OCD Artesia

11-113

Form 3160-3
(February 2005)

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007 11-177

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
SL: NM 0560355 BHL: NM66437

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

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

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.
Helios 6 Fed Com 2H

2. Name of Operator
Devon Energy Production Co., LP 6137

9. API Well No.
30-015-38483

3a. Address **20 North Broadway OKC, OK 73102**

3b. Phone No. *(include area code)*
(405)-552-7802

10. Field and Pool, or Exploratory
Hackberry; Bone Spring, N NW

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface **SWSE 340' FSL & 1955' FEL Lot O**
At proposed prod. zone **NWNE 340' FNL & 1660' FEL Lot B**

11. Sec., T. R. M. or Blk. and Survey or Area
Sec 6-T19S-R31E

14. Distance in miles and direction from nearest town or post office*
Approximately 10 miles southeast of Loco Hills, NM.

12. County or Parish
Eddy

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) **340'**

16. No. of acres in lease
SL: 120 & BHL: 359

17. Spacing Unit dedicated to this well
159.74

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. **SL: ~50' BHL: ~740'**

19. Proposed Depth
TVD 8795' MD ~~12160'~~ 13153

20. BLM/BIA Bond No. on file
CO-1104

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3529.7' GL 3530

22. Approximate date work will start*
12/01/2010

23. Estimated duration
45 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature

Name *(Printed/Typed)* **Stephanie A. Ysasaga**

Date **11/01/2010**

Title **Sr. Staff Engineering Technician**

Approved by *(Signature)* **/s/ Don Peterson**

Name *(Printed/Typed)*

Date **JAN 27 2011**

Title **FIELD MANAGER**

Office **CARLSBAD FIELD OFFICE**

Application approval 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.
Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

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)

Capitan Controlled Water Basin

RECEIVED
FEB 01 2011
NMOCD ARTESIA

Approval Subject to General Requirements & Special Stipulations Attached

SEE ATTACHED FOR CONDITIONS OF APPROVAL

DRILLING PROGRAM

Devon Energy Production Company, LP
Helios 6 Fed Com 2H
Surface Location: 340' FSL & 1955' FEL, Unit O, Sec 6 T19S R31E, Eddy, NM
Bottom hole Location: 340' FNL & 1660' FEL, Unit B, Sec 6 T19S R31E, Eddy, NM

1. Geologic Name of Surface Formation

a. Permian

2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:

a.	Rustler	530'	Barren
b.	Salado	670'	Barren
c.	Tansil Dolomite	2190'	Barren
d.	Yates	2300'	Oil
e.	Seven Rivers	2625'	Oil
f.	Queen	3210'	Oil
g.	San Andres	3730'	Oil
h.	Delaware	4415'	Oil
i.	Bone Springs	6385'	Oil
j.	1st Bone Spring Ss	7785'	Oil
k.	2nd Bone Spring Lime	8060'	Oil
l.	2nd Bone Spring Ss	8610'	Oil
m.	2nd Bone Spring Middle SS	8765'	Oil
n.	2nd Bone Spring Middle Ss Base	8865'	Oil
o.	3rd Bone Springs Lime	9005'	Oil
p.	Total Depth	TVD 8795' MD ~~13160'~~ 13153	

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13 3/8" casing at ~~590'~~ 630' and circulating cement back to surface. The fresh water sands will be protected by setting 9 5/8" casing at 3150' and circulating cement to surface. The Delaware intervals will be isolated by setting 5 ½" casing to total depth and circulating cement above the base of the 9 5/8" casing. All casing is new and API approved.

