise Pinkerton E-mail Address: denise.pinkerton@chevron.com 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. Date of Survey: 5.19.14 Signature and Seal of Professional Surveyor: [Signature] Professional Surveyor Number: 15078
HAYHURST 16 25 27 STATE NO. 4H WELL																																							
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EDDY COUNTY, NEW MEXICO

CULBERSON COUNTY, TEXAS

VICINITY MAP

10,000' 0 5,000' 10,000'
Scale: 1" = 10,000'

CHEVRON U.S.A. INC.

HAYHURST 16 25 27 STATE NO. 4H WELL

LOCATED 175' FNL AND 990' FEL

SECTION 16, T25S-R27E

EDDY COUNTY, NEW MEXICO

Not to be used for construction, bidding,
recording, conveyance, sales, or as the
basis for the issuance of a permit.



Lafayette New Orleans Houston
135 Regency Sq. Lafayette, LA 70508
Ph. 337-237-2200 Fax. 337-232-3299
www.fenstermaker.com

DRAWN BY: BMO

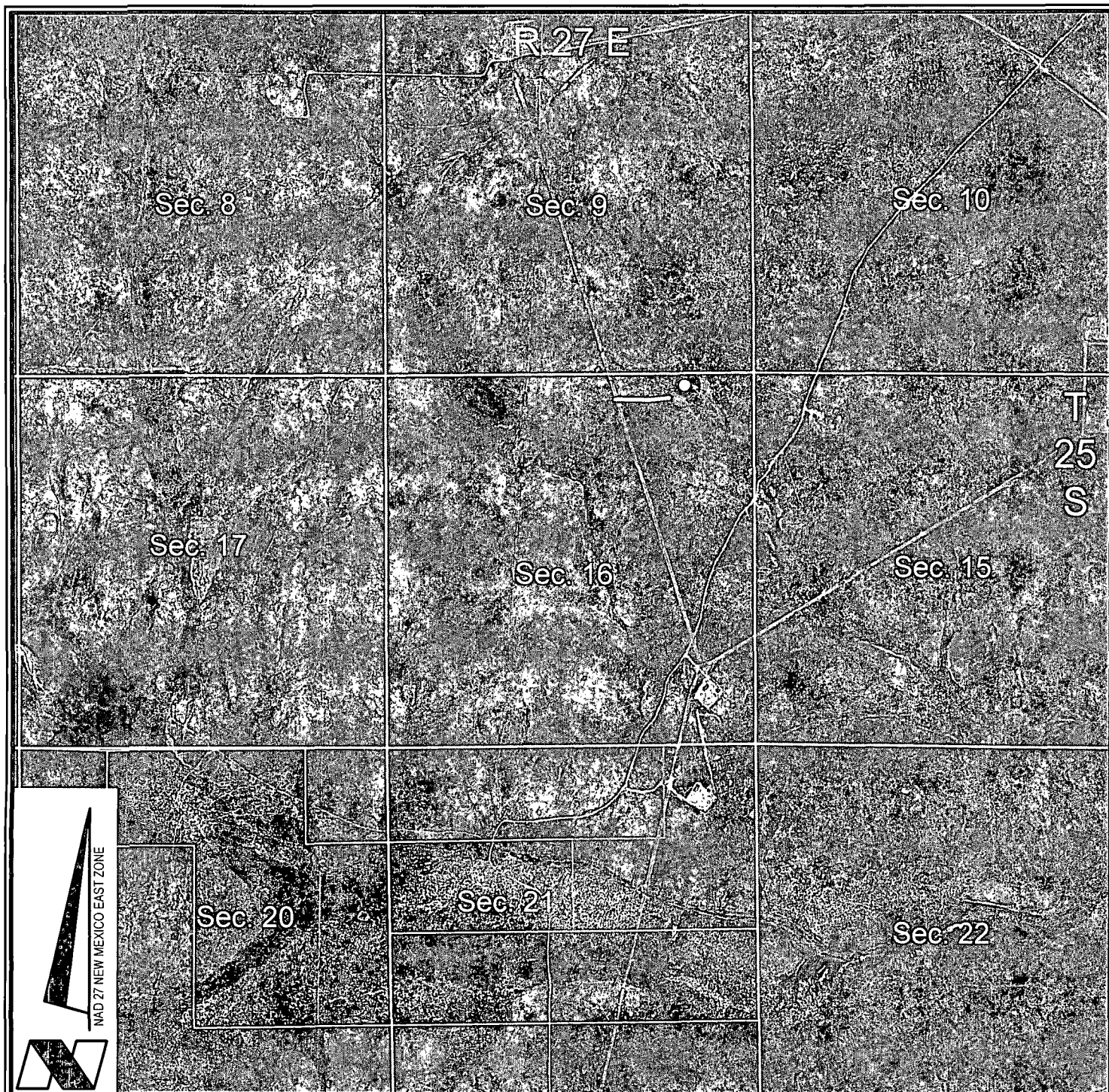
REVISED:

DATE: MAY 09, 2014

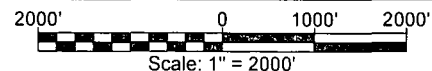
PROJ. MGR.: GDG

SHEET 2 OF 3 SHEETS

FILENAME: T:\2014\2145151\DWG\HAYHURST 16 25 27 STATE 4H APD.dwg



VICINITY MAP



-  = FEDERAL LAND
-  = FEE LAND
-  = STATE LAND

CHEVRON U.S.A. INC.
HAYHURST. 16 25 27 STATE NO. 4H WELL
LOCATED 175' FNL AND 990' FEL
SECTION 16, T25S-R27E
EDDY COUNTY, NEW MEXICO

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PROJ. MGR.: GDG

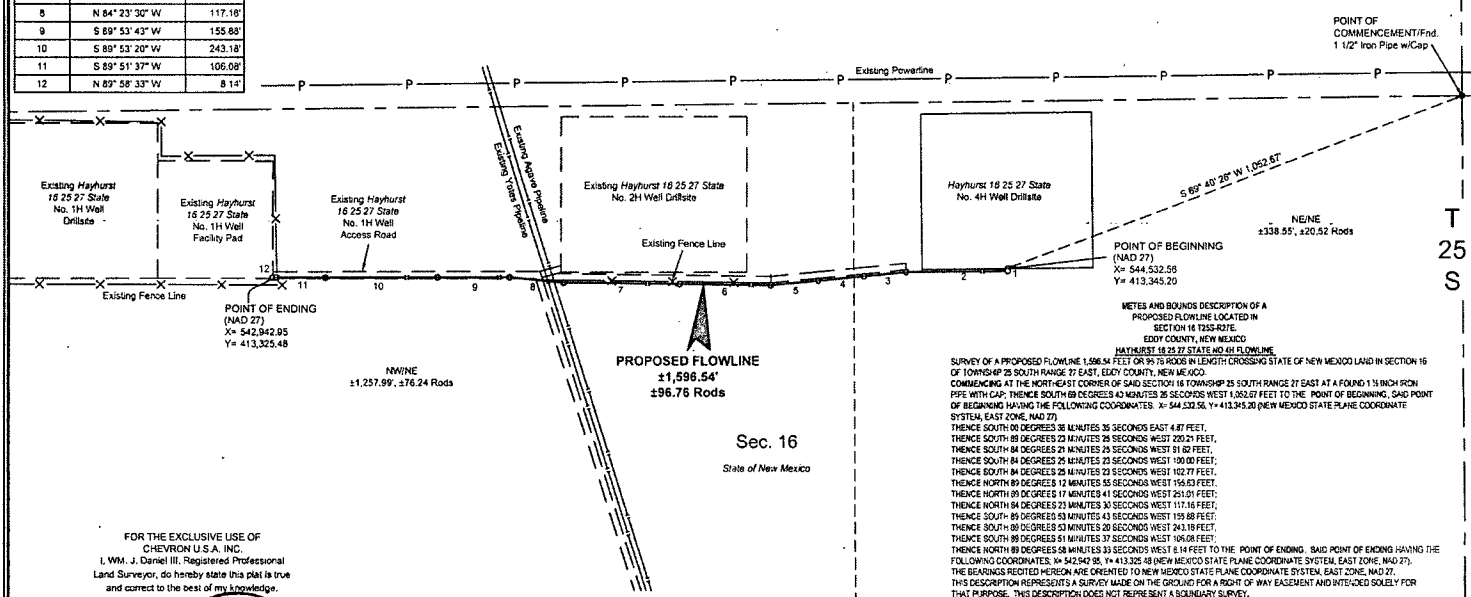
SHEET 3 OF 3 SHEETS

FILENAME: T:\2014\2145151\DWG\HAYHURST 16 25 27 STATE 4H APD.dwg

LEGEND

	Section Line
	Fence Line
	Existing Road
	Existing Powerline
	Existing Pipeline
	Section Break
	Proposed Flowline

Sec. 9



FOR THE EXCLUSIVE USE OF
CHEVRON U.S.A. INC.
I, WM. J. Daniel III, Registered Professional
Land Surveyor, do hereby state this plat is true
and correct to the best of my knowledge.



NOTE:
Please be advised, that while reasonable efforts are made to locate and verify pipelines and anomalies using our standard pipeline locating equipment, it is impossible to be 100 % effective. As such, we advise using caution when performing work as there is a possibility that pipelines and other hazards, such as fiber optic cables, PVC pipelines, etc. may exist undetected on site.

NOTE: Many states maintain information centers that establish links between those who dig (excavators) and those who own and operate underground facilities (operators). It is advisable and in most states, law, for the contractor to contact the center for assistance in locating and marking underground utilities. For guidance: New Mexico One Call - www.nmonocall.org

DISCLAIMER: At this time, C.H. Fenstermaker & Associates, LLC has not performed nor was asked to perform any type of engineering, hydrological modeling, flood plain, or "No Rise" certification analyses, including but not limited to determining whether the project will impact flood hazards in connection with federal/FEMA, state, and/or local laws, ordinances and regulations. Accordingly, Fenstermaker makes no warranty or representation of any kind as to the foregoing issues, and persons or entities using this information shall do so at their own risk.

