ATS-12-1094

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Form 3160-3
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. **NM-89057** TES 12/26/2013

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. **Snapping 10 Federal 6H** <38187>

2. Name of Operator **Devon Energy Production Company, LP** <6137>

9. API Well No. 30-015-41154

3a. Address **333 W. Sheridan, Oklahoma City, Oklahoma City 73102-8260**

3b. Phone No. *(include area code)* **405-228-8699**

10. Field and Pool, or Exploratory **West Jennings; Bone Spring** <97860>

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface **175 FSL & 210 FEL P** SESE
At proposed prod. zone **330 FNL & 990 FEL A**

11. Sec., T. R. M. or Blk. and Survey or Area **SEC10 T26S R31E**

14. Distance in miles and direction from nearest town or post office*
Approximately 25 miles southeast of Loving, NM.

12. County or Parish **Eddy County**

13. State **NM**

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any) **330'**

16. No. of acres in lease **2160 Acres**

17. Spacing Unit dedicated to this well **160 Acres**

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. **See Attached Map**

19. Proposed Depth **8495' TVD 13,140' MD**

20. BLM/BIA Bond No. on file **CO-1104; NMB-000801**

21. Elevations (Show whether DF, KDB, RT, GL, etc.) **3879 ' GL**

22. Approximate date work will start*

23. Estimated duration **45 days**

24. Attachments Pad drilled w/ Snapping 10 Federal 5H

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall 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 shall 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 authorized officer.

25. Signature Judy A Barnett — Name *(Printed/Typed)* **Judy A. Barnett** — Date **08/05/2012**

Title **Regulatory Specialist**

Approved by *(Signature)* — Name *(Printed/Typed)* — Date

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)*

Carlsbad Controlled Water Basin

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Approval Subject to General Requirements & Special Stipulations Attached

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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 October 15,2009
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015-41154	97860	~~WEST~~ JENNINGS; BONE SPRING, West

[4] Property Code	[5] Property Name	[6] Well Number
38187	SNAPPING "10" FEDERAL	6H

[7] OGRID No.	[8] Operator Name	[9] Elevation
6137	DEVON ENERGY PRODUCTION COMPANY, L.P.	3879.7

[10] Surface Location

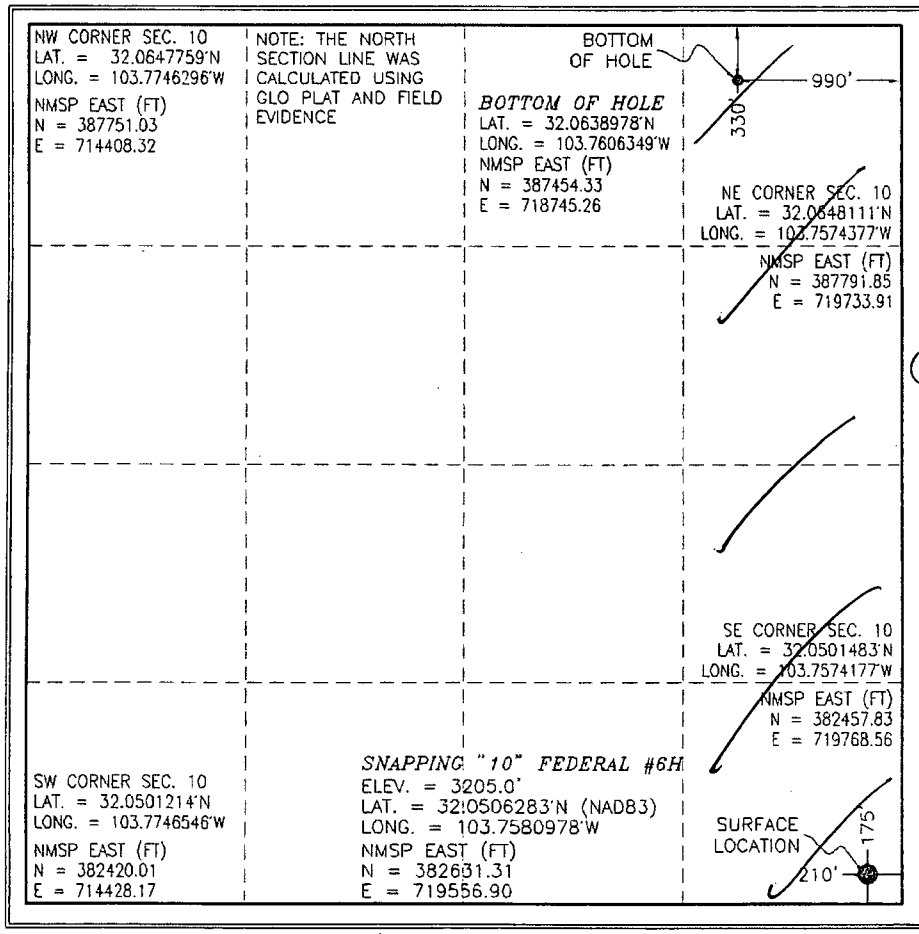
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	10	26 S	31 E		175	SOUTH	210	EAST	EDDY

[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
A	10	26 S	31 E		330	NORTH	990	EAST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
160			

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.



[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 Date

Printed Name
Judy A. Barnett Regulatory Specialist

[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.

NOVEMBER 21, 2011

Date of Survey

Signature and Seal of Professional Surveyor

Certificate Number FILIMON F. JARAMILLO, PLS 12797 SURVEY NO. 700A

Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or Devon Energy Production Company, L.P. am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

I hereby also certify that I, or Devon Energy Production Company, L.P. have made a good faith effort to provide the surface owner with a copy of the Surface Use Plan of Operations and any Conditions of Approval that are attached to the APD.