3. Casing Program:

Hole Size	Hole Interval	OD Csg	Casing Interval	Weight	Collar	Grade
17 1/2"	0'-~~590'~~ 630'	13 3/8"	0'-~~590'~~ 630	48#	STC	H-40
12 ¼"	~~590~~'-3150'	9 5/8"	0'-3150'	40#	BTC	J-55
8 ¾"	3150'–8200	5 ½"	0'-8200'	17#	LTC	P-110HC
8 ¾"	8200'- ~~13160'~~ 13153	5 ½"	8200-~~13160'~~ 13153	17#	BTC	P-110HC

Design Parameter Factors:

Casing Size	Collapse Design Factor	Burst Design Factor	Tension Design Factor
13 3/8"	2.99	6.72	12.20
9 5/8" 36# J-55BTC	1.62	2.43	5.66
5 1/2" 17# P110LTC	1.64	2.02	~~1.55~~ 2.9 per rev. 1/19/11 WWJ
5 ½" 17# P110LTC	1.84	2.27	5.22

4. **Cement Program: (Note: All cement volumes are calculated with 25% excesses.)**

a. 13 3/8" Surface

Lead: 250 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 4% bwoc Bentonite + 81.4% Fresh Water, 13.5 ppg. **Yield:** 1.75 cf/sk

Tail: 250 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 56.3% Fresh Water, 14.8 ppg. **Yield:** 1.35 cf/sk.. **TOC @ surface.**

b. 9 5/8" Intermediate

Lead: 750 sacks (35:65) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 6% bwoc Bentonite + 107.8% Fresh Water, 12.5 ppg. **Yield**: 1.96 cf/sk

Tail: 300 sacks Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.4% bwoc Sodium Metasilicate + 4% bwoc MPA-5 + 52.7% Water, 14.8 ppg. **Yield**: 1.34 cf/sk. **TOC @ surface.**

c. 5 ½" Production

1st Stage

Lead: 900 sacks (35:65) Poz (Fly Ash):Class H Cement + 5% bwow Sodium Chloride + 0.3% bwoc CD-32 + 0.5% bwoc FL-25 + 2% bwoc Bentonite + 0.6% bwoc Sodium Metasilicate + 0.5% bwoc FL-52A + 102.5% Fresh Water, 12.5 ppg. **Yield**: 2.00 cf/sk

Tail: 1,300 sacks (50:50) Poz (Fly Ash):Class H Cement + 1% bwow Sodium Chloride + 0.2% bwoc R-3 + 0.125 lbs/sack Cello Flake + 0.5% bwoc BA-10A + 4% bwoc MPA-5 + 58.3% Fresh Water, 14.2 ppg. **Yield**: 1.28 cf/sk

DV TOOL at ~4,500 ft

2nd Stage

Lead: 215 sacks Class C Cement + 1% bwow Calcium Chloride + 0.125 lbs/sack Cello Flake + 157.8% Fresh Water, 11.4 ppg. **Yield**: 2.89 cf/sk

Tail: 150 sacks (60:40) Poz (Fly Ash):Class C Cement + 1% bwow Sodium Chloride + 0.2% bwoc R-3 + 0.125 lbs/sack Cello Flake + 0.5% bwoc BA-10A + 4% bwoc MPA-5 + 63.2% Fresh Water, 13.8 ppg. **Yield**: 1.37cf/sk. **TOC @ 2,600 ft**

TOC for All Strings:

Surface:	0'
Intermediate:	0'
Production:	2,600'

See COA The above cement volumes could be revised pending the caliper measurement from the open hole logs. Actual cement volumes will be adjusted bases on fluid caliper and caliper log data.

5. **Pressure Control Equipment:**
The BOP system used to drill the intermediate hole will consist of a 13-5/8" 5M Double Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a 3M system prior to drilling out the surface casing shoe.

The BOP system used to drill the production hole will consist of a 13-5/8" 5M Double Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a 5M system prior to drilling out the intermediate casing shoe.

The pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These tests will be logged in the daily driller's log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 5,000 psi WP.

6. **Proposed Mud Circulation System**

See COA

Depth	Mud Wt.	Visc	Fluid Loss	Type System
0' – ~~590'~~ 630	8.4-9.0	30-34	NC	Fresh Water
~~590'~~ – 3150'	9.8-10.0	28-32	NC	Brine
3150'–13250'	8.6-9.0	28-32	NC-12	Fresh Water

The necessary mud products for weight addition and fluid loss control will be on location at all times.