[illegible]

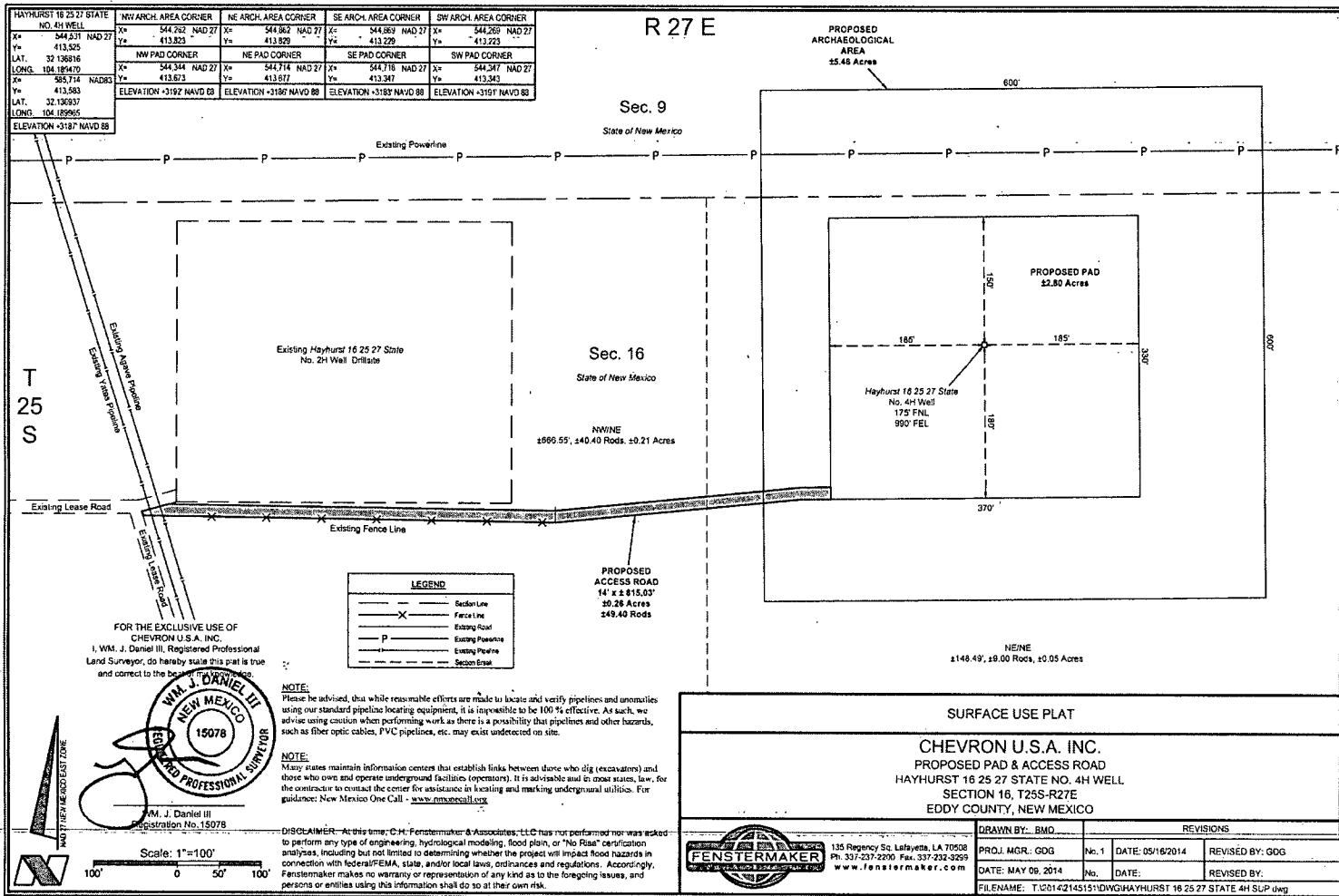
SURFACE USE PLAT

CHEVRON U.S.A. INC.
PROPOSED FLOWLINE
AYHURST 16 25 27 STATE NO. 4H WELL
SECTION 16, T25S-R27E
EDDY COUNTY, NEW MEXICO



135 Regency Sq. Lafayette, LA 70508
Ph. 337-237-2200 Fax. 337-232-3299
www.fenstermaker.com

DRAWN BY: BMO		REVISIONS	
PROJ. MGR: GDG	No.	DATE:	REVISED BY:
DATE: MAY 13, 2014	No.	DATE:	REVISED BY:
FILENAME: T:2014\2145151\DWG\HAYHURST 10 25 27 STATE 4H FLOWLINE.dwg			

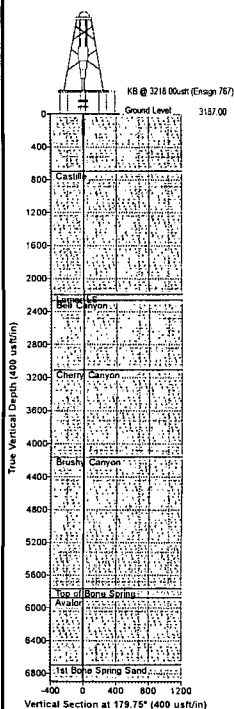




Project: Eddy County NM (NAD27 NME)
Site: Hayhurst 16-25-27 State
Well: #4H
Wellbore: WB1/Job #1411428
Design: Plan #1 08-01-14
Rig: Ensign 767



Azimuths to Grid North
True North: -0.08°
Magnetic North: 7.40°
Magnetic Field
Strength: 48185.4 nT
Dip Angle: 59.82°
Date: 08/01/2014
Model: IGRF2010_14



