

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

State of New Mexico

Form C-101
Revised November 14, 2012

RECEIVED
FEB 14 2013
NMOCD ARTESIA

Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address Chevron USA, Inc. 15 Smith Road Midland, TX 79705		2. OGRID Number 4323
3. Property Code 39726	4. Property Name HAYHURST 16 25 27 STATE	5. API Number 30-015-41121 6. Well No. 2H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
B	16	25 S	27 E		150'	N	1780'	E	EDDY

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
O	16	25 S	27 E		200'	S	1780'	E	EDDY

9. Pool Information

Pool Name WILDCAT G-02 S2527 15A ; BONE SPRING;	Pool Code 97816
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Additional Well Information

11. Work Type N	12. Well Type O	13. Cable/Rotary R	14. Lease Type S	15. Ground Level Elevation 3201'
16. Multiple N	17. Proposed Depth 12,306'	18. Formation Bone Spring	19. Contractor TBD	20. Spud Date
Depth to Ground water 75'+		Distance from nearest fresh water well > 1.6 MILES		Distance to nearest surface water > 6 MILES

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	17 1/2"	13 3/8"	48#	650'	600	0'
Intermediate	12 1/4"	9 5/8"	40#	2240'	1000	0'
Production	8 3/4"	5 1/2"	17#	12,306'	900	1740'

Casing/Cement Program: Additional Comments

DETAILED INFORMATION IS ATTACHED.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	5000	

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☐ , if applicable. Signature: <i>Bryan Arrant</i>		OIL CONSERVATION DIVISION	
Printed name: Bryan Arrant-Agent for Chevron USA, Inc.		Approved By: <i>T. C. Shepard</i>	
Title: Regulatory Specialist II		Title: <i>60010515</i>	
E-mail Address: bryan.arrant@chk.com		Approved Date: <i>2/15/2013</i> Expiration Date: <i>2/15/2015</i>	
Date: 02/13/2013	Phone: (405)935-3782	Conditions of Approval Attached <i>Require NSL Drilling "permit"</i>	

HAYHURST 16 25 27 STATE 2H

NMOCD's forms C-102, C-144(CLEZ) pit permit, casing program, directional planning report, depth to ground water reports, and other information is enclosed. There are no known high levels of H₂S in this area. However, monitoring of H₂S and well readiness will be utilized in the drilling of this well.

This well will require a NSL. Permit is for "DRILL ONLY". Surface hole will be drilled with fresh water mud, intermediate-brine and production hole with cut-brine.

Hayhurst 16-25-27 State 2H

Type	Hole Size (")	Casing Size (in)	Casing Weight (#'s)	Setting Depth (ft)	Estimated TOC (ft)	Bottom of Cemented Interval (ft)	Sacks of Cement (sx)
Surface	17.5	13.375	48	650	0	650	600
Intermediate	12.25	9.625	40	2,240	0	2,240	1,000
Production	8.75	5.5	17	12,306	1,740	7,843	900
		** Lateral will be an OH Packer Completion (no cement) from 12,306' (TD) to 7,843' (End of Curve). There will be a stage tool at the End of Curve to cement back up to 500' inside Intermediate csg thru.					

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District IV
1229 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-1469 Fax: (505) 476-3462

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

¹ API Number 30-015-41121	² Pool Code 97816	³ Pool Name Wildcat G-02 S2527 15A; Bone Spring
⁴ Property Code 39726	⁵ Property Name HAYHURST 16 25 27 STATE	
⁶ OGRID No. 4323	⁷ Operator Name CHEVRON U.S.A. INC.	⁸ Well Number 2H
		⁹ Elevation 3201'

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
B	16	25 SOUTH	27 EAST, N.M.P.M.		150'	NORTH	1780'	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
O	16	25 SOUTH	27 EAST, N.M.P.M.		200'	SOUTH	1780'	EAST	EDDY

¹² Dedicated Acres 160	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.