7. **Auxiliary Well Control and Monitoring Equipment:**
   a. A Kelly cock will be in the drill string at all times.
   b. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
   c. Hydrogen Sulfide detection equipment will be in operation after drilling out the 13 3/8" casing shoe until the 5 1/2" casing is cemented. Breathing equipment will be on location upon drilling the 13 3/8" shoe until total depth is reached.
8. **Logging, Coring, and Testing Program:**
   a. Drill stem tests will be based on geological sample shows.

8. **Logging, Coring, and Testing Program:**
   a. Drill stem tests will be based on geological sample shows.
   b. If a drill stem test is anticipated; a procedure, equipment to be used and safety measures will be provided via sundry notice to the BLM.
   c. The open hole electrical logging program will be:
      i. Total Depth to Intermediate Casing — Dual Laterolog-Micro Laterolog with SP and Gamma Ray. Compensated Neutron – Z Density log with Gamma Ray and Caliper.
      ii. Total Depth to Surface — Compensated Neutron with Gamma Ray
      iii. No coring program is planned
      iv. Additional testing will be initiated subsequent to setting the 5 ½" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

9. **Potential Hazards:**
   a. No abnormal pressures or temperatures are expected. There is no known presence of H2S in this area. If H2S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6 No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 3600 psi and Estimated BHT 145°. No H2S is anticipated to be encountered.

10. **Anticipated Starting Date and Duration of Operations:**
   a. Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 32 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.

devon

Devon Energy

Eddy County
Sec 6 - T19S - R31E
Helios 6 Fed Com #2H

Wellbore #1

Plan: Plan #1

Standard Planning Report

27 October, 2010

GREAT WHITE
DIRECTIONAL SERVICES, L.L.C.

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Site Sec 6 - T19S - R31E
Company:	Devon Energy	**TVD Reference:**	WELL @ 0.0usft (Original Well Elev)
Project:	Eddy County	**MD Reference:**	WELL @ 0.0usft (Original Well Elev)
Site:	Sec 6 - T19S - R31E	**North Reference:**	Grid
Well:	Helios 6 Fed Com #2H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Project	Eddy County		
Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Sec 6 - T19S - R31E				
Site Position:		**Northing:**	612,494.05 usft	**Latitude:**	32° 40' 59.031 N
From:	Map	**Easting:**	672,661.31 usft	**Longitude:**	103° 54' 23.396 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.23 °

Well	Helios 6 Fed Com #2H					
Well Position	**+N/-S**	0.0 usft	**Northing:**	612,494.05 usft	**Latitude:**	32° 40' 59.031 N
	+E/-W	0.0 usft	**Easting:**	672,661.31 usft	**Longitude:**	103° 54' 23.396 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**		**Ground Level:**	0.0 usft

Wellbore	Wellbore #1				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF200510	10/27/10	7.84	60.59	48,979

Design	Plan #1				
Audit Notes:					
Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0
Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**	
	0.0	0.0	0.0	3.28	

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
8,225.0	0.00	0.00	8,225.0	0.0	0.0	0.00	0.00	0.00	0.00	
9,120.4	90.00	3.28	8,795.0	569.1	32.6	10.05	10.05	0.00	3.28	
13,152.5	90.00	3.28	8,795.0	4,594.6	263.3	0.00	0.00	0.00	0.00	Helios #2H PBHL

