

NM OIL CONSERVATION
ARTESIA DISTRICT

JUL 08 2014

Form C-102

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 86210
Phone: (575) 748-1293 Fax: (575) 748-9720
District III
1600 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT G-02 S252715A

¹ API Number 30-015-42491	² Pool Code 97816	³ Pool Name Hayhurst, Bone Spring
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 3H
		⁹ Elevation 3219'

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
D	16	25 SOUTH	27 EAST, N.M.P.M.		175'	NORTH	660'	WEST	EDDY

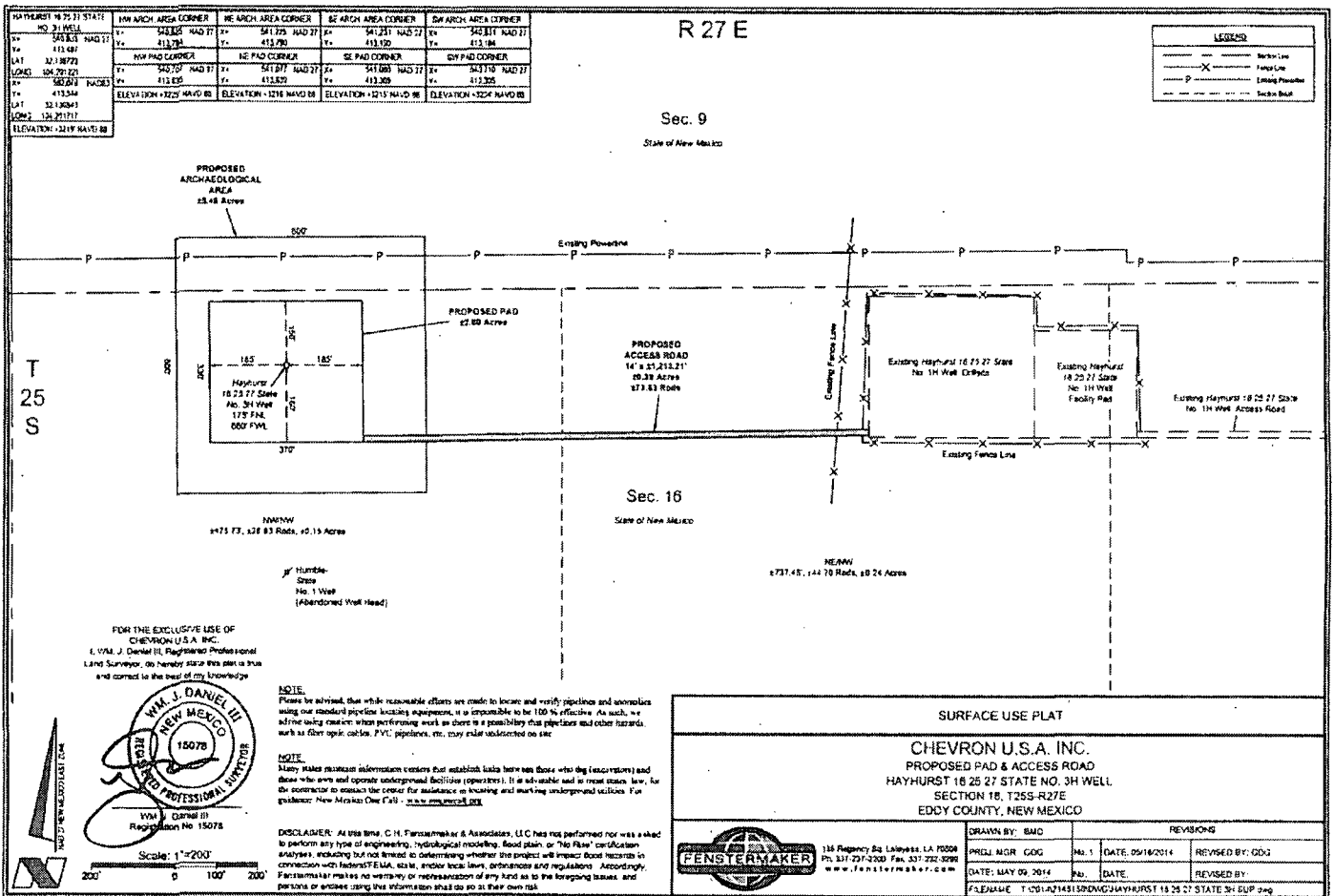
11 Bottom Hole Location If Different From Surface

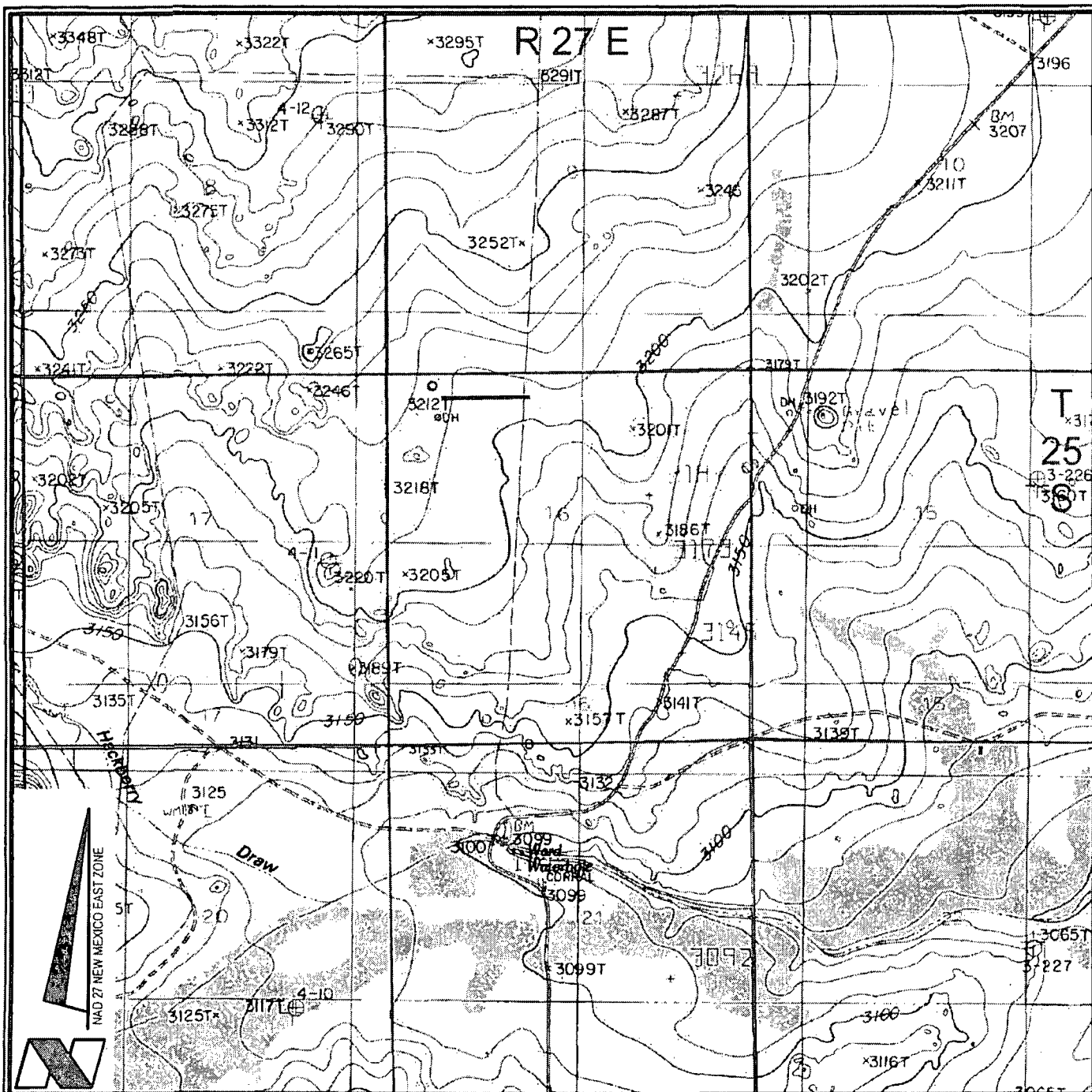
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	16	25 SOUTH	27 EAST, N.M.P.M.		150'	SOUTH	660'	WEST	EDDY