Executed this _5th___ day of __August, 2012.
Printed Name: Judy A. Barnett
Signed Name: Judy A. Barnett
Position Title: Regulatory Specialist
Address: 333 W. Sheridan, OKC OK 73102
Telephone: (405)-228-8699
Field Representative (if not above signatory):
Address (if different from above):
Telephone (if different from above):

DRILLING PROGRAM

Devon Energy Production Company, LP

Snapping 10 Federal #6H

Surface Location: 175' FSL & 210' FEL, Unit P, Sec 10 T26S R31E, Eddy, NM
Bottom Hole Location: 330' FNL & 990' FEL, Unit A, Sec 10 T26S R31E, Eddy, NM

1. **Geologic Name of Surface Formation**

   a. Quaternary Alluvium

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

a.	Fresh Water	25'	
b.	Rustler	1311'	
c.	Salado	1785'	
d.	Base of Salt	3908'	
e.	Delaware	4112'	Oil
f.	Bell Canyon	4144'	Oil
g.	Cherry Canyon	5096'	Oil
h.	Brushy Canyon	6440'	Oil
i.	Bone Spring	8132'	Oil & Gas
	Total Depth	13,140'	

3. **Casing Program: All casing is new and API approved.**

Hole Size	Hole Interval	OD Csg	Casing Interval	Weight	Collar	Grade
17 1/2"	0' – ~~1350'~~ 1440	13 3/8"	0'-1350'	54.5#	ST&C	J-55
12 1/4"	1350' – 4150'	9 5/8"	0- 4150'	40#	LT&C	J-55
8 ¾"	4150' - 8100'	5 1/2"	0'-~~8100'~~ 7922	17#	LT&C	HCP110
8 ¾"	8100' - 13140'	5 1/2"	~~8100~~'-13140' 7922	17#	BT&C	HCP110

MAXIMUM TVD 8495'

Design Parameter Factors:

Casing Size	Collapse Design Factor	Burst Design Factor	Tension Design Factor
13 3/8"	1.44	3.50	5.60
9 5/8"	1.23	1.90	3.25
5 ½"	1.97	2.81	1.99
5 ½"	1.88	2.68	7.19

4. Cement Program: (volumes based on at least 25% excess):

a. 13 3/8" Surface — **Lead** w/840 sx ExtendaCem CZ +0.125#/sx Poly-E. FW 13.50. **Yield** 1.75 cf/sx. **Tail** w/340 sx HalCem C + 2% Calcium Chloride + 0.125#/sx Poly-EF. FW 14.80 ppg. **Yield** 1.35 cf/sx. **TOC** @ surface.

b. 9 5/8" Intermediate — **Lead** w/905 sx EconoCem HCL + 5% Salt + 0.125#/sx Poly-EF. FW. 12.90 ppg. **Yield** 1.85 cf/sx. **Tail** w/450 sx HalCem C + 0.125 #/sx Poly EF. FW 14.80. **Yield** 1.33 cf/sx. **TOC** @ surface.

c. 5 1/2" Production — **Lead** w/335 sx EconoCem H + 0.3% Econolite + 0.125 #/sx Poly-EF + 14.55 g/sx 0.3% HR-601. FW 12.50 ppg. **Yield** 1.95 cf/sx. **Tail** w/1320 sx VersaCem-H + 0.5% HaladR-344 + 0.3% CFR-3 + 1 #/sx Salt + 0.2% HR-601. FW, 14.40 ppg. **Yield** 1.24 cf/sx. **TOC** @ 3650'.

See COA

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

5. **Pressure Control Equipment**

The BOP system used to drill the **12-1/4" and 8-3/4"** holes will consist of a **13-5/8" 3M 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 casing shoe.

The pipe rams will be operated and checked as per Onshore Order No 2. 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 **3,000 psi WP**.

Devon requests a variance to use a flexible line with flanged ends between the BOP and the choke manifold (choke line). The line will be kept as straight as possible with minimal turns.

6. **Proposed Mud Circulation System**

Depth	Mud Wt.	Visc	Fluid Loss	Type System
0 – 1350'	8.4-9.0	30-34	NC	FW
1350'–4,150'	9.8–10.0	28-32	NC	Brine
4,150'–13,140'	8.6–9.0	28-32	NC-12	FW

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:** See COA
   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:**

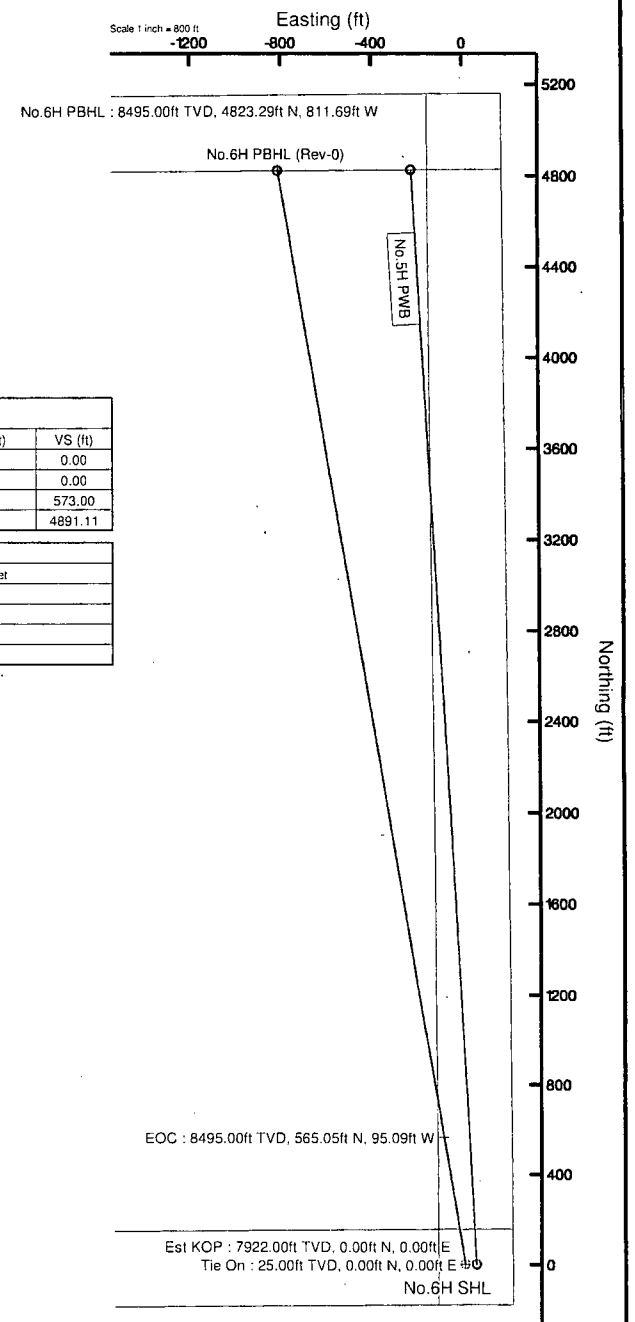
a. No abnormal pressures or temperatures are expected. There is no known presence of H2S in this area. If H2S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6 No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 3800 psi and Estimated BHT 125°. 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 Energy