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Project:	Eddy County	**MD Reference:**	WELL @ 0.0usft (Original Well Elev)
Site:	Sec 6 - T19S - R31E	**North Reference:**	Grid
Well:	Helios 6 Fed Com #2H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,225.0	0.00	0.00	8,225.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP 10.05°/100 DLS @ 3.28° AZI - 2nd Bone Spring Mid SS									
8,250.0	2.51	3.28	8,250.0	0.5	0.0	0.5	10.05	10.05	0.00
8,300.0	7.54	3.28	8,299.8	4.9	0.3	4.9	10.05	10.05	0.00
8,350.0	12.56	3.28	8,349.0	13.6	0.8	13.7	10.05	10.05	0.00
8,400.0	17.59	3.28	8,397.3	26.6	1.5	26.7	10.05	10.05	0.00
8,450.0	22.62	3.28	8,444.2	43.8	2.5	43.8	10.05	10.05	0.00
8,500.0	27.64	3.28	8,489.5	65.0	3.7	65.1	10.05	10.05	0.00
8,550.0	32.67	3.28	8,532.7	90.0	5.2	90.2	10.05	10.05	0.00
8,600.0	37.69	3.28	8,573.5	118.8	6.8	119.0	10.05	10.05	0.00
8,647.7	42.49	3.28	8,610.0	149.4	8.6	149.7	10.05	10.05	0.00
2n Bone Spring Ss									
8,650.0	42.72	3.28	8,611.7	151.0	8.7	151.2	10.05	10.05	0.00
8,700.0	47.75	3.28	8,646.9	186.4	10.7	186.7	10.05	10.05	0.00
8,750.0	52.77	3.28	8,678.9	224.8	12.9	225.2	10.05	10.05	0.00
8,800.0	57.80	3.28	8,707.3	265.8	15.2	266.2	10.05	10.05	0.00
8,850.0	62.82	3.28	8,732.1	309.2	17.7	309.7	10.05	10.05	0.00
8,900.0	67.85	3.28	8,752.9	354.5	20.3	355.1	10.05	10.05	0.00
8,934.6	71.33	3.28	8,765.0	386.9	22.2	387.5	10.05	10.05	0.00
2nd Bone Spring Mid Ss									
8,950.0	72.88	3.28	8,769.7	401.5	23.0	402.2	10.05	10.05	0.00
9,000.0	77.90	3.28	8,782.3	449.8	25.8	450.5	10.05	10.05	0.00
9,050.0	82.93	3.28	8,790.7	499.0	28.6	499.8	10.05	10.05	0.00
9,100.0	87.95	3.28	8,794.6	548.8	31.4	549.7	10.05	10.05	0.00
9,120.4	90.00	3.28	8,795.0	569.1	32.6	570.0	10.05	10.05	0.00
EOC - Hold to TD - 2nd BS Mid Ss Landing Depth									
9,200.0	90.00	3.28	8,795.0	648.6	37.2	649.6	0.00	0.00	0.00
9,300.0	90.00	3.28	8,795.0	748.4	42.9	749.6	0.00	0.00	0.00
9,400.0	90.00	3.28	8,795.0	848.3	48.6	849.6	0.00	0.00	0.00
9,500.0	90.00	3.28	8,795.0	948.1	54.3	949.6	0.00	0.00	0.00
9,600.0	90.00	3.28	8,795.0	1,047.9	60.1	1,049.6	0.00	0.00	0.00
9,700.0	90.00	3.28	8,795.0	1,147.8	65.8	1,149.6	0.00	0.00	0.00
9,800.0	90.00	3.28	8,795.0	1,247.6	71.5	1,249.6	0.00	0.00	0.00
9,900.0	90.00	3.28	8,795.0	1,347.4	77.2	1,349.6	0.00	0.00	0.00
10,000.0	90.00	3.28	8,795.0	1,447.3	82.9	1,449.6	0.00	0.00	0.00
10,100.0	90.00	3.28	8,795.0	1,547.1	88.7	1,549.6	0.00	0.00	0.00
10,200.0	90.00	3.28	8,795.0	1,646.9	94.4	1,649.6	0.00	0.00	0.00
10,300.0	90.00	3.28	8,795.0	1,746.8	100.1	1,749.6	0.00	0.00	0.00
10,400.0	90.00	3.28	8,795.0	1,846.6	105.8	1,849.6	0.00	0.00	0.00
10,500.0	90.00	3.28	8,795.0	1,946.5	111.6	1,949.6	0.00	0.00	0.00
10,600.0	90.00	3.28	8,795.0	2,046.3	117.3	2,049.6	0.00	0.00	0.00
10,700.0	90.00	3.28	8,795.0	2,146.1	123.0	2,149.6	0.00	0.00	0.00
10,800.0	90.00	3.28	8,795.0	2,246.0	128.7	2,249.6	0.00	0.00	0.00
10,900.0	90.00	3.28	8,795.0	2,345.8	134.4	2,349.6	0.00	0.00	0.00
11,000.0	90.00	3.28	8,795.0	2,445.6	140.2	2,449.6	0.00	0.00	0.00
11,100.0	90.00	3.28	8,795.0	2,545.5	145.9	2,549.6	0.00	0.00	0.00
11,200.0	90.00	3.28	8,795.0	2,645.3	151.6	2,649.6	0.00	0.00	0.00
11,300.0	90.00	3.28	8,795.0	2,745.1	157.3	2,749.6	0.00	0.00	0.00
11,400.0	90.00	3.28	8,795.0	2,845.0	163.0	2,849.6	0.00	0.00	0.00
11,500.0	90.00	3.28	8,795.0	2,944.8	168.8	2,949.6	0.00	0.00	0.00
11,600.0	90.00	3.28	8,795.0	3,044.7	174.5	3,049.6	0.00	0.00	0.00
11,700.0	90.00	3.28	8,795.0	3,144.5	180.2	3,149.6	0.00	0.00	0.00
11,800.0	90.00	3.28	8,795.0	3,244.3	185.9	3,249.6	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Site Sec 6 - T19S - R31E
Company:	Devon Energy	**TVD Reference:**	WELL @ 0.0usft (Original Well Elev)
Project:	Eddy County	**MD Reference:**	WELL @ 0.0usft (Original Well Elev)
Site:	Sec 6 - T19S - R31E	**North Reference:**	Grid
Well:	Helios 6 Fed Com #2H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
11,900.0	90.00	3.28	8,795.0	3,344.2	191.7	3,349.6	0.00	0.00	0.00
12,000.0	90.00	3.28	8,795.0	3,444.0	197.4	3,449.6	0.00	0.00	0.00
12,100.0	90.00	3.28	8,795.0	3,543.8	203.1	3,549.6	0.00	0.00	0.00
12,200.0	90.00	3.28	8,795.0	3,643.7	208.8	3,649.6	0.00	0.00	0.00
12,300.0	90.00	3.28	8,795.0	3,743.5	214.5	3,749.6	0.00	0.00	0.00
12,400.0	90.00	3.28	8,795.0	3,843.3	220.3	3,849.6	0.00	0.00	0.00
12,500.0	90.00	3.28	8,795.0	3,943.2	226.0	3,949.6	0.00	0.00	0.00
12,600.0	90.00	3.28	8,795.0	4,043.0	231.7	4,049.6	0.00	0.00	0.00
12,700.0	90.00	3.28	8,795.0	4,142.8	237.4	4,149.6	0.00	0.00	0.00
12,800.0	90.00	3.28	8,795.0	4,242.7	243.1	4,249.6	0.00	0.00	0.00
12,900.0	90.00	3.28	8,795.0	4,342.5	248.9	4,349.6	0.00	0.00	0.00
13,000.0	90.00	3.28	8,795.0	4,442.4	254.6	4,449.6	0.00	0.00	0.00
13,100.0	90.00	3.28	8,795.0	4,542.2	260.3	4,549.6	0.00	0.00	0.00
13,152.5	90.00	3.28	8,795.0	4,594.6	263.3	4,602.2	0.00	0.00	0.00
TD at 13152.5 - Helios #2H PBHL									