HAYHURST 16 25 27 STATE 2H WELL X= 543,740 NAD 27 Y= 413,542 LAT. 32.136865 LONG. 104.192022 X= 584,924 NAD83 Y= 413,600 LAT. 32.136958 LONG. 104.192517 ELEVATION +3201' NAD83	Proposed Penetration Point 330' FNL & 1780' FEL	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 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. <i>Bryan Arrant</i> 02/13/2013 Signature Date Bryan Arrant (Agent for Chevron) Printed Name bryan.arrant@chk.com E-mail Address
PROPOSED BOTTOM HOLE LOCATION X= 543,763 NAD 27 Y= 408,603 LAT. 32.123288 LONG. 104.191970 X= 584,947 NAD83 Y= 408,661 LAT. 32.123410 LONG. 104.192464	Project Area Producing Area S 00°15'53"E 4938.52'	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. Jan 30 2013 Date of Survey <i>Wm. J. Daniel III</i> Signature and Printed Name of Registered Professional Surveyor Wm. J. DANIEL III NEW MEXICO 15078 REGISTERED PROFESSIONAL SURVEYOR Certification #15078



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,
O=orphaned,

C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Code	Subbasin	County	POD	Q	Q	Q	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
C 03261 POD1			ED	3	2	1	20	25S	27E		574007	3554006*	351		
C 03262 POD1			ED	2	1	2	22	25S	27E		577837	3554244*	75		
													Average Depth to Water:	--	
													Minimum Depth:	--	
													Maximum Depth:	--	

Record Count: 2

Basin/County Search:

Basin: Carlsbad

County: Eddy

PLSS Search:

Section(s): 8, 9, 10, 15, 16, 17, 20, 21, 22

Township: 25S

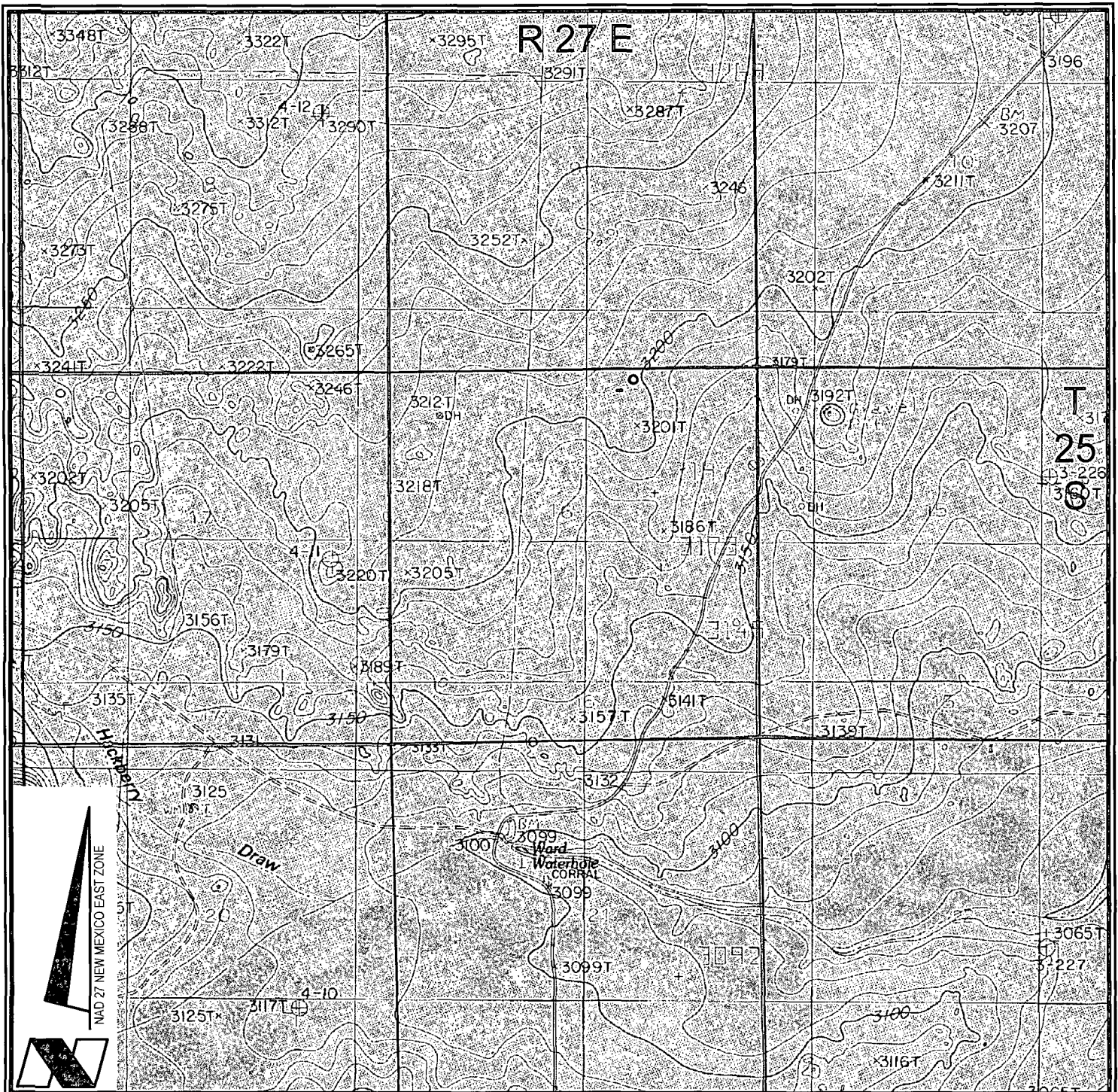
Range: 27E

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

2/13/13 9:37 AM

WATER COLUMN/ AVERAGE
DEPTH TO WATER



VICINITY MAP