WELL DETAILS									
N/S	E/W	North	Ground Level	Easting	Latitude	Longitude			
0.00	0.00	413525.00	3187.00	544531.00	32° 8' 12.53435 N	104° 11' 22.08688 W			

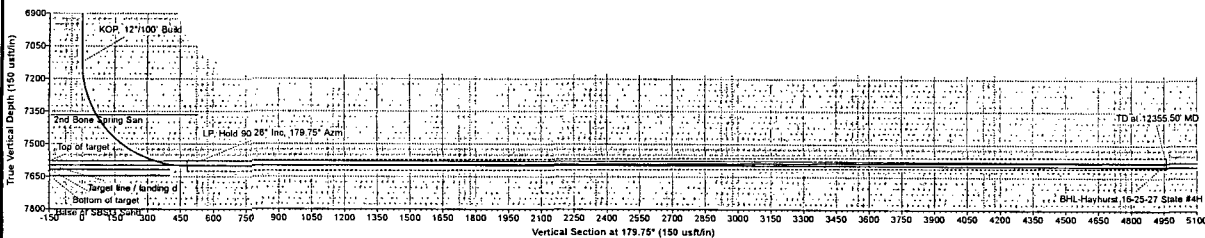
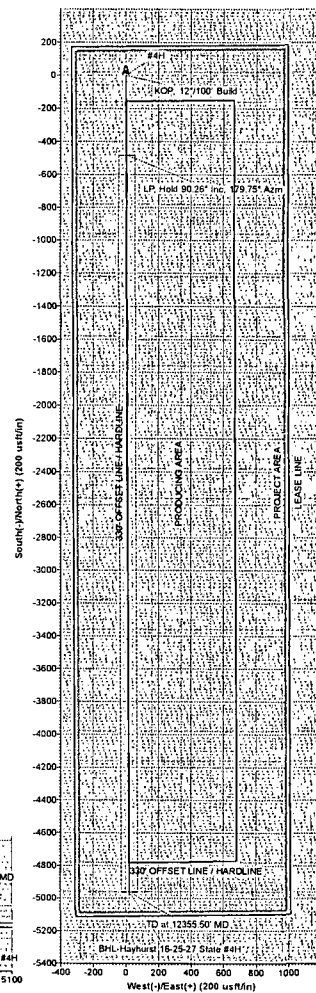
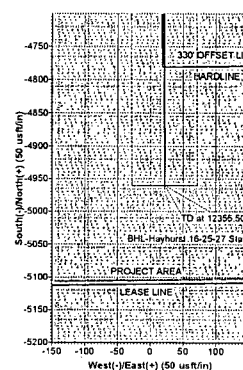
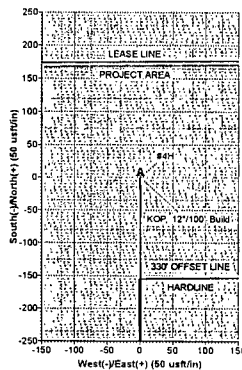
SECTION DETAILS									
Sec	MD	Inc	As	TVD	N/S	E/W	Orig	Face	V Sect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	7122.87	0.00	0.00	7122.87	0.00	0.00	0.00	0.00	0.00
3	7875.04	90.26	179.75	7800.33	-479.63	2.13	12.00	179.75	479.63
4	12355.50	90.26	179.75	7500.00	-4960.00	22.00	0.00	0.00	4960.00

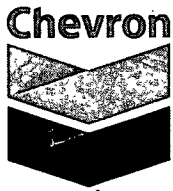
Annotation: KOP: 127100' Build, LP: Hold 90.26° Inc. 179.75° Azim, TD at 12355.50' MD

DESIGN TARGET DETAILS									
Name	TVD	N/S	E/W	North	Easting	Latitude	Longitude	Shape	
BHL Hayhurst 16-25-27 State #4H	7500.00	-4960.00	22.00	408505.00	544553.00	32° 7' 23.44742 N	104° 11' 21.90787 W	Rectangle (Scale: L50.00 W100.00)	plan has target center

FORMATION TOP DETAILS									
TVD	MD	Inc	As	Formation	Depth	Angle	Dir		
1095.00	1095.00	0.00	0.00	Castle	-0.22	179.75			
2194.00	2194.00	0.00	0.00	Lamar LS	-0.22	179.75			
2254.00	2254.00	0.00	0.00	Bell Canyon	-0.22	179.75			
3189.00	3189.00	0.00	0.00	Cherry Canyon	-0.22	179.75			
4182.00	4182.00	0.00	0.00	Brushy Canyon	-0.22	179.75			
5165.00	5165.00	0.00	0.00	Top of Bone Spring	-0.22	179.75			
5877.00	5877.00	0.00	0.00	Avellan	-0.22	179.75			
6697.00	6697.00	0.00	0.00	1st Bone Spring Sand	-0.22	179.75			
7365.75	7365.75	0.00	0.00	2nd Bone Spring Sand	-0.22	179.75			
7571.00	7571.00	0.00	0.00	Top of target	-0.22	179.75			
7598.00	7598.00	0.00	0.00	Target line / landing d	-0.22	179.75			