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
Helios #2H PBHL	0.00	0.00	8,795.0	4,594.6	263.0	617,088.69	672,924.28	32° 41' 44.485 N	103° 54' 20.102 W
- plan misses target center by 0.3usft at 13152.5usft MD (8795.0 TVD, 4594.6 N, 263.3 E)									
- Point									

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
8,060.0	8,060.0	2nd Bone Spring Lime		0.00	
8,225.0	8,225.0	2nd Bone Spring Mid SS		0.00	
8,647.7	8,610.0	2n Bone Spring Ss		0.00	
8,934.6	8,765.0	2nd Bone Spring Mid Ss		0.00	
9,120.4	8,795.0	2nd BS Mid Ss Landing Depth		0.00	

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
8,225.0	8,225.0	0.0	0.0	KOP 10.05°/100 DLS @ 3.28° AZI
9,120.4	8,795.0	569.1	32.6	EOC - Hold to TD
13,152.5	8,795.0	4,594.6	263.3	TD at 13152.5

devon

WELL DETAILS: Helios 6 Fed Com #2H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	612494.05	672661.31	32° 40' 59.031 N	103° 54' 23.396 W

SHL: 340' FSL / 1955' FEL
BHL: 340' FNL / 1660' FEL

GREAT WHITE DIRECTIONAL SERVICES, L.L.C.