¹² Dedicated Acres 16.0	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.

Proposed First Take Point 330' FNL & 660' FWL Proposed Last Take Point 330' FSL & 660' FWL Proposed Producing Interval CORNER COORDINATES TABLE (NAD 27) A - Y=413654.70, X=540232.49 B - Y=413668.74, X=541654.29 C - Y=408353.74, X=540251.14 D - Y=408372.47, X=541674.37	11 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 undivided 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: <i>Denise Pinkerton</i> Date: 09/08/2014 Printed Name: Denise Pinkerton E-mail Address: leakejd@chevron.com
	12 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: <i>[Signature]</i> Professional Surveyor Seal: WM. J. DANIEL III NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR 15078 Certificate Number: #15078





VICINITY MAP

2000' 0 1000' 2000'
Scale: 1" = 2000'

CHEVRON U.S.A. INC.
HAYHURST 16 25 27 STATE NO. 3H WELL
LOCATED 175' FNL AND 660' FWL
SECTION 16, T25S-R27E
EDDY COUNTY, NEW MEXICO

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

PRELIMINARY



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

DRAWN BY: BMO

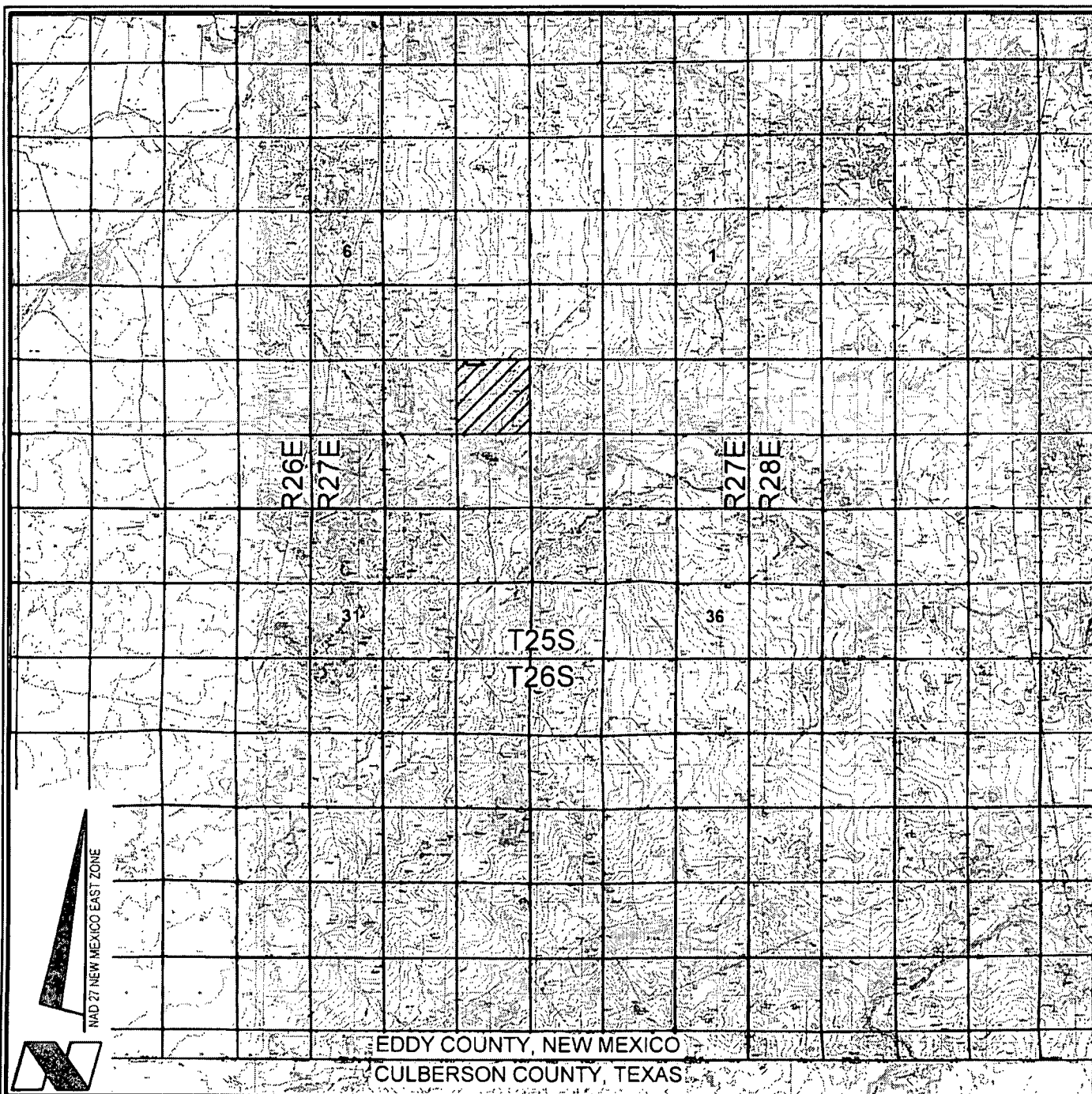
REVISED:

DATE: MAY 09, 2014

PROJ. MGR.: GDG

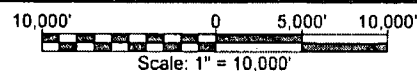
SHEET 1 OF 3 SHEETS

FILENAME: T:\2014\2145150\DWG\HAYHURST 16 25 27 STATE 3H APD.dwg



EDDY COUNTY, NEW MEXICO
CULBERSON COUNTY, TEXAS

VICINITY MAP



CHEVRON U.S.A. INC.