CHEVRON U.S.A. INC.
HAYHURST 16-25-27 STATE NO. 2H WELL
 LOCATED 150' FNL AND 1780' FEL
 SECTION 16, T25S-R27E
 EDDY COUNTY, NEW MEXICO



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

DRAWN BY: BMO

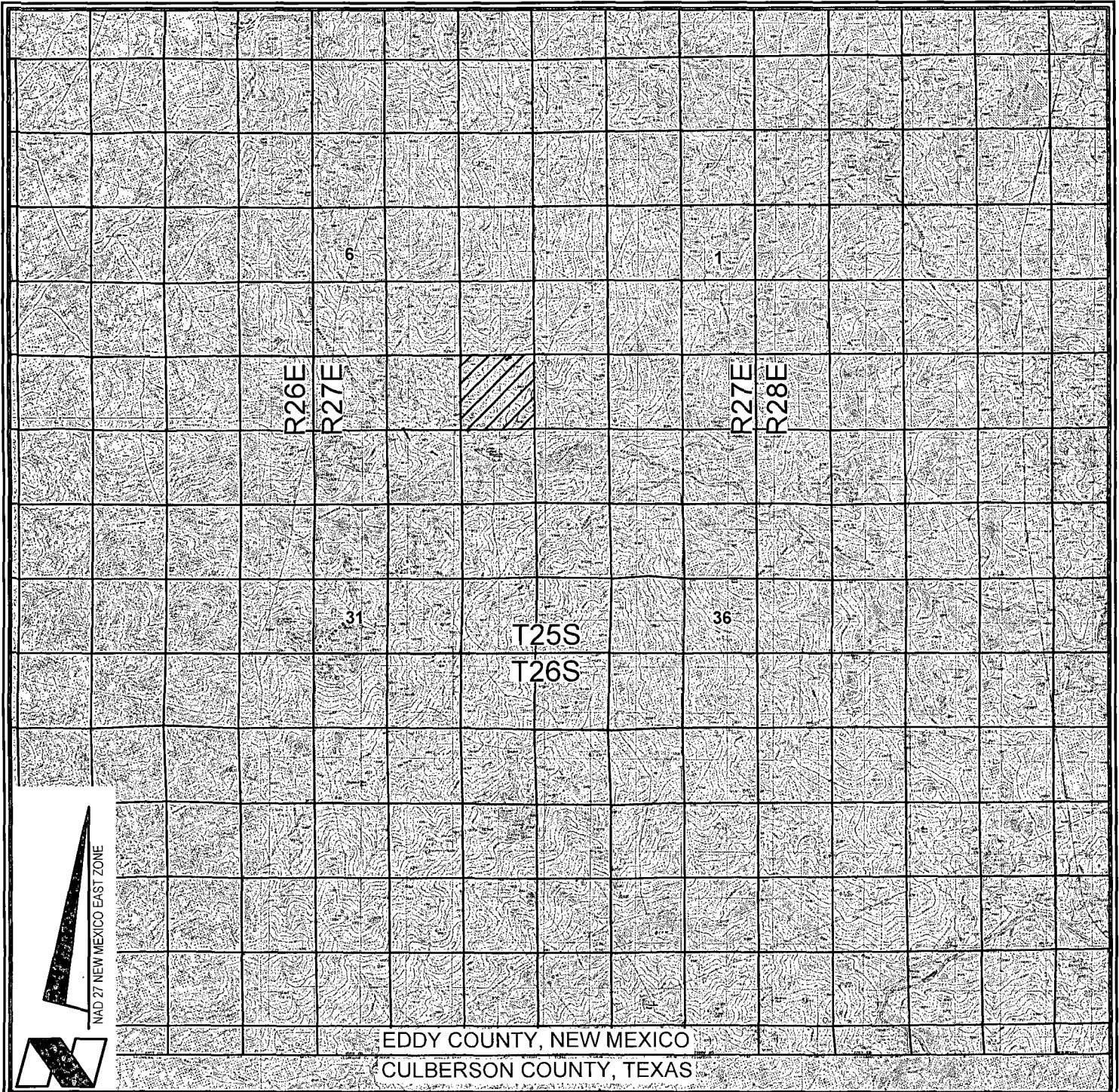
REVISED:

DATE: 01/29/2013

PROJ. MGR.: DBM

SHEET 1 OF 3 SHEETS

FILENAME: T:\2012\2128638\DWG\HAYHURST 16-25-27 STATE 2H APD.dwg



VICINITY MAP

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

CHEVRON U.S.A. INC.

HAYHURST 16-25-27 STATE NO. 2H WELL

LOCATED 150' FNL AND 1780' FEL

SECTION 16, T25S-R27E

EDDY COUNTY, NEW MEXICO



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: 01/29/2013

PROJ. MGR.: DBM

SHEET 2 OF 3 SHEETS

FILENAME: T:\2012\2128638\DWG\HAYHURST 16-25-27 STATE 2H APD.dwg

Permian District

NM - Bone Spring Sand Project

Hayhurst 16-25-27 State 2H

Well #1

Wellbore #1

Plan: Plat 30Jan13

Standard Planning Report

11 February, 2013

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Site Hayhurst 16-25-27 State 2H
Company:	Permian District	TVD Reference:	RKB @ 3218.0usft
Project:	NM - Bone Spring Sand Project	MD Reference:	RKB @ 3218.0usft
Site:	Hayhurst 16-25-27 State 2H	North Reference:	Grid
Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat 30Jan13		

Project:	NM - Bone Spring Sand Project		
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 2H		
Site Position:		Northing:	413,542.00 ft
From:	Map	Easting:	543,740.00 ft
Position Uncertainty:	0.0 usft	Slot Radius:	13.200 in
		Latitude:	32° 8' 12.70478524 N
		Longitude:	104° 11' 31.29869790 W
		Grid Convergence:	0.08 °

Well:	Well #1		
Well Position	+N/-S	0.0 usft	Northing: 413,542.00 ft
	+E/-W	0.0 usft	Easting: 543,740.00 ft
Position Uncertainty		0.0 usft	Wellhead Elevation: 3,201.0 usft
			Ground Level: 3,201.0 usft

Wellbore:	Wellbore #1		
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2/11/2013	7.66	59.96	48,331

Design:	Plat 30Jan13		
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Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	179.73