Project: Eddy County
Site: Sec 6 - T19S - R31E
Well: Helios 6 Fed Com #2H
Wellbore: Wellbore #1
Design: Plan #1

Azimuths to Grid North
Total Correction: 7.61°
Magnetic Field
Strength: 48978.9snT
Dip Angle: 60.59°
Date: 10/27/2010
Model: IGRF200510

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Helios #2H PBHL	8795.0	4594.6	263.0	617088.69	672924.28	32° 41' 44.485 N	103° 54' 20.102 W

- plan misses target center by 0.3usft at 13152.5usft MD (8795.0 TVD, 4594.6 N, 263.3 E)

PLAN DETAILS

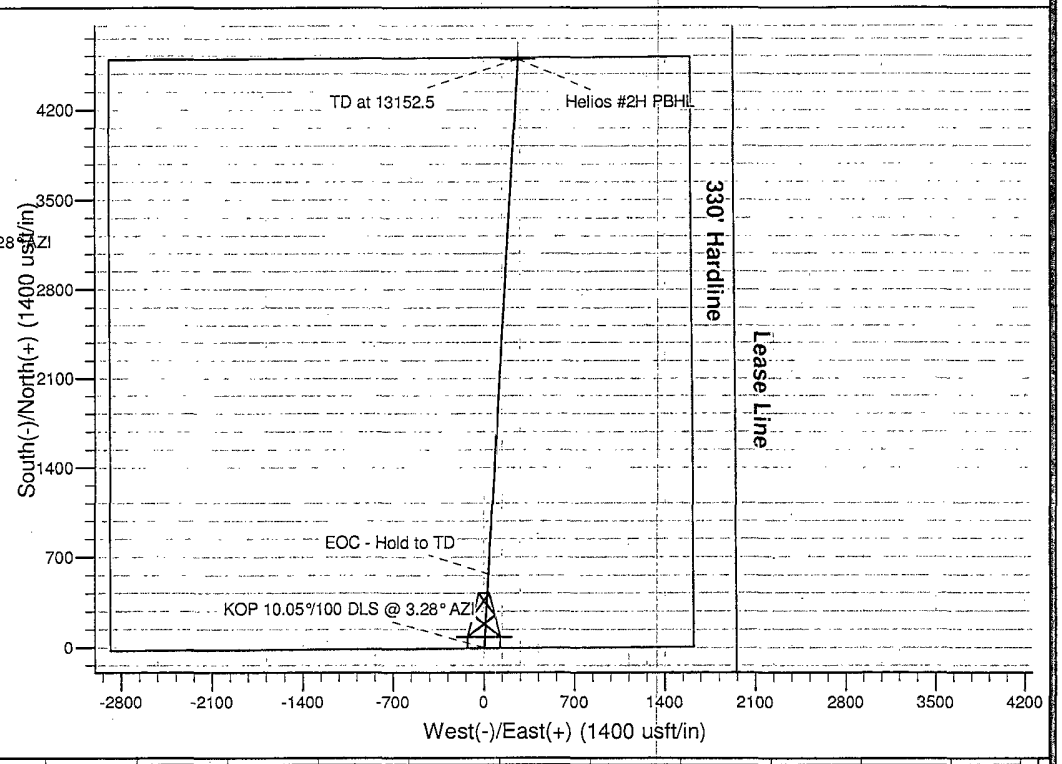
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
8225.0	0.00	0.00	8225.0	0.0	0.0	0.00	0.00	0.0	
9120.4	90.00	3.28	8795.0	569.1	32.6	10.05	3.28	570.0	
13152.5	90.00	3.28	8795.0	4594.6	263.3	0.00	0.00	4602.2	Helios #2H PBHL