HAYHURST 16 25 27 STATE NO. 3H WELL
LOCATED 175' FNL AND 660' FWL
SECTION 16, T25S-R27E
EDDY COUNTY, NEW MEXICO

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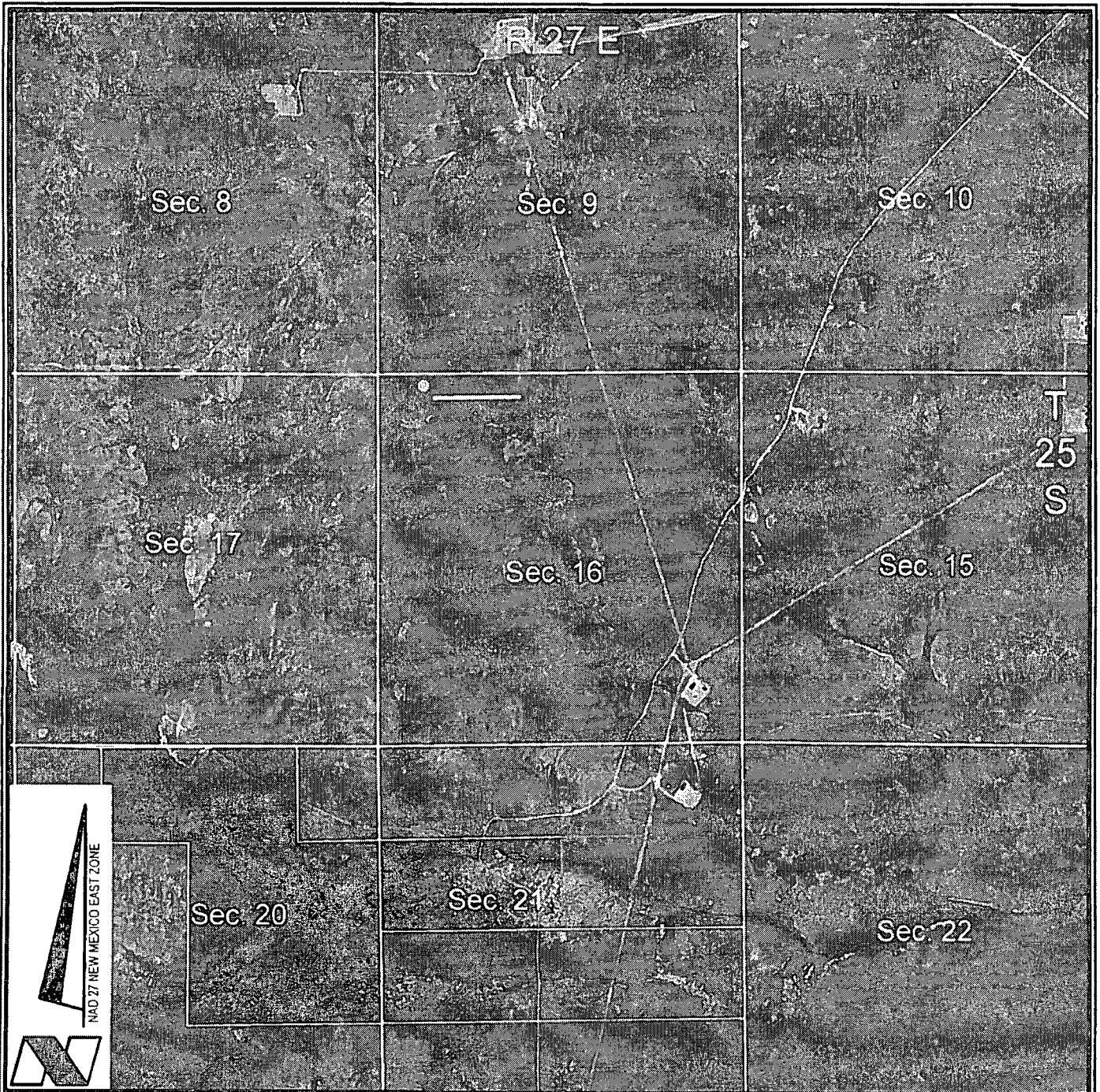
REVISED:

DATE: MAY 09, 2014

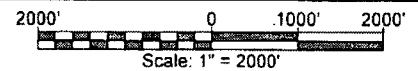
PROJ. MGR.: GDG

SHEET 2 OF 3 SHEETS

FILENAME: T:\2014\2145150\DWG\HAYHURST 16 25 27 STATE 3H APD.dwg



VICINITY MAP



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

CHEVRON U.S.A. INC.
HAYHURST 16 25 27 STATE NO. 3H WELL
LOCATED 175' FNL AND 660' FWL
SECTION 16, T25S-R27E
EDDY COUNTY, NEW MEXICO

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

PRELIMINARY



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DRAWN BY: BMO

REVISED:

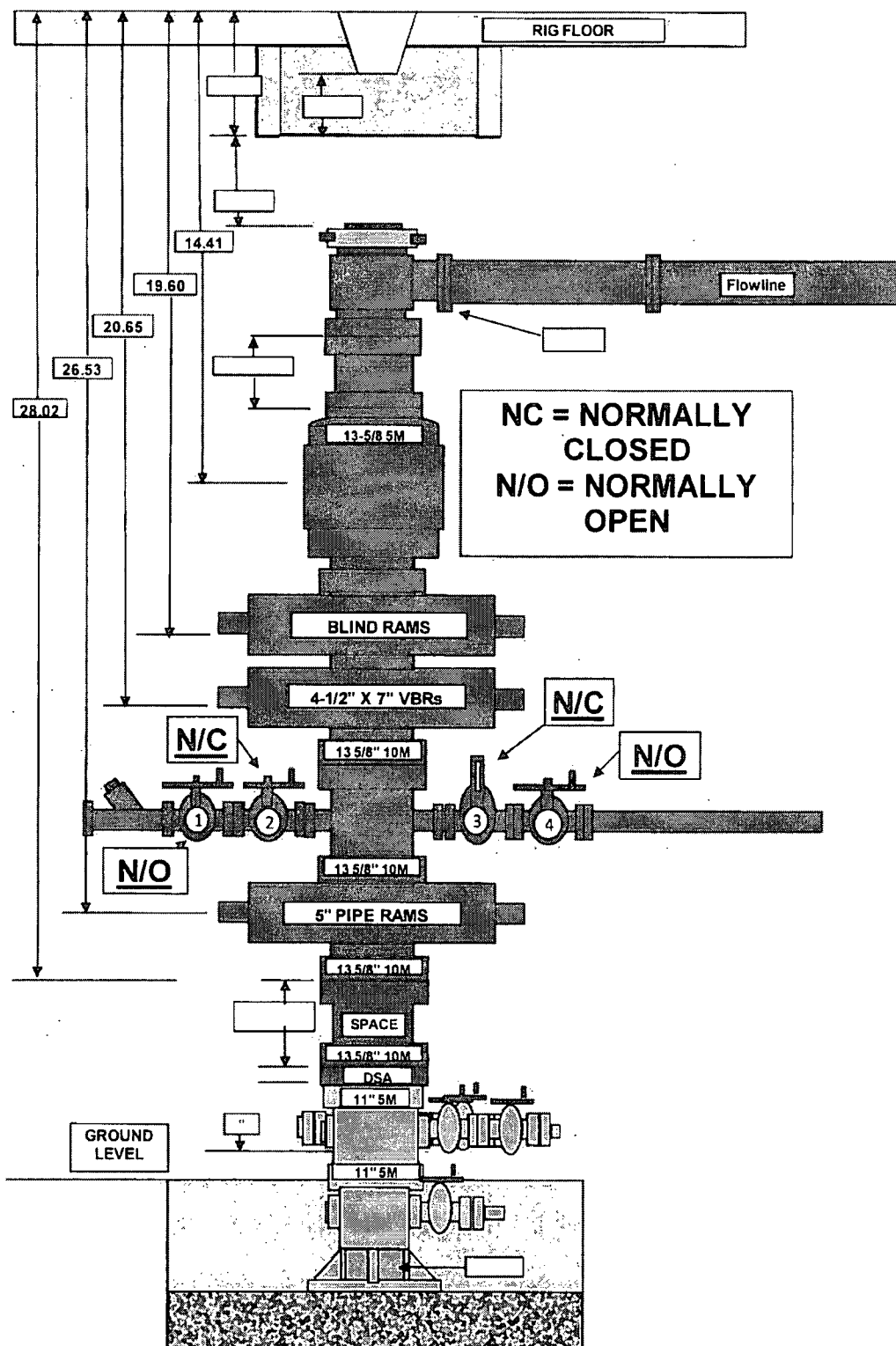
DATE: MAY 09, 2014

PROJ. MGR.: GDG

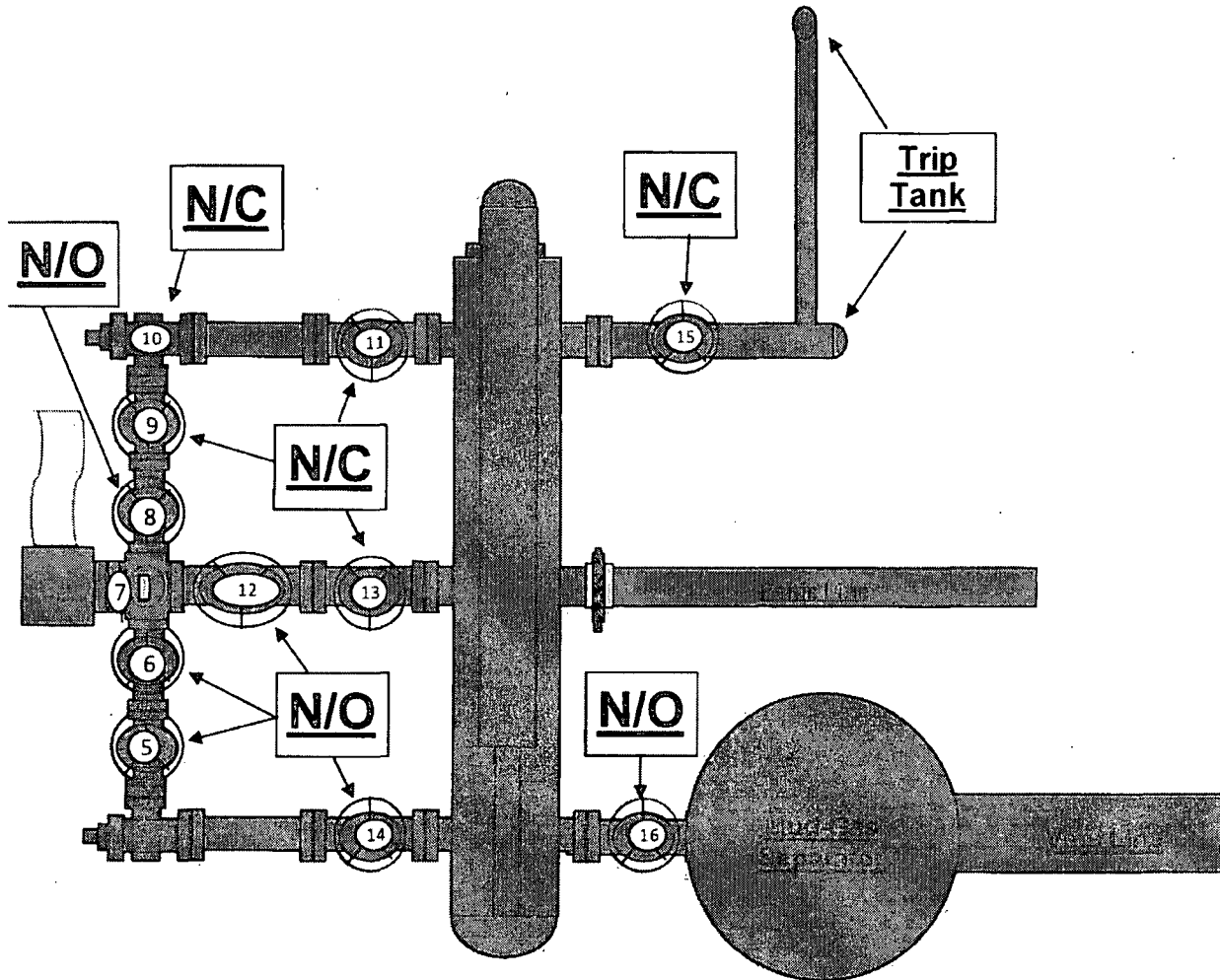
SHEET 3 OF 3 SHEETS

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Ensign 767 BOP Stack

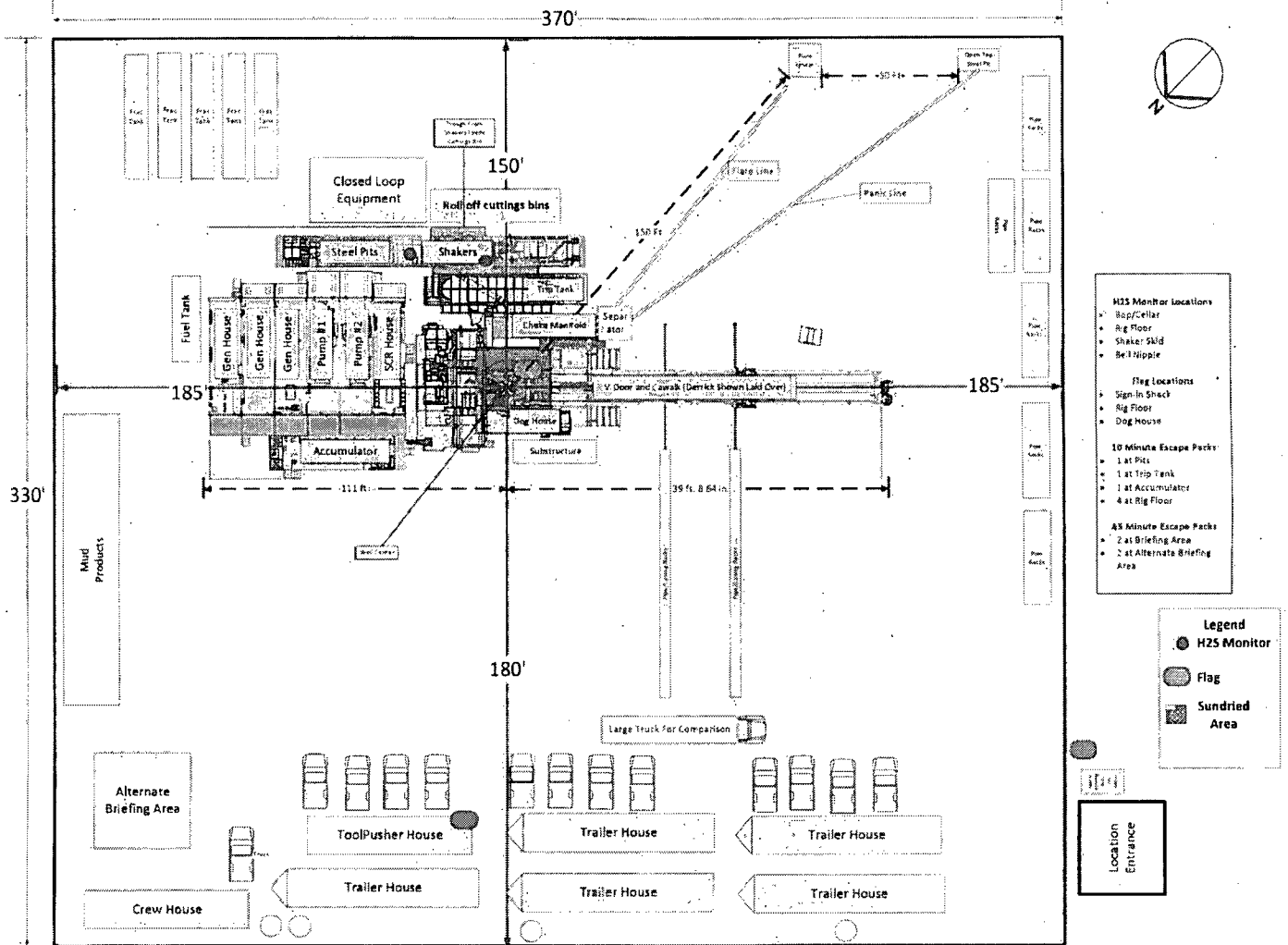


Ensign 767 Choke Manifold



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

Hayhurst 16 State 3H Pad Layout (330' x 370')



Chevron USA, Inc.

HALLIBURTON

Berry Drilling



Project: Eddy County, NM
Site: Hayhurst 16 25 27
Well: Hayhurst 16 25 27 State 3H
Wellbore: Wellbore #1
Design: Plan #1
Rig: Ensign 767

SURFACE LOCATION

US State Plane 1927 (Exact solution)
New Mexico East 3001
Elevation: GL 3219.0' + KB 25.0' @ 3244.00usft (Ensign 767)
Northing: 413487.00 Easting: 540893.00 Latitude: 32° 8' 12.204" N Longitude: 104° 12' 4.399" W

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Hayhurst 16 25 27 #3H FTP	7424.94	-155.30	0.56	413331.70	540893.56	32° 8' 10.667" N	104° 12' 4.394" W
Hayhurst 16 25 27 #3H BHL	7530.00	-4974.00	18.00	408513.00	540911.00	32° 7' 22.979" N	104° 12' 4.280" W
Hayhurst 16 25 27 #3H LTP	7530.00	-4795.80	17.35	408693.10	540910.35	32° 7' 24.761" N	104° 12' 4.285" W