LEGEND
Plan #1 08-01-14





Chevron

**Eddy County NM (NAD27 NME)
Hayhurst 16-25-27 State
#4H**

WB1/Job #1411428

Plan: Plan #1 08-01-14

Standard Planning Report

01 August, 2014

**NM OIL CONSERVATION
ARTESIA DISTRICT**

AUG 07 2014

RECEIVED





Phoenix Technology Services

Planning Report



Database:	GCR/DB	Local Co-ordinate Reference:	Well #4H
Company:	Chevron	TVD Reference:	KB @ 3218'00usft (Ensign 767)
Project:	Eddy County NM (NAD27 NME)	MD Reference:	KB @ 3218'00usft (Ensign 767)
Site:	Hayhurst 16-25-27 State	North Reference:	Grid
Well:	#4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB1/Job #1411428		
Design:	Plan #1.08-01-14		

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	Hayhurst 16-25-27 State		
Site Position:		Northing:	413,517.00 usft
From:	Map	Easting:	543,787.00 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"
		Latitude:	32° 8' 12.46493 N
		Longitude:	104° 11' 30.73979 W
		Grid Convergence:	0.08 °

Well	#4H		
Well Position	+N/-S	8.00 usft	Northing:
	+E/-W	744.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	32° 8' 12.53435 N
		Longitude:	104° 11' 22.08668 W
		Ground Level:	3,187.00 usft

Wellbore	WB1/Job #1411428		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2010_14	08/01/14	7.48
			Dip Angle
			(°)
			Field Strength
			(nT)
			59.92
			48,185

Design	Plan #1.08-01-14		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction
			(°)
			179.75

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)			(usft)			(°/100usft)	(°/100usft)	(°/100usft)		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7,122.87	0.00	0.00	7,122.87	0.00	0.00	0.00	0.00	0.00	0.00	
7,875.04	90.26	179.75	7,600.33	-479.63	2.13	12.00	12.00	0.00	179.75	
12,355.50	90.26	179.75	7,580.00	-4,960.00	22.00	0.00	0.00	0.00	0.00	BHL-Hayhurst 16-25-



Phoenix Technology Services
Planning Report



Database:	GCR DB	Local Co-ordinate Reference:	Well #4H
Company:	Chevron	TVD Reference:	KB @ 3218.00usft (Ensign 767)
Project:	Eddy County, NM (NAD27 NME)	MD Reference:	KB @ 3218.00usft (Ensign 767)
Site:	Hayhurst 16-25-27 State	North Reference:	Grid
Well:	#4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB1/Job #1411428		
Design:	Plan #1 08-01-14		

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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
695.00	0.00	0.00	695.00	0.00	0.00	0.00	0.00	0.00	0.00
Castille									
2,194.00	0.00	0.00	2,194.00	0.00	0.00	0.00	0.00	0.00	0.00
Lamar LS									
2,264.00	0.00	0.00	2,264.00	0.00	0.00	0.00	0.00	0.00	0.00
Bell Canyon									
3,109.00	0.00	0.00	3,109.00	0.00	0.00	0.00	0.00	0.00	0.00
Cherry Canyon									
4,162.00	0.00	0.00	4,162.00	0.00	0.00	0.00	0.00	0.00	0.00
Brushy Canyon									
5,765.00	0.00	0.00	5,765.00	0.00	0.00	0.00	0.00	0.00	0.00
Top of Bone Spring									
5,877.00	0.00	0.00	5,877.00	0.00	0.00	0.00	0.00	0.00	0.00
Avalon									
6,697.00	0.00	0.00	6,697.00	0.00	0.00	0.00	0.00	0.00	0.00
1st Bone Spring Sand									
7,122.87	0.00	0.00	7,122.87	0.00	0.00	0.00	0.00	0.00	0.00
KOP, 12°/100' Build									
7,200.00	9.26	179.75	7,199.67	-6.22	0.03	6.22	12.00	12.00	0.00
7,300.00	21.26	179.75	7,295.97	-32.48	0.14	32.48	12.00	12.00	0.00
7,377.67	30.58	179.75	7,365.75	-66.39	0.29	66.39	12.00	12.00	0.00
2nd Bone Spring San									
7,400.00	33.26	179.75	7,384.70	-78.19	0.35	78.19	12.00	12.00	0.00
7,500.00	45.26	179.75	7,461.99	-141.35	0.63	141.35	12.00	12.00	0.00
7,600.00	57.26	179.75	7,524.46	-219.20	0.97	219.21	12.00	12.00	0.00
7,700.00	69.26	179.75	7,569.38	-308.34	1.37	308.35	12.00	12.00	0.00
7,726.25	72.41	179.75	7,578.00	-333.13	1.48	333.14	12.00	12.00	0.00
Top of target									
7,800.00	81.26	179.75	7,594.79	-404.87	1.80	404.88	12.00	12.00	0.00
7,825.62	84.33	179.75	7,598.00	-430.28	1.91	430.29	12.00	12.00	0.00
Target line / landing d									
7,875.04	90.26	179.75	7,600.33	-479.63	2.13	479.63	12.00	12.00	0.00
LP: Hold 90.26° Inc, 179.75° Azm									
7,900.00	90.26	179.75	7,600.22	-504.59	2.24	504.59	0.00	0.00	0.00
8,000.00	90.26	179.75	7,599.76	-604.59	2.68	604.59	0.00	0.00	0.00
8,100.00	90.26	179.75	7,599.31	-704.58	3.13	704.59	0.00	0.00	0.00
8,200.00	90.26	179.75	7,598.86	-804.58	3.57	804.59	0.00	0.00	0.00
8,300.00	90.26	179.75	7,598.40	-904.58	4.01	904.59	0.00	0.00	0.00
8,400.00	90.26	179.75	7,597.95	-1,004.58	4.46	1,004.59	0.00	0.00	0.00
8,500.00	90.26	179.75	7,597.50	-1,104.58	4.90	1,104.59	0.00	0.00	0.00
8,600.00	90.26	179.75	7,597.04	-1,204.57	5.34	1,204.59	0.00	0.00	0.00
8,700.00	90.26	179.75	7,596.59	-1,304.57	5.79	1,304.58	0.00	0.00	0.00
8,800.00	90.26	179.75	7,596.13	-1,404.57	6.23	1,404.58	0.00	0.00	0.00
8,900.00	90.26	179.75	7,595.68	-1,504.57	6.67	1,504.58	0.00	0.00	0.00
9,000.00	90.26	179.75	7,595.23	-1,604.57	7.12	1,604.58	0.00	0.00	0.00
9,100.00	90.26	179.75	7,594.77	-1,704.56	7.56	1,704.58	0.00	0.00	0.00
9,200.00	90.26	179.75	7,594.32	-1,804.56	8.00	1,804.58	0.00	0.00	0.00
9,300.00	90.26	179.75	7,593.87	-1,904.56	8.45	1,904.58	0.00	0.00	0.00
9,400.00	90.26	179.75	7,593.41	-2,004.56	8.89	2,004.58	0.00	0.00	0.00
9,500.00	90.26	179.75	7,592.96	-2,104.56	9.33	2,104.58	0.00	0.00	0.00
9,600.00	90.26	179.75	7,592.50	-2,204.55	9.78	2,204.58	0.00	0.00	0.00
9,700.00	90.26	179.75	7,592.05	-2,304.55	10.22	2,304.57	0.00	0.00	0.00