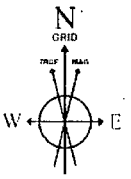
Location: Eddy County, NM
Field: (Snapping) Sec. 10, T26S, R31E
Facility: Snapping 10 Federal No.6H
Slot: No.6H SHL
Well: No.6H
Wellbore: No.6H PWB



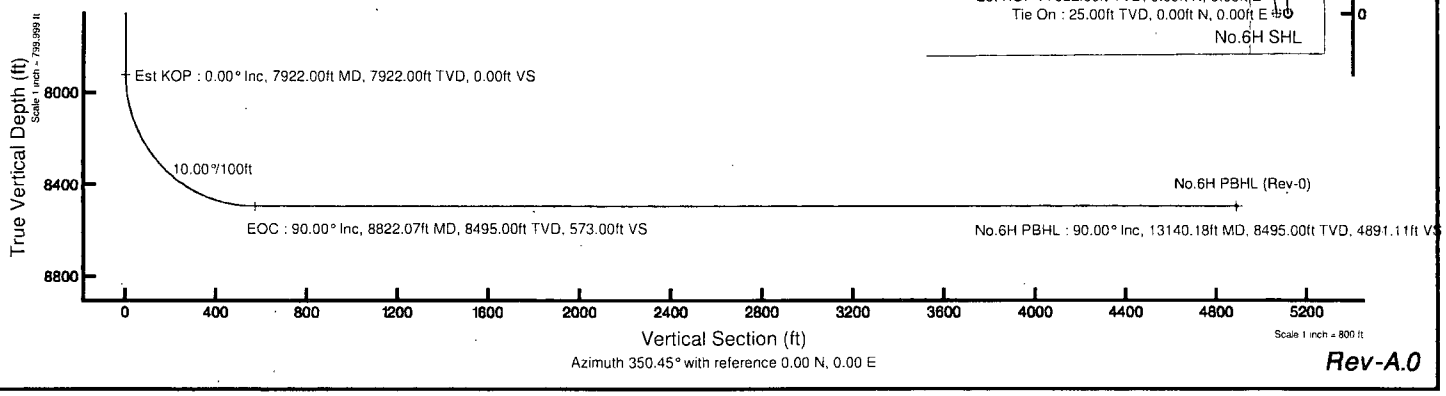
Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	25.00	0.000	350.448	25.00	0.00	0.00	0.00	0.00
Est KOP	7922.00	0.000	350.448	7922.00	0.00	0.00	0.00	0.00
EOC	8822.07	90.000	350.448	8495.00	565.05	-95.09	10.00	573.00
No.6H PBHL	13140.18	90.000	350.448	8495.00	4823.29	-811.69	0.00	4891.11

Plot reference wellpath is Rev-A.0	
True vertical depths are referenced to Rig on No.6H SHL (KB)	Grid System: NAD83 / TM New Mexico SP, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No.6H SHL (KB)	North Reference: Grid north
Rig on No.6H SHL (KB) to Mean Sea Level: 3230 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: No.6H SHL): -3205 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: gentbry on 5/29/2012



BGGM (1945.0 to 2013.0) Dip: 59.93° Field: 48395 nT
Magnetic North is 7.62 degrees East of True North (at 5/29/2012)
Grid North is 0.31 degrees East of True North
To correct azimuth from True to Grid subtract 0.31 degrees
To correct azimuth from Magnetic to Grid add 7.32 degrees
For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.32 = 97.32



Azimuth 350.45° with reference 0.00 N, 0.00 E

Rev-A.0

Planned Wellpath Report

Rev-A.0

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Devon Energy**	Slot	**No.6H SHL**
Area	**Eddy County, NM**	Well	**No.6H**
Field	**(Snapping) Sec. 10, T26S, R31E**	Wellbore	**No.6H PWB**
Facility	**Snapping 10 Federal No.6H**		

REPORT SETUP INFORMATION			
Projection System	**NAD83 / TM New Mexico SP, Eastern Zone (3001), US feet**	Software System	**WellArchitect® 3.0.0**
North Reference	**Grid**	User	**Gentbry**
Scale	**0.999945**	Report Generated	**5/29/2012** at **4:56:00 PM**
Convergence at slot	**0.31° East**	Database/Source file	**WA Midland/No.6H_PWB.xml**

WELLPATH LOCATION	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	**East[ft]**	**Easting[US ft]**	**Northing[US ft]**	**Latitude**	**Longitude**
Slot Location	**0.00**	**0.00**	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W
Facility Reference Pt			**719556.90**	**382631.31**	32°03'02.262"N	103°45'29.152"W
Field Reference Pt			**719606.88**	**382631.68**	32°03'02.263"N	103°45'28.572"W

WELLPATH DATUM			
Calculation method	**Minimum curvature**	Rig on No.6H SHL (KB) to Facility Vertical Datum	**25.00ft**
Horizontal Reference Pt	**Slot**	Rig on No.6H SHL (KB) to Mean Sea Level	**3230.00ft**
Vertical Reference Pt	**Rig on No.6H SHL (KB)**	Rig on No.6H SHL (KB) to Mud Line at Slot (No.6H SHL)	**25.00ft**
MD Reference Pt	**Rig on No.6H SHL (KB)**	Section Origin	**N 0.00, E 0.00 ft**
Field Vertical Reference	**Mean Sea Level**	Section Azimuth	**350.45°**

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Devon Energy**	Slot	**No.6H SHL**
Area	**Eddy County, NM**	Well	**No.6H**
Field	**(Snapping) Sec. 10, T26S, R31E**	Wellbore	**No.6H PWB**
Facility	**Snapping 10 Federal No.6H**		