SECTION DETAILS

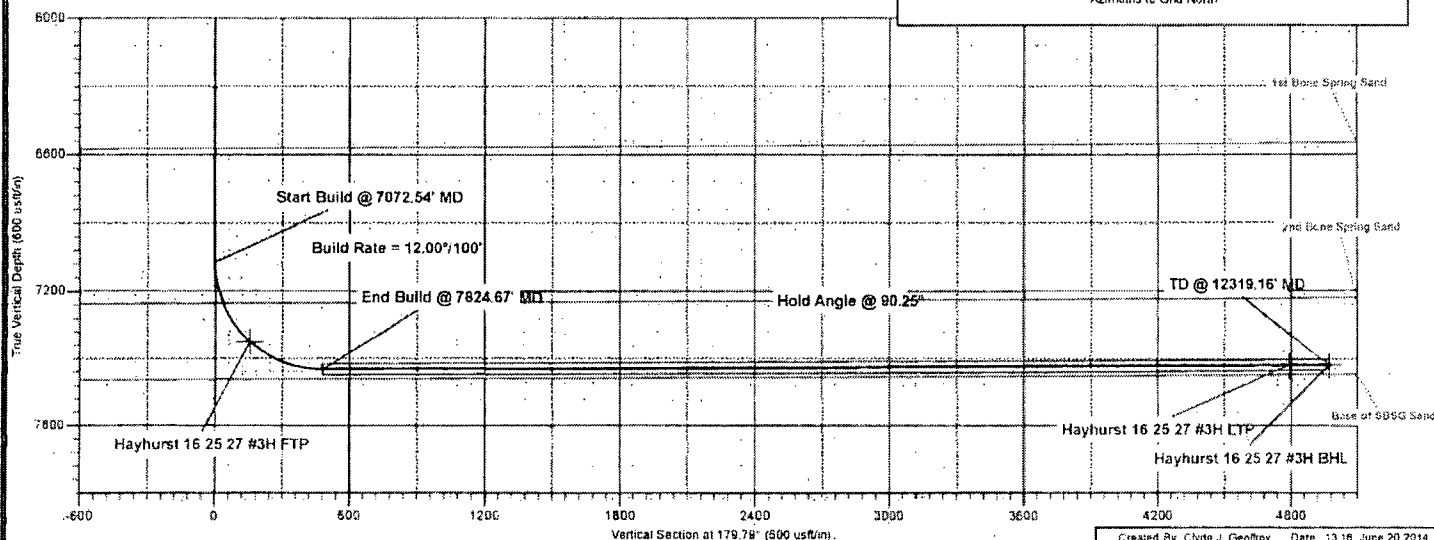
MD	Inc	Azi	TVD	+N/-S	+E/-W	Diag	TFace	VSecl	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7072.54	0.00	0.00	7072.54	0.00	0.00	0.00	0.00	0.00	Start Build
7824.67	90.25	179.79	7550.00	-479.58	1.74	12.00	179.79	479.59	End Build
12319.16	90.25	179.79	7530.00	-4974.00	18.00	0.00	0.00	4974.03	TD

TARGET WINDOW:

25' Up & 25' Down
50' Right & 50' Left

To convert a Magnetic Direction to a Grid Direction, Add 7.59°

Magnetic Model: BGM2014 Date: 20-Jun-14
Azimuths to Grid North

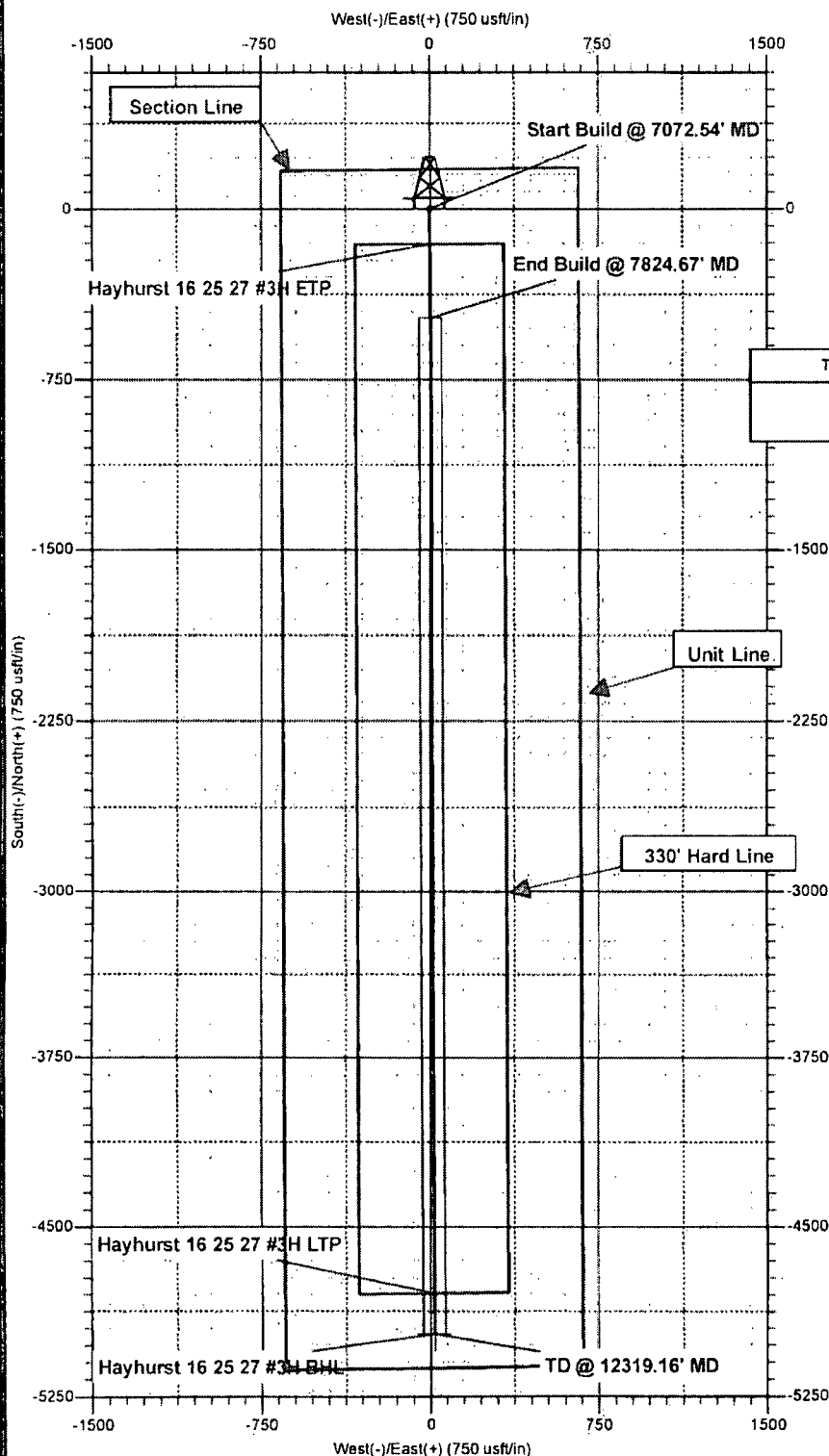


Created By: Clyde J. Geoffrey Date: 13:16, June 20, 2014

Project: Eddy County, NM
Site: Hayhurst 16 25 27
Well: Hayhurst 16 25 27 State 3H
Wellbore: Wellbore #1
Design: Plan #1
Rig: Ensign 767

SURFACE LOCATION

US State Plane 1927 (Exact solution)
New Mexico East 3001
Elevation: GL 3219.0' + KB 25.0' @ 3244.00usft (Ensign 767)
Northing 413487.00 Easting 540893.00 Latitude 32° 8' 12.204 N Longitude 104° 12' 4.399 W



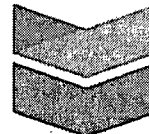
To convert a Magnetic Direction to a Grid Direction, Add 7.59°

Magnetic Model: BGGM2014 Date: 20-Jun-14
Azimuths to Grid North

TARGET WINDOW:

25' Up & 25' Down
50' Right & 50' Left

Chevron



Chevron USA, Inc.