Phoenix Technology Services

Planning Report



Database:	GCR/DB	Local Co-ordinate Reference:	Well #4H
Company:	Chevron	TVD Reference:	KB @ 3218.00usft (Ensign 767)
Project:	Eddy County NM (NAD27 NME)	MD Reference:	KB @ 3218.00usft (Ensign 767)
Site:	Hayhurst 16-25-27 State	North Reference:	Grid
Well:	#4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB1/Job #1411428		
Design:	Plan #1108-01-14		

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)
9,800.00	90.26	179.75	7,591.60	-2,404.55	10.67	2,404.57	0.00	0.00	0.00
9,900.00	90.26	179.75	7,591.14	-2,504.55	11.11	2,504.57	0.00	0.00	0.00
10,000.00	90.26	179.75	7,590.69	-2,604.55	11.55	2,604.57	0.00	0.00	0.00
10,100.00	90.26	179.75	7,590.24	-2,704.54	12.00	2,704.57	0.00	0.00	0.00
10,200.00	90.26	179.75	7,589.78	-2,804.54	12.44	2,804.57	0.00	0.00	0.00
10,300.00	90.26	179.75	7,589.33	-2,904.54	12.88	2,904.57	0.00	0.00	0.00
10,400.00	90.26	179.75	7,588.87	-3,004.54	13.33	3,004.57	0.00	0.00	0.00
10,500.00	90.26	179.75	7,588.42	-3,104.54	13.77	3,104.57	0.00	0.00	0.00
10,600.00	90.26	179.75	7,587.97	-3,204.53	14.21	3,204.57	0.00	0.00	0.00
10,700.00	90.26	179.75	7,587.51	-3,304.53	14.66	3,304.56	0.00	0.00	0.00
10,800.00	90.26	179.75	7,587.06	-3,404.53	15.10	3,404.56	0.00	0.00	0.00
10,900.00	90.26	179.75	7,586.61	-3,504.53	15.54	3,504.56	0.00	0.00	0.00
11,000.00	90.26	179.75	7,586.15	-3,604.53	15.99	3,604.56	0.00	0.00	0.00
11,100.00	90.26	179.75	7,585.70	-3,704.52	16.43	3,704.56	0.00	0.00	0.00
11,200.00	90.26	179.75	7,585.24	-3,804.52	16.87	3,804.56	0.00	0.00	0.00
11,300.00	90.26	179.75	7,584.79	-3,904.52	17.32	3,904.56	0.00	0.00	0.00
11,400.00	90.26	179.75	7,584.34	-4,004.52	17.76	4,004.56	0.00	0.00	0.00
11,500.00	90.26	179.75	7,583.88	-4,104.52	18.21	4,104.56	0.00	0.00	0.00
11,600.00	90.26	179.75	7,583.43	-4,204.51	18.65	4,204.55	0.00	0.00	0.00
11,700.00	90.26	179.75	7,582.97	-4,304.51	19.09	4,304.55	0.00	0.00	0.00
11,800.00	90.26	179.75	7,582.52	-4,404.51	19.54	4,404.55	0.00	0.00	0.00
11,900.00	90.26	179.75	7,582.07	-4,504.51	19.98	4,504.55	0.00	0.00	0.00
12,000.00	90.26	179.75	7,581.61	-4,604.51	20.42	4,604.55	0.00	0.00	0.00
12,100.00	90.26	179.75	7,581.16	-4,704.50	20.87	4,704.55	0.00	0.00	0.00
12,200.00	90.26	179.75	7,580.71	-4,804.50	21.31	4,804.55	0.00	0.00	0.00
12,300.00	90.26	179.75	7,580.25	-4,904.50	21.75	4,904.55	0.00	0.00	0.00
12,355.50	90.26	179.75	7,580.00	-4,960.00	22.00	4,960.05	0.00	0.00	0.00
TD at 12355.50 MD: BHL-Hayhurst 16-25-27 State #4H									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
BHL-Hayhurst 16-25-27	-90.26	179.75	7,580.00	-4,960.00	22.00	408,565.00	544,553.00	32° 7' 23.44742 N	104° 11' 21.90787 W
- hit/miss target									
- Shape									
- plan hits target center									
- Rectangle (sides W100.00 H50.00 D4,480.00)									