WELLPATH DATA (136 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	350.448	0.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
25.00	0.000	350.448	25.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	Tie On
125.00†	0.000	350.448	125.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
225.00†	0.000	350.448	225.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
325.00†	0.000	350.448	325.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
425.00†	0.000	350.448	425.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
525.00†	0.000	350.448	525.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
625.00†	0.000	350.448	625.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
725.00†	0.000	350.448	725.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
825.00†	0.000	350.448	825.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
925.00†	0.000	350.448	925.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
1025.00†	0.000	350.448	1025.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
1125.00†	0.000	350.448	1125.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
1225.00†	0.000	350.448	1225.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
1325.00†	0.000	350.448	1325.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
1425.00†	0.000	350.448	1425.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
1525.00†	0.000	350.448	1525.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
1625.00†	0.000	350.448	1625.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
1725.00†	0.000	350.448	1725.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
1825.00†	0.000	350.448	1825.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
1925.00†	0.000	350.448	1925.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
2025.00†	0.000	350.448	2025.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
2125.00†	0.000	350.448	2125.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
2225.00†	0.000	350.448	2225.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
2325.00†	0.000	350.448	2325.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
2425.00†	0.000	350.448	2425.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
2525.00†	0.000	350.448	2525.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
2625.00†	0.000	350.448	2625.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
2725.00†	0.000	350.448	2725.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
2825.00†	0.000	350.448	2825.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
2925.00†	0.000	350.448	2925.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
3025.00†	0.000	350.448	3025.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
3125.00†	0.000	350.448	3125.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
3225.00†	0.000	350.448	3225.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
3325.00†	0.000	350.448	3325.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
3425.00†	0.000	350.448	3425.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
3525.00†	0.000	350.448	3525.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
3625.00†	0.000	350.448	3625.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
3725.00†	0.000	350.448	3725.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
3825.00†	0.000	350.448	3825.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
3925.00†	0.000	350.448	3925.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
4025.00†	0.000	350.448	4025.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
4125.00†	0.000	350.448	4125.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
4225.00†	0.000	350.448	4225.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
4325.00†	0.000	350.448	4325.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Devon Energy**	Slot	**No.6H SHL**
Area	**Eddy County, NM**	Well	**No.6H**
Field	**(Snapping) Sec. 10, T26S, R31E**	Wellbore	**No.6H PWB**
Facility	**Snapping 10 Federal No.6H**		

WELLPATH DATA (136 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4425.00†	0.000	350.448	4425.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
4525.00†	0.000	350.448	4525.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
4625.00†	0.000	350.448	4625.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
4725.00†	0.000	350.448	4725.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
4825.00†	0.000	350.448	4825.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
4925.00†	0.000	350.448	4925.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
5025.00†	0.000	350.448	5025.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
5125.00†	0.000	350.448	5125.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
5225.00†	0.000	350.448	5225.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
5325.00†	0.000	350.448	5325.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
5425.00†	0.000	350.448	5425.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
5525.00†	0.000	350.448	5525.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
5625.00†	0.000	350.448	5625.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
5725.00†	0.000	350.448	5725.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
5825.00†	0.000	350.448	5825.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
5925.00†	0.000	350.448	5925.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
6025.00†	0.000	350.448	6025.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
6125.00†	0.000	350.448	6125.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
6225.00†	0.000	350.448	6225.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
6325.00†	0.000	350.448	6325.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
6425.00†	0.000	350.448	6425.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
6525.00†	0.000	350.448	6525.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
6625.00†	0.000	350.448	6625.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
6725.00†	0.000	350.448	6725.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
6825.00†	0.000	350.448	6825.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
6925.00†	0.000	350.448	6925.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
7025.00†	0.000	350.448	7025.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
7125.00†	0.000	350.448	7125.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
7225.00†	0.000	350.448	7225.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
7325.00†	0.000	350.448	7325.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
7425.00†	0.000	350.448	7425.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
7525.00†	0.000	350.448	7525.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
7625.00†	0.000	350.448	7625.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
7725.00†	0.000	350.448	7725.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
7825.00†	0.000	350.448	7825.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	
7922.00	0.000	350.448	7922.00	0.00	0.00	0.00	719556.90	382631.31	32°03'02.262"N	103°45'29.152"W	0.00	Est KOP
7925.00†	0.300	350.448	7925.00	0.01	0.01	0.00	719556.90	382631.32	32°03'02.262"N	103°45'29.152"W	10.00	
8025.00†	10.299	350.448	8024.45	9.23	9.10	-1.53	719555.37	382640.41	32°03'02.352"N	103°45'29.170"W	10.00	
8125.00†	20.299	350.448	8120.78	35.58	35.09	-5.91	719551.00	382666.40	32°03'02.609"N	103°45'29.219"W	10.00	
8225.00†	30.298	350.448	8211.08	78.26	77.18	-12.99	719543.91	382708.48	32°03'03.026"N	103°45'29.298"W	10.00	
8325.00†	40.297	350.448	8292.59	135.97	134.09	-22.56	719534.34	382765.39	32°03'03.590"N	103°45'29.406"W	10.00	
8425.00†	50.296	350.448	8362.84	206.96	204.09	-34.34	719522.56	382835.39	32°03'04.283"N	103°45'29.539"W	10.00	
8525.00†	60.296	350.448	8419.70	289.06	285.06	-47.97	719508.93	382916.35	32°03'05.085"N	103°45'29.692"W	10.00	
8625.00†	70.295	350.448	8461.45	379.80	374.53	-63.03	719493.88	383005.82	32°03'05.971"N	103°45'29.861"W	10.00	
8725.00†	80.294	350.448	8486.80	476.40	469.79	-79.06	719477.85	383101.07	32°03'06.915"N	103°45'30.042"W	10.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	Devon Energy	Slot	No.6H SHL
Area	Eddy County, NM	Well	No.6H
Field	(Snapping) Sec. 10, T26S, R31E	Wellbore	No.6H PWB
Facility	Snapping 10 Federal No.6H		