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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
7,094.2	0.00	0.00	7,094.2	0.0	0.0	0.00	0.00	0.00	0.00	
7,842.5	89.80	179.73	7,571.6	-475.8	2.2	12.00	12.00	0.00	179.73	
12,305.8	89.80	179.73	7,587.2	-4,939.0	23.0	0.00	0.00	0.00	0.00	Hayhurst 16-25-27

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Site Hayhurst 16-25-27 State 2H
Company:	Permian District	TVD Reference:	RKB @ 3218.0usft
Project:	NM - Bone Spring Sand Project	MD Reference:	RKB @ 3218.0usft
Site:	Hayhurst 16-25-27 State 2H	North Reference:	Grid
Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat 30Jan13		

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Site Hayhurst 16-25-27 State 2H
Company:	Permian District	TVD Reference:	RKB @ 3218.0usft
Project:	NM - Bone Spring Sand Project	MD Reference:	RKB @ 3218.0usft
Site:	Hayhurst 16-25-27 State 2H	North Reference:	Grid
Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat 30Jan13		

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)
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,094.2	0.00	0.00	7,094.2	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.70	179.73	7,100.0	0.0	0.0	0.0	12.00	12.00	0.00
7,125.0	3.70	179.73	7,125.0	-1.0	0.0	1.0	12.00	12.00	0.00
7,150.0	6.70	179.73	7,149.9	-3.3	0.0	3.3	12.00	12.00	0.00
7,175.0	9.70	179.73	7,174.6	-6.8	0.0	6.8	12.00	12.00	0.00
7,200.0	12.70	179.73	7,199.1	-11.7	0.1	11.7	12.00	12.00	0.00
7,225.0	15.70	179.73	7,223.4	-17.8	0.1	17.8	12.00	12.00	0.00
7,250.0	18.70	179.73	7,247.2	-25.2	0.1	25.2	12.00	12.00	0.00
7,275.0	21.70	179.73	7,270.7	-33.8	0.2	33.8	12.00	12.00	0.00
7,300.0	24.70	179.73	7,293.7	-43.7	0.2	43.7	12.00	12.00	0.00
7,325.0	27.70	179.73	7,316.1	-54.7	0.3	54.7	12.00	12.00	0.00
7,350.0	30.70	179.73	7,337.9	-66.9	0.3	66.9	12.00	12.00	0.00
7,375.0	33.70	179.73	7,359.1	-80.2	0.4	80.2	12.00	12.00	0.00
7,400.0	36.70	179.73	7,379.5	-94.6	0.4	94.7	12.00	12.00	0.00
7,425.0	39.70	179.73	7,399.2	-110.1	0.5	110.1	12.00	12.00	0.00
7,450.0	42.70	179.73	7,418.0	-126.6	0.6	126.6	12.00	12.00	0.00
7,475.0	45.70	179.73	7,435.9	-144.0	0.7	144.0	12.00	12.00	0.00
7,500.0	48.70	179.73	7,452.9	-162.3	0.8	162.3	12.00	12.00	0.00
7,525.0	51.70	179.73	7,468.9	-181.5	0.8	181.5	12.00	12.00	0.00
7,550.0	54.70	179.73	7,483.8	-201.6	0.9	201.6	12.00	12.00	0.00
7,575.0	57.70	179.73	7,497.7	-222.3	1.0	222.3	12.00	12.00	0.00
7,600.0	60.70	179.73	7,510.5	-243.8	1.1	243.8	12.00	12.00	0.00
7,625.0	63.70	179.73	7,522.2	-265.9	1.2	265.9	12.00	12.00	0.00
7,650.0	66.70	179.73	7,532.7	-288.6	1.3	288.6	12.00	12.00	0.00
7,675.0	69.70	179.73	7,542.0	-311.8	1.5	311.8	12.00	12.00	0.00
7,700.0	72.70	179.73	7,550.0	-335.5	1.6	335.5	12.00	12.00	0.00
7,725.0	75.70	179.73	7,556.8	-359.5	1.7	359.5	12.00	12.00	0.00
7,750.0	78.70	179.73	7,562.4	-383.9	1.8	383.9	12.00	12.00	0.00
7,775.0	81.70	179.73	7,566.6	-408.5	1.9	408.5	12.00	12.00	0.00
7,800.0	84.70	179.73	7,569.6	-433.4	2.0	433.4	12.00	12.00	0.00
7,825.0	87.70	179.73	7,571.2	-458.3	2.1	458.3	12.00	12.00	0.00
7,842.5	89.80	179.73	7,571.6	-475.8	2.2	475.8	12.00	12.00	0.00
7,900.0	89.80	179.73	7,571.8	-533.3	2.5	533.3	0.00	0.00	0.00
8,000.0	89.80	179.73	7,572.2	-633.3	2.9	633.3	0.00	0.00	0.00
8,100.0	89.80	179.73	7,572.5	-733.3	3.4	733.3	0.00	0.00	0.00
8,200.0	89.80	179.73	7,572.9	-833.3	3.9	833.3	0.00	0.00	0.00
8,300.0	89.80	179.73	7,573.2	-933.3	4.3	933.3	0.00	0.00	0.00