Phoenix Technology Services
Planning Report

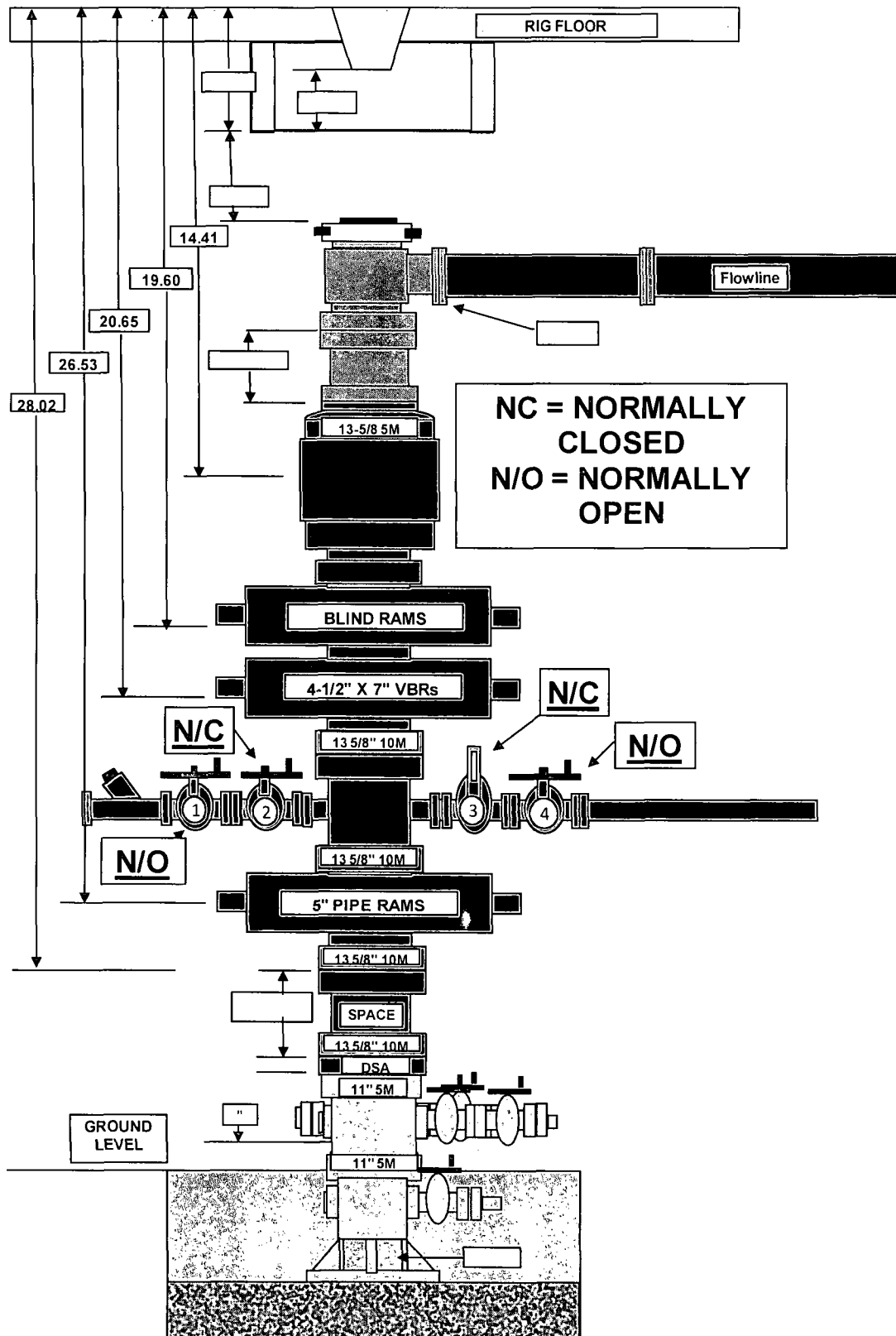


Database:	GCR DB	Local Co-ordinate Reference:	Well #4H:
Company:	Chevron	TVD Reference:	KB @ 3218.00usft (Ensign 767)
Project:	Eddy County NM (NAD27 NME)	MD Reference:	KB @ 3218.00usft (Ensign 767)
Site:	Hayhurst 16-25-27 State	North Reference:	Grid
Well:	#4H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB1/Job #1411428		
Design:	Plan #1,08-01-14		