WELLPATH DATA (136 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8822.07	90.000	350.448	8495.00	573.00	565.05	-95.09	719461.82	383196.33	32°03'07.858"N	103°45'30.222"W	10.00	EOC
8825.00†	90.000	350.448	8495.00	575.93	567.95	-95.58	719461.33	383199.23	32°03'07.887"N	103°45'30.228"W	0.00	
8925.00†	90.000	350.448	8495.00	675.93	666.56	-112.17	719444.73	383297.83	32°03'08.863"N	103°45'30.414"W	0.00	
9025.00†	90.000	350.448	8495.00	775.93	765.17	-128.77	719428.14	383396.44	32°03'09.840"N	103°45'30.601"W	0.00	
9125.00†	90.000	350.448	8495.00	875.93	863.79	-145.36	719411.55	383495.05	32°03'10.817"N	103°45'30.788"W	0.00	
9225.00†	90.000	350.448	8495.00	975.93	962.40	-161.96	719394.95	383593.66	32°03'11.793"N	103°45'30.974"W	0.00	
9325.00†	90.000	350.448	8495.00	1075.93	1061.01	-178.55	719378.36	383692.26	32°03'12.770"N	103°45'31.161"W	0.00	
9425.00†	90.000	350.448	8495.00	1175.93	1159.63	-195.15	719361.76	383790.87	32°03'13.747"N	103°45'31.348"W	0.00	
9525.00†	90.000	350.448	8495.00	1275.93	1258.24	-211.74	719345.17	383889.48	32°03'14.723"N	103°45'31.535"W	0.00	
9625.00†	90.000	350.448	8495.00	1375.93	1356.85	-228.34	719328.58	383988.09	32°03'15.700"N	103°45'31.721"W	0.00	
9725.00†	90.000	350.448	8495.00	1475.93	1455.47	-244.93	719311.98	384086.70	32°03'16.677"N	103°45'31.908"W	0.00	
9825.00†	90.000	350.448	8495.00	1575.93	1554.08	-261.53	719295.39	384185.30	32°03'17.654"N	103°45'32.095"W	0.00	
9925.00†	90.000	350.448	8495.00	1675.93	1652.70	-278.12	719278.79	384283.91	32°03'18.630"N	103°45'32.281"W	0.00	
10025.00†	90.000	350.448	8495.00	1775.93	1751.31	-294.72	719262.20	384382.52	32°03'19.607"N	103°45'32.468"W	0.00	
10125.00†	90.000	350.448	8495.00	1875.93	1849.92	-311.31	719245.60	384481.13	32°03'20.584"N	103°45'32.655"W	0.00	
10225.00†	90.000	350.448	8495.00	1975.93	1948.54	-327.91	719229.01	384579.74	32°03'21.560"N	103°45'32.842"W	0.00	
10325.00†	90.000	350.448	8495.00	2075.93	2047.15	-344.50	719212.42	384678.34	32°03'22.537"N	103°45'33.028"W	0.00	
10425.00†	90.000	350.448	8495.00	2175.93	2145.76	-361.10	719195.82	384776.95	32°03'23.514"N	103°45'33.215"W	0.00	
10525.00†	90.000	350.448	8495.00	2275.93	2244.38	-377.69	719179.23	384875.56	32°03'24.490"N	103°45'33.402"W	0.00	
10625.00†	90.000	350.448	8495.00	2375.93	2342.99	-394.29	719162.63	384974.17	32°03'25.467"N	103°45'33.589"W	0.00	
10725.00†	90.000	350.448	8495.00	2475.93	2441.60	-410.88	719146.04	385072.77	32°03'26.444"N	103°45'33.775"W	0.00	
10825.00†	90.000	350.448	8495.00	2575.93	2540.22	-427.48	719129.44	385171.38	32°03'27.420"N	103°45'33.962"W	0.00	
10925.00†	90.000	350.448	8495.00	2675.93	2638.83	-444.07	719112.85	385269.99	32°03'28.397"N	103°45'34.149"W	0.00	
11025.00†	90.000	350.448	8495.00	2775.93	2737.44	-460.67	719096.26	385368.60	32°03'29.374"N	103°45'34.336"W	0.00	
11125.00†	90.000	350.448	8495.00	2875.93	2836.06	-477.26	719079.66	385467.21	32°03'30.350"N	103°45'34.522"W	0.00	
11225.00†	90.000	350.448	8495.00	2975.93	2934.67	-493.86	719063.07	385565.81	32°03'31.327"N	103°45'34.709"W	0.00	
11325.00†	90.000	350.448	8495.00	3075.93	3033.28	-510.45	719046.47	385664.42	32°03'32.304"N	103°45'34.896"W	0.00	
11425.00†	90.000	350.448	8495.00	3175.93	3131.90	-527.05	719029.88	385763.03	32°03'33.280"N	103°45'35.082"W	0.00	
11525.00†	90.000	350.448	8495.00	3275.93	3230.51	-543.65	719013.29	385861.64	32°03'34.257"N	103°45'35.269"W	0.00	
11625.00†	90.000	350.448	8495.00	3375.93	3329.12	-560.24	718996.69	385960.24	32°03'35.234"N	103°45'35.456"W	0.00	
11725.00†	90.000	350.448	8495.00	3475.93	3427.74	-576.84	718980.10	386058.85	32°03'36.210"N	103°45'35.643"W	0.00	
11825.00†	90.000	350.448	8495.00	3575.93	3526.35	-593.43	718963.50	386157.46	32°03'37.187"N	103°45'35.829"W	0.00	
11925.00†	90.000	350.448	8495.00	3675.93	3624.96	-610.03	718946.91	386256.07	32°03'38.164"N	103°45'36.016"W	0.00	
12025.00†	90.000	350.448	8495.00	3775.93	3723.58	-626.62	718930.31	386354.68	32°03'39.140"N	103°45'36.203"W	0.00	
12125.00†	90.000	350.448	8495.00	3875.93	3822.19	-643.22	718913.72	386453.28	32°03'40.117"N	103°45'36.390"W	0.00	
12225.00†	90.000	350.448	8495.00	3975.93	3920.80	-659.81	718897.13	386551.89	32°03'41.094"N	103°45'36.576"W	0.00	
12325.00†	90.000	350.448	8495.00	4075.93	4019.42	-676.41	718880.53	386650.50	32°03'42.070"N	103°45'36.763"W	0.00	
12425.00†	90.000	350.448	8495.00	4175.93	4118.03	-693.00	718863.94	386749.11	32°03'43.047"N	103°45'36.950"W	0.00	
12525.00†	90.000	350.448	8495.00	4275.93	4216.64	-709.60	718847.34	386847.72	32°03'44.024"N	103°45'37.137"W	0.00	
12625.00†	90.000	350.448	8495.00	4375.93	4315.26	-726.19	718830.75	386946.32	32°03'45.001"N	103°45'37.323"W	0.00	
12725.00†	90.000	350.448	8495.00	4475.93	4413.87	-742.79	718814.16	387044.93	32°03'45.977"N	103°45'37.510"W	0.00	
12825.00†	90.000	350.448	8495.00	4575.93	4512.48	-759.38	718797.56	387143.54	32°03'46.954"N	103°45'37.697"W	0.00	
12925.00†	90.000	350.448	8495.00	4675.93	4611.10	-775.98	718780.97	387242.15	32°03'47.931"N	103°45'37.884"W	0.00	
13025.00†	90.000	350.448	8495.00	4775.93	4709.71	-792.57	718764.37	387340.75	32°03'48.907"N	103°45'38.070"W	0.00	
13125.00†	90.000	350.448	8495.00	4875.93	4808.32	-809.17	718747.78	387439.36	32°03'49.884"N	103°45'38.257"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Devon Energy**	Slot	**No.6H SHL**
Area	**Eddy County, NM**	Well	**No.6H**
Field	**(Snapping) Sec. 10, T26S, R31E**	Wellbore	**No.6H PWB**
Facility	**Snapping 10 Federal No.6H**		