Chesapeake Operating

Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Site Hayhurst 16-25-27 State 2H
Company:	Permian District	TVD Reference:	RKB @ 3218.0usft
Project:	NM - Bone Spring Sand Project	MD Reference:	RKB @ 3218.0usft
Site:	Hayhurst 16-25-27 State 2H	North Reference:	Grid
Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat 30Jan13		

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)
8,400.0	89.80	179.73	7,573.6	-1,033.3	4.8	1,033.3	0.00	0.00	0.00
8,500.0	89.80	179.73	7,573.9	-1,133.3	5.3	1,133.3	0.00	0.00	0.00
8,600.0	89.80	179.73	7,574.3	-1,233.3	5.7	1,233.3	0.00	0.00	0.00
8,700.0	89.80	179.73	7,574.6	-1,333.3	6.2	1,333.3	0.00	0.00	0.00
8,800.0	89.80	179.73	7,575.0	-1,433.3	6.7	1,433.3	0.00	0.00	0.00
8,900.0	89.80	179.73	7,575.3	-1,533.3	7.1	1,533.3	0.00	0.00	0.00
9,000.0	89.80	179.73	7,575.7	-1,633.3	7.6	1,633.3	0.00	0.00	0.00
9,100.0	89.80	179.73	7,576.0	-1,733.3	8.1	1,733.3	0.00	0.00	0.00
9,200.0	89.80	179.73	7,576.4	-1,833.3	8.5	1,833.3	0.00	0.00	0.00
9,300.0	89.80	179.73	7,576.7	-1,933.3	9.0	1,933.3	0.00	0.00	0.00
9,400.0	89.80	179.73	7,577.1	-2,033.3	9.5	2,033.3	0.00	0.00	0.00
9,500.0	89.80	179.73	7,577.4	-2,133.3	9.9	2,133.3	0.00	0.00	0.00
9,600.0	89.80	179.73	7,577.8	-2,233.3	10.4	2,233.3	0.00	0.00	0.00
9,700.0	89.80	179.73	7,578.1	-2,333.3	10.9	2,333.3	0.00	0.00	0.00
9,800.0	89.80	179.73	7,578.5	-2,433.3	11.3	2,433.3	0.00	0.00	0.00
9,900.0	89.80	179.73	7,578.8	-2,533.3	11.8	2,533.3	0.00	0.00	0.00
10,000.0	89.80	179.73	7,579.2	-2,633.3	12.3	2,633.3	0.00	0.00	0.00
10,100.0	89.80	179.73	7,579.5	-2,733.3	12.7	2,733.3	0.00	0.00	0.00
10,200.0	89.80	179.73	7,579.8	-2,833.3	13.2	2,833.3	0.00	0.00	0.00
10,300.0	89.80	179.73	7,580.2	-2,933.3	13.7	2,933.3	0.00	0.00	0.00
10,400.0	89.80	179.73	7,580.5	-3,033.3	14.1	3,033.3	0.00	0.00	0.00
10,500.0	89.80	179.73	7,580.9	-3,133.3	14.6	3,133.3	0.00	0.00	0.00
10,600.0	89.80	179.73	7,581.2	-3,233.3	15.1	3,233.3	0.00	0.00	0.00
10,700.0	89.80	179.73	7,581.6	-3,333.3	15.5	3,333.3	0.00	0.00	0.00
10,800.0	89.80	179.73	7,581.9	-3,433.3	16.0	3,433.3	0.00	0.00	0.00
10,900.0	89.80	179.73	7,582.3	-3,533.2	16.5	3,533.3	0.00	0.00	0.00
11,000.0	89.80	179.73	7,582.6	-3,633.2	16.9	3,633.3	0.00	0.00	0.00
11,100.0	89.80	179.73	7,583.0	-3,733.2	17.4	3,733.3	0.00	0.00	0.00
11,200.0	89.80	179.73	7,583.3	-3,833.2	17.9	3,833.3	0.00	0.00	0.00
11,300.0	89.80	179.73	7,583.7	-3,933.2	18.3	3,933.3	0.00	0.00	0.00
11,400.0	89.80	179.73	7,584.0	-4,033.2	18.8	4,033.3	0.00	0.00	0.00
11,500.0	89.80	179.73	7,584.4	-4,133.2	19.2	4,133.3	0.00	0.00	0.00
11,600.0	89.80	179.73	7,584.7	-4,233.2	19.7	4,233.3	0.00	0.00	0.00
11,700.0	89.80	179.73	7,585.1	-4,333.2	20.2	4,333.3	0.00	0.00	0.00
11,800.0	89.80	179.73	7,585.4	-4,433.2	20.6	4,433.3	0.00	0.00	0.00
11,900.0	89.80	179.73	7,585.8	-4,533.2	21.1	4,533.3	0.00	0.00	0.00
12,000.0	89.80	179.73	7,586.1	-4,633.2	21.6	4,633.3	0.00	0.00	0.00
12,100.0	89.80	179.73	7,586.5	-4,733.2	22.0	4,733.3	0.00	0.00	0.00
12,200.0	89.80	179.73	7,586.8	-4,833.2	22.5	4,833.3	0.00	0.00	0.00
12,305.8	89.80	179.73	7,587.2	-4,939.0	23.0	4,939.0	0.00	0.00	0.00