**Eddy County, NM
Hayhurst 16 25 27
Hayhurst 16 25 27 State 3H**

Wellbore #1

Plan: Plan #1

Sperry Drilling Services Proposal Report

20 June, 2014

Well Coordinates: 413,487.00 N, 540,893.00 E (32° 08' 12.20" N, 104° 12' 04.40" W)
Ground Level: 3,212.00 usft

Local Coordinate Origin:	Centered on Well Hayhurst 16 25 27 State 3H
Viewing Datum:	GL 3219.0' + KB 25.0' @ 3244.00usft (Ensign 767)
TVDs to System:	N
North Reference:	Grid
Unit System:	API - US Survey Feet

Version: 5000.1 Build: 65

HALLIBURTON

HALLIBURTON**Plan Report for Hayhurst 16 25 27 State 3H - Plan #1**

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)	Toolface Azimuth (°)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
560.00	0.00	0.00	560.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Castile										
2,089.00	0.00	0.00	2,089.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lamar LS										
2,134.00	0.00	0.00	2,134.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bell Canyon										
2,959.00	0.00	0.00	2,959.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cherry Canyon										
4,055.00	0.00	0.00	4,055.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Brushy Canyon										
5,531.00	0.00	0.00	5,531.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Top of Bone Spring										
5,754.00	0.00	0.00	5,754.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avalon										
6,574.00	0.00	0.00	6,574.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1st Bone Spring Sand										
7,072.54	0.00	0.00	7,072.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build @ 7072.54' MD - Build Rate = 12.00°/100'										
7,100.00	3.29	179.79	7,099.98	-0.79	0.00	0.79	12.00	12.00	0.00	179.79
7,200.00	15.29	179.79	7,198.49	-16.91	0.06	16.91	12.00	12.00	0.00	0.00
7,258.51	22.32	179.79	7,253.84	-35.76	0.13	35.76	12.00	12.00	0.00	0.00
2nd Bone Spring Sand										
7,300.00	27.29	179.79	7,291.49	-53.16	0.19	53.16	12.00	12.00	0.00	0.00
7,400.00	39.29	179.79	7,374.93	-107.96	0.39	107.96	12.00	12.00	0.00	0.00
7,468.96	47.57	179.79	7,424.96	-155.32	0.56	155.32	12.00	12.00	0.00	0.00
Hayhurst 16 25 27 #3H FTP										
7,500.00	51.29	179.79	7,445.14	-178.90	0.65	178.90	12.00	12.00	0.00	0.00
7,600.00	63.29	179.79	7,499.08	-262.89	0.95	262.89	12.00	12.00	0.00	0.00
7,700.00	75.29	179.79	7,534.37	-356.26	1.29	356.26	12.00	12.00	0.00	0.00
7,800.00	87.29	179.79	7,549.48	-454.93	1.65	454.93	12.00	12.00	0.00	0.00
7,824.67	90.25	179.79	7,550.00	-479.59	1.74	479.59	12.00	12.00	0.00	0.00
End Build @ 7824.67' MD - Hold Angle @ 90.25°										
7,900.00	90.25	179.79	7,549.67	-554.92	2.01	554.92	0.00	0.00	0.00	0.00
8,000.00	90.25	179.79	7,549.22	-654.92	2.37	654.92	0.00	0.00	0.00	0.00
8,100.00	90.25	179.79	7,548.78	-754.91	2.73	754.92	0.00	0.00	0.00	0.00
8,200.00	90.25	179.79	7,548.33	-854.91	3.09	854.92	0.00	0.00	0.00	0.00
8,300.00	90.25	179.79	7,547.89	-954.91	3.46	954.92	0.00	0.00	0.00	0.00
8,400.00	90.25	179.79	7,547.44	-1,054.91	3.82	1,054.92	0.00	0.00	0.00	0.00
8,500.00	90.25	179.79	7,547.00	-1,154.91	4.18	1,154.92	0.00	0.00	0.00	0.00
8,600.00	90.25	179.79	7,546.55	-1,254.91	4.54	1,254.91	0.00	0.00	0.00	0.00
8,700.00	90.25	179.79	7,546.11	-1,354.90	4.90	1,354.91	0.00	0.00	0.00	0.00
8,800.00	90.25	179.79	7,545.66	-1,454.90	5.27	1,454.91	0.00	0.00	0.00	0.00
8,900.00	90.25	179.79	7,545.22	-1,554.90	5.63	1,554.91	0.00	0.00	0.00	0.00
9,000.00	90.25	179.79	7,544.77	-1,654.90	5.99	1,654.91	0.00	0.00	0.00	0.00
9,100.00	90.25	179.79	7,544.33	-1,754.90	6.35	1,754.91	0.00	0.00	0.00	0.00
9,200.00	90.25	179.79	7,543.88	-1,854.90	6.71	1,854.91	0.00	0.00	0.00	0.00
9,300.00	90.25	179.79	7,543.44	-1,954.89	7.07	1,954.91	0.00	0.00	0.00	0.00
9,400.00	90.25	179.79	7,542.99	-2,054.89	7.44	2,054.91	0.00	0.00	0.00	0.00
9,500.00	90.25	179.79	7,542.55	-2,154.89	7.80	2,154.91	0.00	0.00	0.00	0.00
9,600.00	90.25	179.79	7,542.10	-2,254.89	8.16	2,254.90	0.00	0.00	0.00	0.00
9,700.00	90.25	179.79	7,541.66	-2,354.89	8.52	2,354.90	0.00	0.00	0.00	0.00
9,800.00	90.25	179.79	7,541.21	-2,454.89	8.88	2,454.90	0.00	0.00	0.00	0.00
9,900.00	90.25	179.79	7,540.77	-2,554.88	9.25	2,554.90	0.00	0.00	0.00	0.00
10,000.00	90.25	179.79	7,540.32	-2,654.88	9.61	2,654.90	0.00	0.00	0.00	0.00
10,100.00	90.25	179.79	7,539.88	-2,754.88	9.97	2,754.90	0.00	0.00	0.00	0.00
10,200.00	90.25	179.79	7,539.43	-2,854.88	10.33	2,854.90	0.00	0.00	0.00	0.00