WELLPATH DATA (136 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13140.18	90.000	350.448	8495.00	4891.11	4823.29	-811.69	718745.26	387454.33	32°03'50.032"N	103°45'38.286"W	0.00	No.6H PBHL

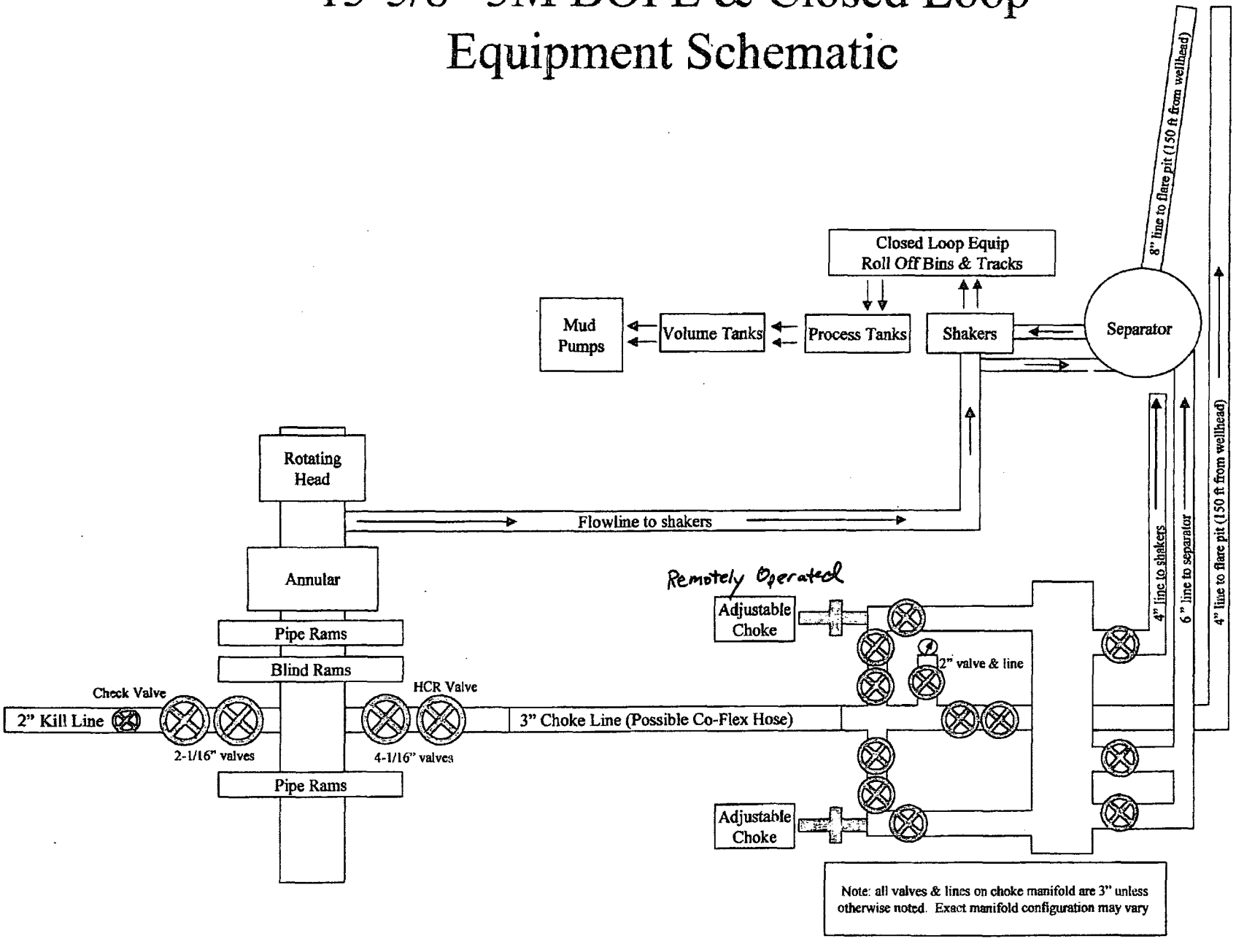
TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
1) No.6H PBHL (Rev-0)	13140.18	8495.00	4823.29	-811.69	**718745.26**	**387454.33**	32°03'50.032"N	103°45'38.286"W	point

SURVEY PROGRAM - Ref Wellbore: No.6H PWB Ref Wellpath: Rev-A.0

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	7700.00	Generic gyro - northseeking (Standard)		No.6H PWB
7700.00	13140.18	NaviTrak (Standard)		No.6H PWB

13-5/8" 3M BOPE & Closed Loop Equipment Schematic



NOTES REGARDING BLOWOUT PREVENTERS

Devon Energy Production Company, LP

Snapping 10 Federal 6H

Surface Location: 175' FSL & 210' FEL, Unit P, Sec 10 T26S R31E, Eddy, NM

Bottom Hole Location: 330' FNL & 990' FEL, Unit A, Sec 10 T26S 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 3000 psi working pressure.
4. All fittings will be flanged.
5. A full bore safety valve tested to a minimum 3000 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.