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Hayhurst 16-25-27 St: - hit/miss target - Shape - Point	0.00	0.01	0.0	0.0	0.0	413,542.00	543,740.00	2° 8' 12.70478524 N	11° 31.29869790 W
Hayhurst 16-25-27 St: - plan hits target center - Point	0.00	0.01	7,587.2	-4,939.0	23.0	408,603.00	543,763.00	2° 7' 23.82576118 N	11° 31.10657318 W

Chesapeake Operating

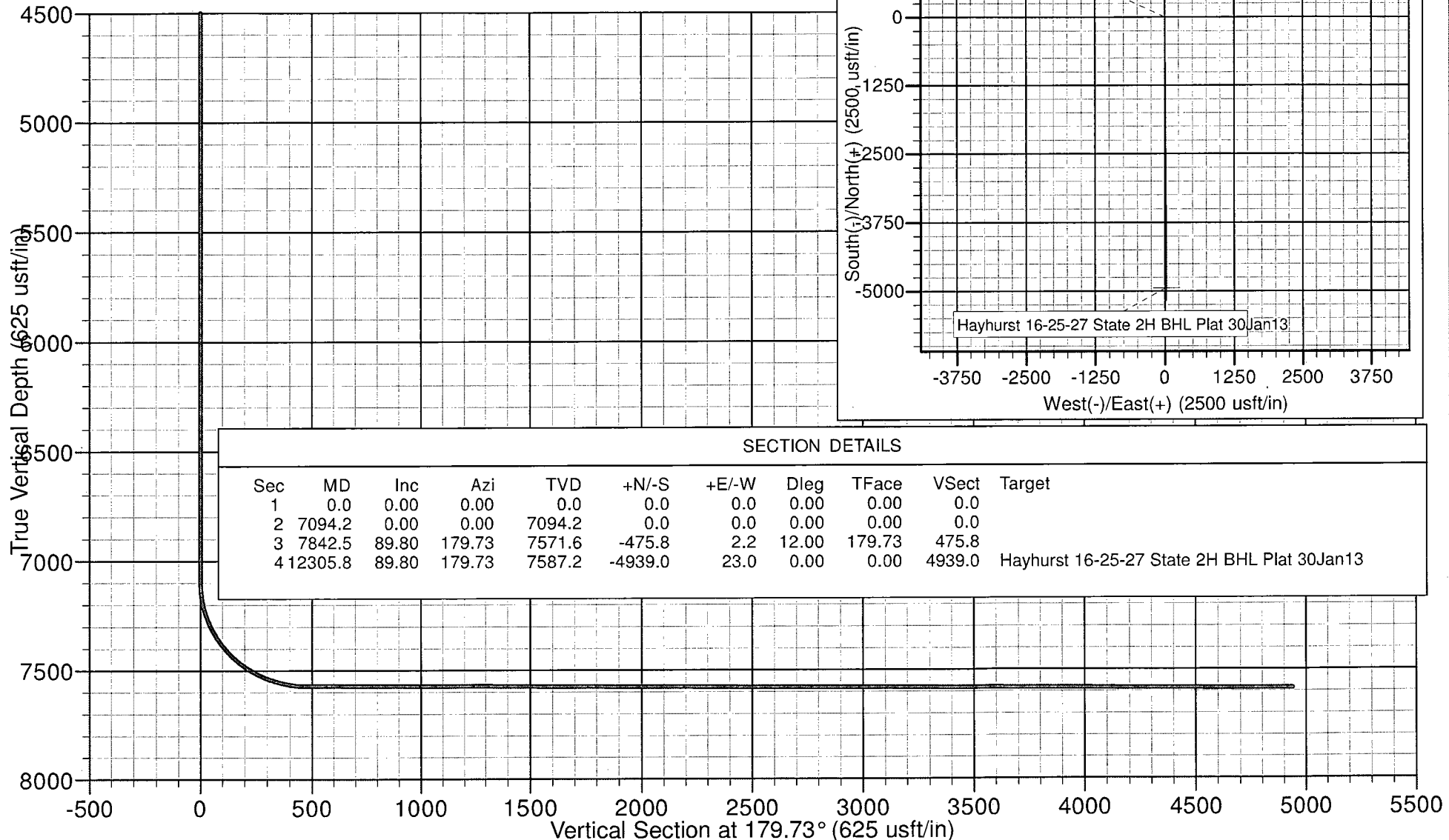
Planning Report

Database:	Drilling Database	Local Co-ordinate Reference:	Site Hayhurst 16-25-27 State 2H
Company:	Permian District	TVD Reference:	RKB @ 3218.0usft
Project:	NM - Bone Spring Sand Project	MD Reference:	RKB @ 3218.0usft
Site:	Hayhurst 16-25-27 State 2H	North Reference:	Grid
Well:	Well #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat 30Jan13		

Project: NM - Bone Spring Sand Project
 Site: Hayhurst 16-25-27 State 2H
 Well: Well #1
 Wellbore: Wellbore #1
 Design: Plat 30Jan13

PROJECT DETAILS: NM - Bone Spring Sand Project

Geodetic System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: New Mexico East 3001
 System Datum: Mean Sea Level



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	7094.2	0.00	0.00	7094.2	0.0	0.0	0.00	0.00	0.0	
3	7842.5	89.80	179.73	7571.6	-475.8	2.2	12.00	179.73	475.8	
4	12305.8	89.80	179.73	7587.2	-4939.0	23.0	0.00	0.00	4939.0	Hayhurst 16-25-27 State 2H BHL Plat 30Jan13