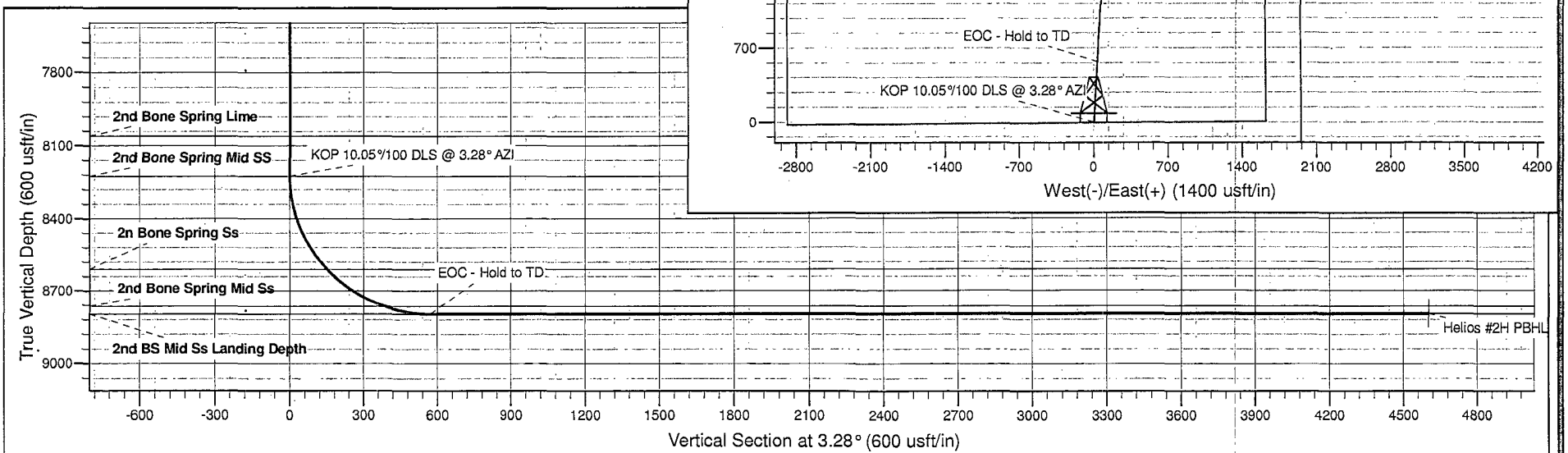
ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Departure	Annotation
8225.0	8225.0	0.00	0.00	0.0	0.0	0.0	0.0	KOP 10.05°/100 DLS @ 3.28° AZI
8795.0	9120.4	90.00	3.28	569.1	32.6	570.0	570.0	EOC - Hold to TD
8795.0	13152.5	90.00	3.28	4594.6	263.3	4602.2	4602.2	TD at 13152.5

FORMATION TOP DETAILS

TVDPath	MDPath	Formation	DipAngle
8060.0	8060.0	2nd Bone Spring Lime	0.00
8225.0	8225.0	2nd Bone Spring Mid SS	0.00
8610.0	8647.7	2n Bone Spring Ss	0.00
8765.0	8934.6	2nd Bone Spring Mid Ss	0.00
8795.0	9120.4	2nd BS Mid Ss Landing Depth	0.00





Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTERS
Devon Energy Production Company, LP
Helios 6 Fed Com 2H
Surface Location: 340' FSL & 1955' FEL, Unit O, Sec 6 T19S R31E, Eddy, NM
Bottom hole Location: 340' FNL & 1660' FEL, Unit B, Sec 6 T19S R31E, Eddy, NM

1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.

2. Wear ring will be properly installed in head.

3. Blowout preventer and all associated fittings will be in operable condition to withstand a minimum 5000 psi working pressure.

4. All fittings will be flanged.

5. A full bore safety valve tested to a minimum 5000 psi WP with proper thread connections will be available on the rotary rig floor at all times.

6. All choke lines will be anchored to prevent movement.

7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.