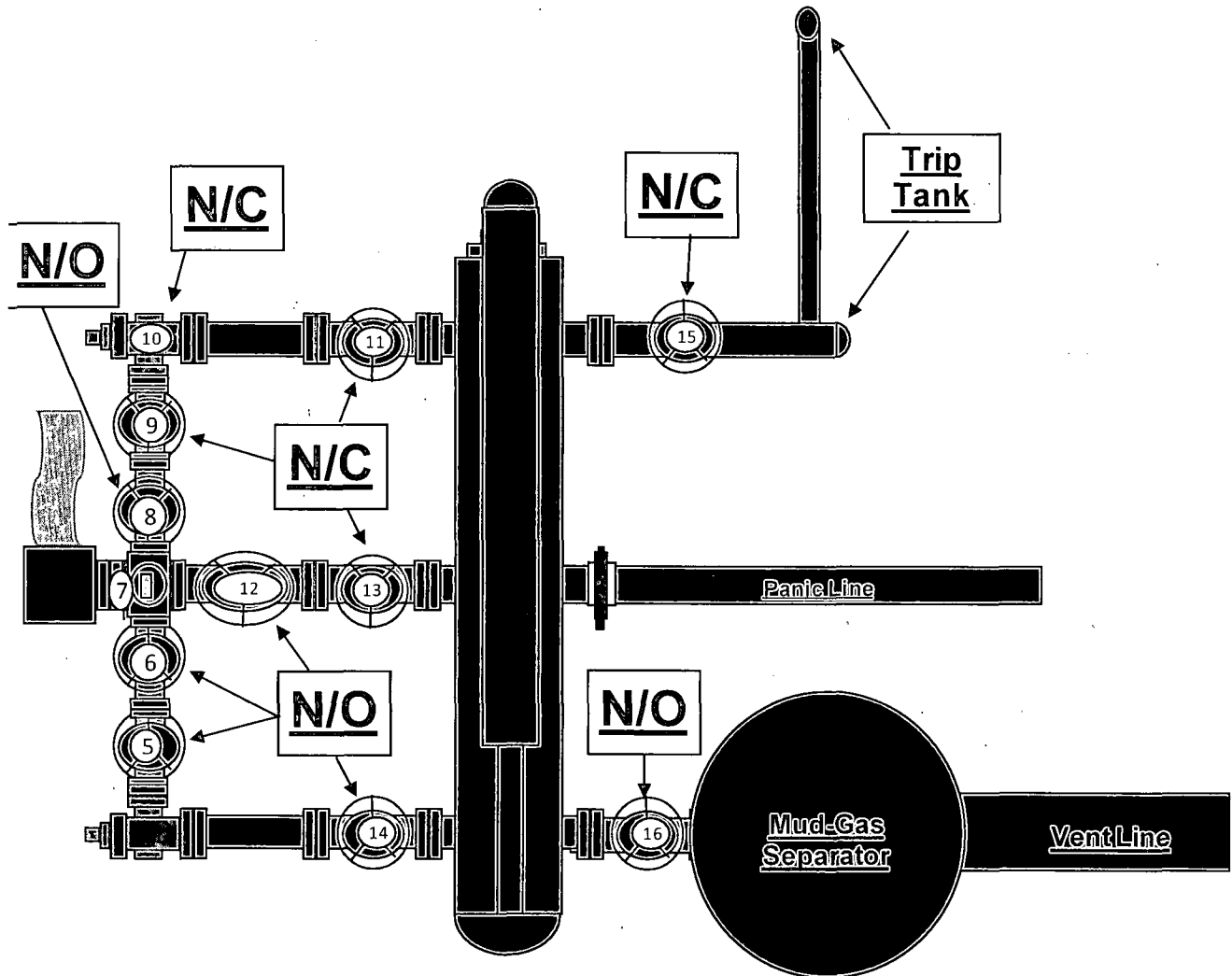
Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
695.00	695.00	Castille		-0.22	179.79
2,194.00	2,194.00	Lamar LS		-0.22	179.79
2,264.00	2,264.00	Bell Canyon		-0.22	179.79
3,109.00	3,109.00	Cherry Canyon		-0.22	179.79
4,162.00	4,162.00	Brushy Canyon		-0.22	179.79
5,765.00	5,765.00	Top of Bone Spring		-0.22	179.79
5,877.00	5,877.00	Avalon		-0.22	179.79
6,697.00	6,697.00	1st Bone Spring Sand		-0.22	179.79
7,377.67	7,365.75	2nd Bone Spring San		-0.22	179.79
7,726.25	7,578.00	Top of target			
7,825.62	7,598.00	Target line / landing d			

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,122.87	7,122.87	0.00	0.00	KOP, 12°/100' Build
7,875.04	7,600.33	-479.63	2.13	LP, Hold 90.26° Inc, 179.75° Azm
12,355.50	7,580.00	-4,960.00	22.00	TD at 12355.50' MD

Ensign 767 BOP Stack



Ensign 767 Choke Manifold



N/C = NORMALLY CLOSED
N/O = NORMALLY OPEN

Hayhurst 16 State 4H Pad Layout (330' x 370')