Continental CONTITECH

Fluid Technology

Quality Document

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE

CERT. N°: 1713

PURCHASER:	ContiTech Beattie Co.			P.O. N°:	002808
CONTITECH ORDER N°:	426127	HOSE TYPE:	3" ID	Choke and Kill Hose	
HOSE SERIAL N°:	53622	NOMINAL / ACTUAL LENGTH:		10,67 m	
W.P. 68,96 MPa	10000 psi	T.P. 103,4 MPa	15000 psi	Duration: 60	min.

Pressure test with water at ambient temperature

See attachment. (1 page)

↑ 10 mm = 10 Min.

→ 10 mm = 25 MPa

COUPLINGS Type	Serial N°	Quality	Heat N°
3" coupling with	5503 2029	AISI 4130	N1590P
4 1/16" Flange end		AISI 4130	27566

INFOCHIP INSTALLED

API Spec 16 C
Temperature rate:"B"

All metal parts are flawless

Hose conform to NACE MR 01-75

WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER INSPECTED AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.

STATEMENT OF CONFORMITY: We hereby certify that the above items/equipment supplied by us are in conformity with the terms, conditions and specifications of the above Purchaser Order and that these items/equipment were fabricated inspected and tested in accordance with the referenced standards, codes and specifications and meet the relevant acceptance criteria and design requirements.

COUNTRY OF ORIGIN HUNGARY/EU

Date:	Inspector	Quality Control
25. August. 2008		ContiTech Rubber Industrial Kft. Quality Control Dept. (1)

ContiTech Rubber Industrial Kft.
Budapesti út 10., Szeged H 6728
P.O.Box 152 Szeged H-6701
Hungary

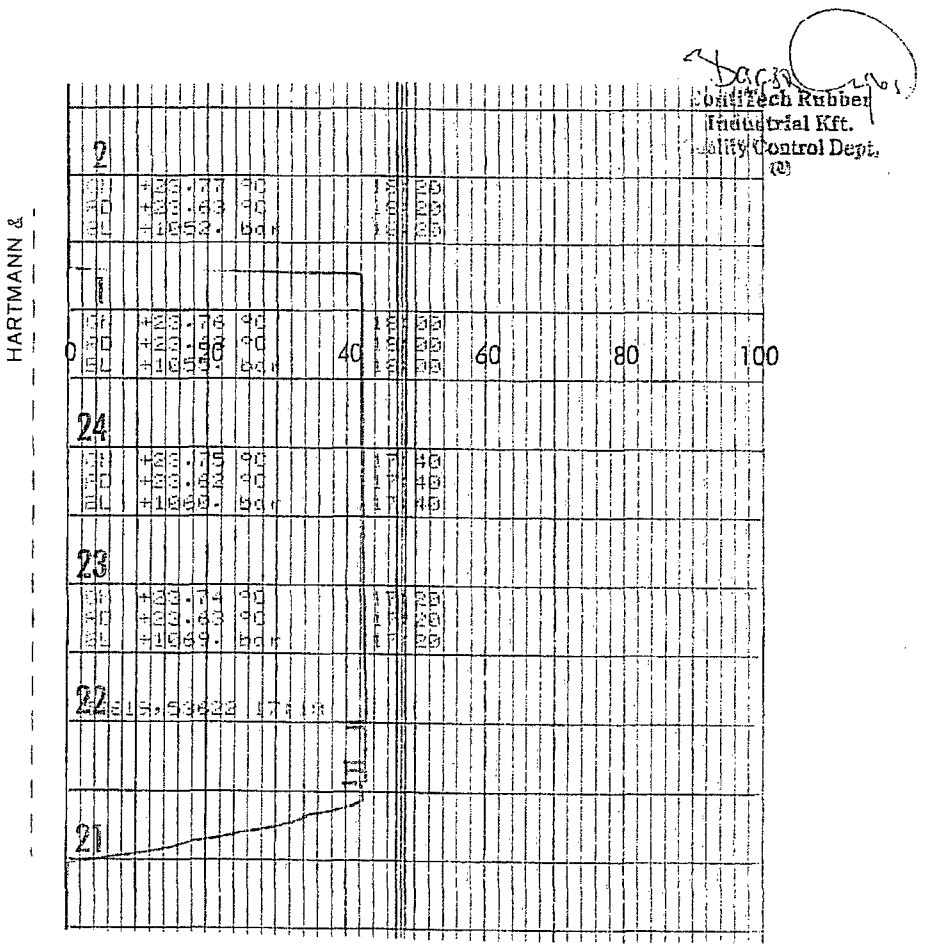
Phone: +36 62 566 737
Fax: +36 62 566 738
e-mail: info@fluid.contitech.hu
Internet: www.contitech-rubber.hu

The Court of Csongrád County as Registry Court
Registry Court No: HU 06-09-002502
EU VAT No: HU11087209

Bank data
Commerzbank Zrt.
Szeged
14220108-26830003-00000000

ATTACHMENT OF QUALITY CONTROL INSPECTION AND TEST CERTIFICATE *No 1711,1713*

Page: 1/1



Continental Rubber
Industrial Kft.
Quality Control Dept.