Plan Report for Hayhurst 16 25 27 State 3H - Plan #1

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)	Toolface Azimuth (°)
10,300.00	90.25	179.79	7,538.99	-2,954.88	10.69	2,954.90	0.00	0.00	0.00	0.00
10,400.00	90.25	179.79	7,538.54	-3,054.88	11.06	3,054.90	0.00	0.00	0.00	0.00
10,500.00	90.25	179.79	7,538.10	-3,154.87	11.42	3,154.90	0.00	0.00	0.00	0.00
10,600.00	90.25	179.79	7,537.65	-3,254.87	11.78	3,254.89	0.00	0.00	0.00	0.00
10,700.00	90.25	179.79	7,537.21	-3,354.87	12.14	3,354.89	0.00	0.00	0.00	0.00
10,800.00	90.25	179.79	7,536.76	-3,454.87	12.50	3,454.89	0.00	0.00	0.00	0.00
10,900.00	90.25	179.79	7,536.32	-3,554.87	12.86	3,554.89	0.00	0.00	0.00	0.00
11,000.00	90.25	179.79	7,535.87	-3,654.87	13.23	3,654.89	0.00	0.00	0.00	0.00
11,100.00	90.25	179.79	7,535.43	-3,754.86	13.59	3,754.89	0.00	0.00	0.00	0.00
11,200.00	90.25	179.79	7,534.98	-3,854.86	13.95	3,854.89	0.00	0.00	0.00	0.00
11,300.00	90.25	179.79	7,534.54	-3,954.86	14.31	3,954.89	0.00	0.00	0.00	0.00
11,400.00	90.25	179.79	7,534.09	-4,054.86	14.67	4,054.89	0.00	0.00	0.00	0.00
11,500.00	90.25	179.79	7,533.65	-4,154.86	15.04	4,154.89	0.00	0.00	0.00	0.00
11,600.00	90.25	179.79	7,533.20	-4,254.86	15.40	4,254.88	0.00	0.00	0.00	0.00
11,700.00	90.25	179.79	7,532.76	-4,354.85	15.76	4,354.88	0.00	0.00	0.00	0.00
11,800.00	90.25	179.79	7,532.31	-4,454.85	16.12	4,454.88	0.00	0.00	0.00	0.00
11,900.00	90.25	179.79	7,531.87	-4,554.85	16.48	4,554.88	0.00	0.00	0.00	0.00
12,000.00	90.25	179.79	7,531.42	-4,654.85	16.85	4,654.88	0.00	0.00	0.00	0.00
12,100.00	90.25	179.79	7,530.98	-4,754.85	17.21	4,754.88	0.00	0.00	0.00	0.00
12,139.05	90.25	179.79	7,530.80	-4,793.90	17.35	4,793.93	0.00	0.00	0.00	0.00
Hayhurst 16 25 27 #3H LTP										
12,200.00	90.25	179.79	7,530.53	-4,854.85	17.57	4,854.88	0.00	0.00	0.00	0.00
12,300.00	90.25	179.79	7,530.09	-4,954.85	17.93	4,954.88	0.00	0.00	0.00	0.00
12,319.16	90.25	179.79	7,530.00	-4,974.00	18.00	4,974.03	0.00	0.00	0.00	0.00
TD @ 12319.16' MD - Hayhurst 16 25 27 #3H BHL										

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
7,072.54	7,072.54	0.00	0.00	Start Build @ 7072.54' MD
7,072.54	7,072.54	0.00	0.00	Build Rate = 12.00°/100'
7,824.67	7,550.00	-479.59	1.74	End Build @ 7824.67' MD
7,824.67	7,550.00	-479.59	1.74	Hold Angle @ 90.25°
12,319.16	7,530.00	-4,974.00	18.00	TD @ 12319.16' MD

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin +N/-S (usft)	Origin +E/-W (usft)	Start TVD (usft)
TD	No Target (Freehand)	179.79	Slot	0.00	0.00	0.00

Survey tool program

From (usft)	To (usft)	Survey/Plan	Survey Tool
0.00	12,319.16	Plan #1	MWD+SC

Plan Report for Hayhurst 16 25 27 State 3H - Plan #1

Formation Details

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
560.00	560.00	Castile		-0.25	179.79
2,089.00	2,089.00	Lamar LS		-0.25	179.79
2,134.00	2,134.00	Bell Canyon		-0.25	179.79
2,959.00	2,959.00	Cherry Canyon		-0.25	179.79
4,055.00	4,055.00	Brushy Canyon		-0.25	179.79
5,531.00	5,531.00	Top of Bone Spring		-0.25	179.79
5,754.00	5,754.00	Avalon		-0.25	179.79
6,574.00	6,574.00	1st Bone Spring Sand		-0.25	179.79
7,258.51	7,254.00	2nd Bone Spring Sand		-0.25	179.79

Targets associated with this wellbore

Target Name	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Shape
Hayhurst 16 25 27 #3H BHL	7,530.00	-4,974.00	18.00	Rectangle
Hayhurst 16 25 27 #3H LTP	7,530.80	-4,793.90	17.35	Point
Hayhurst 16 25 27 #3H FTP	7,424.94	-155.30	0.56	Point

HALLIBURTON**North Reference Sheet for Hayhurst 16 25 27 - Hayhurst 16 25 27 State 3H - Wellbore #1**

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to Grid North Reference.

Vertical Depths are relative to GL 3219.0' + KB 25.0' @ 3244.00usft (Ensign 767). Northing and Easting are relative to Hayhurst 16 25 27 State 3H

Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 3001 using datum NAD 1927 (NADCON CONUS), ellipsoid Clarke 1866

Projection method is Transverse Mercator (Gauss-Kruger)

Central Meridian is -104.33°, Longitude Origin: 0° 0' 0.000 E°, Latitude Origin: 0° 0' 0.000 N°

False Easting: 500,000.00usft, False Northing: 0.00usft, Scale Reduction: 0.99991101

Grid Coordinates of Well: 413,487.00 usft N, 540,893.00 usft E

Geographical Coordinates of Well: 32° 08' 12.20" N, 104° 12' 04.40" W

Grid Convergence at Surface is: 0.07°

Based upon Minimum Curvature type calculations, at a Measured Depth of 12,319.16usft

the Bottom Hole Displacement is 4,974.03usft in the Direction of 179.79° (Grid).

Magnetic Convergence at surface is: -7.59° (20 June 2014, BGGM2014)