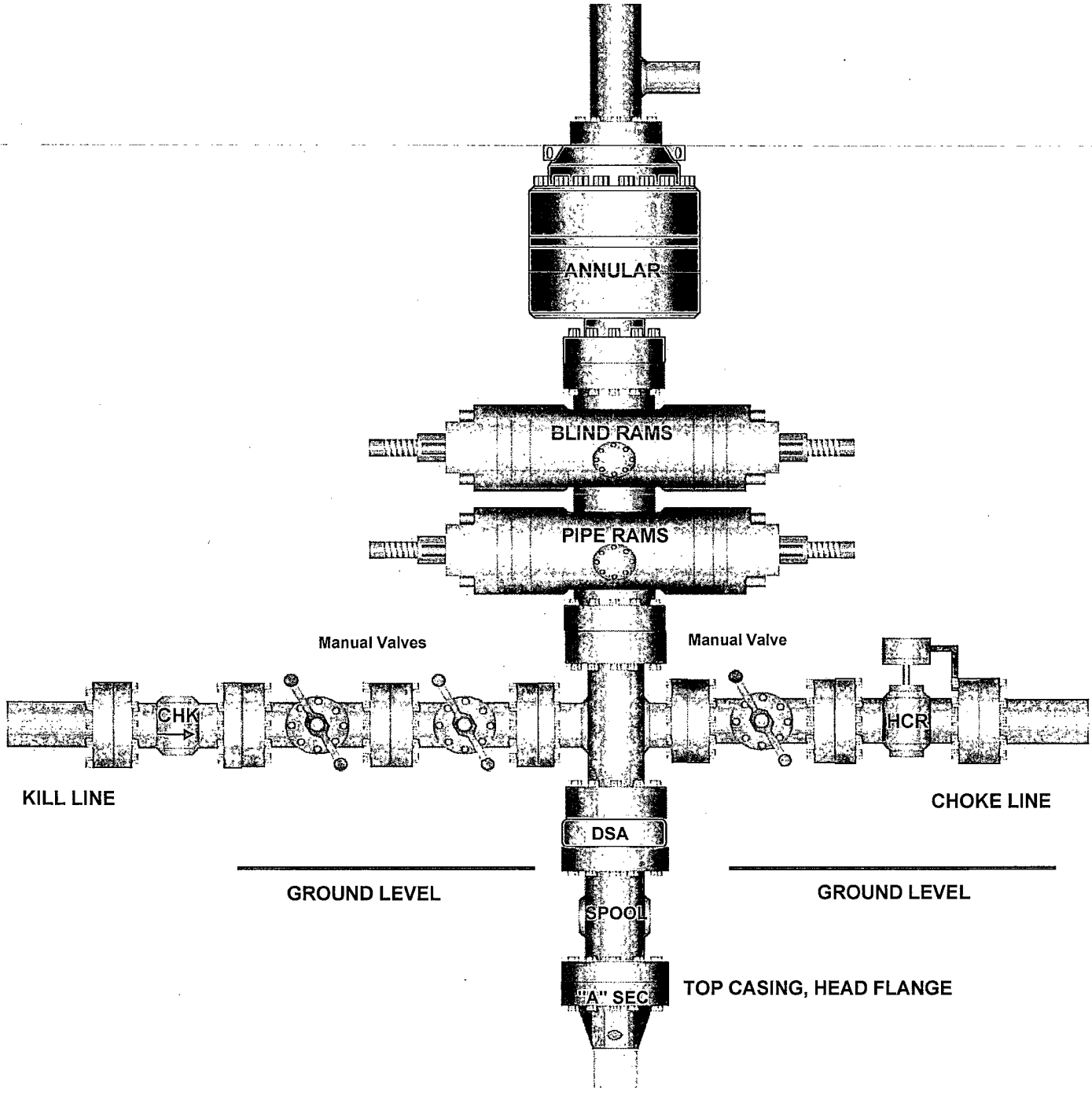
8. Will maintain a kelly cock attached to the kelly.

9. Hand wheels and wrenches will be properly installed and tested for safe operation.

10. Hydraulic floor control for blowout preventer will be located as near in proximity to driller's controls as possible.

11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

13-5/8" x 5,000 psi BOP Stack



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5,000 PSI CHOKE MANIFOLD