devon

Devon Energy Corporation
20 North Broadway
Oklahoma City, Oklahoma 73102-8260

Hydrogen Sulfide (H_2S) Contingency Plan

For

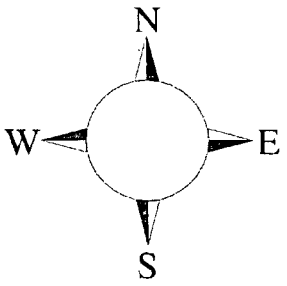
SNAPPING 10" Federal 6H

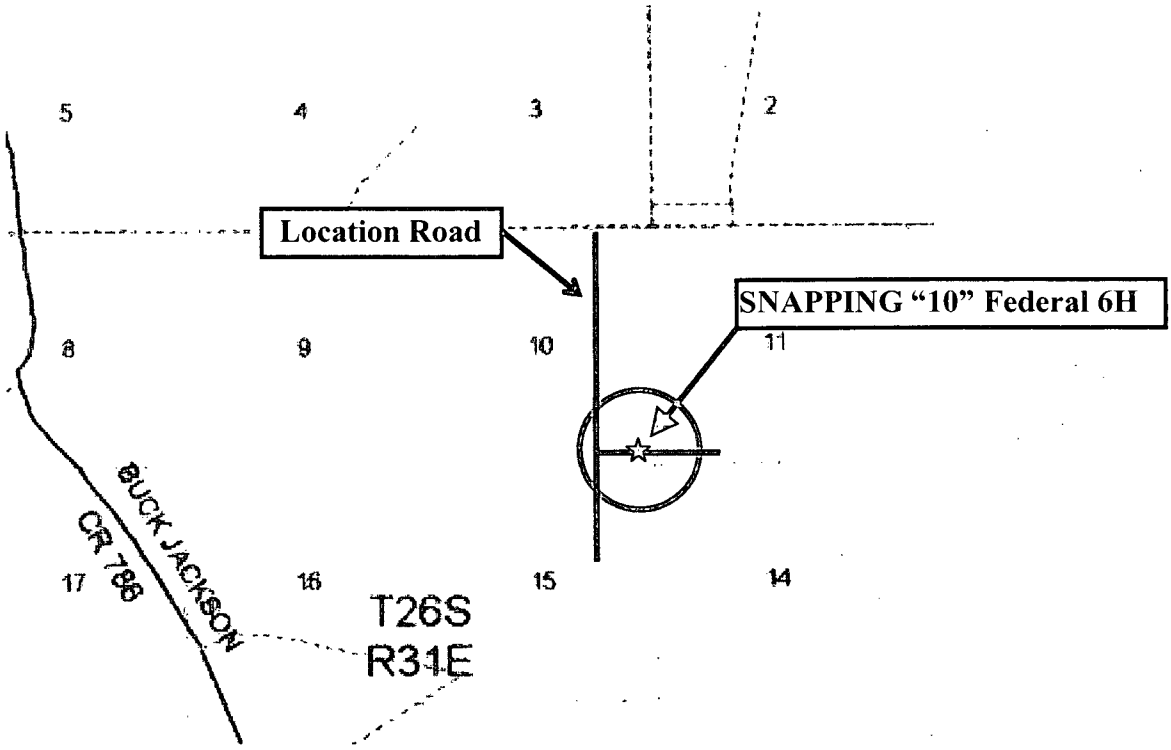
Sec-10, T-26S R-31E
175' FSL & 210' FEL,
LAT. = 32.10501483'N (NAD83)
LONG = 103.7574177'W

Eddy County NM

SNAPPING "10" Federal 6H

This is an open drilling site. H_2S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H_2S, including warning signs, wind indicators and H_2S monitor.





Assumed 100 ppm 3000' ( )
100 ppm H2S concentration shall trigger activation of this plan.

Escape

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated West then North on lease road. Crews should then block entrance to the location from the lease road so as not to allow anyone traversing into a hazardous area. The blockade should be at a safe distance outside of the ROE. There are no homes or buildings in or near the ROE.

Assumed 100 ppm ROE = 3000'

100 ppm H_2S concentration shall trigger activation of this plan.

Emergency Procedures

In the event of a release of gas containing H_2S, the first responder(s) must

- **Isolate the area and prevent entry by other persons into the 100 ppm ROE.**
- **Evacuate any public places encompassed by the 100 ppm ROE.**
- **Be equipped with H_2S monitors and air packs in order to control the release.**
- **Use the "buddy system" to ensure no injuries occur during the response**
- **Take precautions to avoid personal injury during this operation.**
- **Contact operator and/or local officials to aid in operation. See list of phone numbers attached.**
- **Have received training in the**
  - **Detection of H_2S, and**
  - **Measures for protection against the gas,**
  - **Equipment used for protection and emergency response.**

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO_2). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

Characteristics of H_2S and SO_2

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H_2S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO_2	2.21 Air = 1	2 ppm	N/A	1000 ppm

Contacting Authorities

Devon Energy Corp. personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. Devon Energy Corp. Company response must be in coordination with the State of New Mexico's 'Hazardous Materials Emergency Response Plan' (HMER)

Hydrogen Sulfide Drilling Operation Plan

I. HYDROGEN SULFIDE (H_2S) TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H_2S)

2. The proper use and maintenance of personal protective equipment and life support systems.

3. The proper use of H_2S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.

4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H_2S metal components. If high tensile tubular are to be used, personnel will be trained in their special maintenance requirements.

2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.

3. The contents and requirements of the H_2S Drilling Operations Plan and Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H_2S zone (within 3 days or 500 feet) and weekly H_2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H_2S Drilling Operations Plan and the Public Protection Plan.

II. HYDROGEN SULFIDE TRAINING

Note: All H_2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonable expected to contain H_2S.

1. **Well Control Equipment**

   A. Flare line

   B. Choke manifold

   C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit

   D. Auxiliary equipment may include if applicable: annular preventer and rotating head.

2. **Protective equipment for essential personnel:**

   A. 30-minute SCBA units located in the doghouse and at briefing areas, as indicated on well site diagram. As it may be difficult to communicate audibly while wearing these units, hand signals shall be utilized.

3. **H_2S detection and monitoring equipment:**

   A. Portable H_2S monitors positioned on location for best coverage and response. These unites have warning lights and audible sirens when H_2S levels of 20 PPM are reached. These units are usually capable of detecting SO_2, which is a byproduct of burning H_2S.

4. **Visual warning systems:**

   A. Wind direction indicators as shown on well site diagram

   B. Caution/ Danger signs shall be posted on roads providing direct access to locations. Signs will be painted a high visibility yellow with black lettering of sufficient size to be reasonable distance from the immediate location. Bilingual signs will be used when appropriate..

5. **Mud program:**

   A. The mud program has been designed to minimize the volume of H_2S circulated to surface. Proper mud weight, safe drilling practices and the use of H_2S scavengers will minimize hazards when penetrating H_2S bearing zones.

6. **Metallurgy:**

   A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold lines, and valves shall be H_2S trim.

   B. All elastomers used for packing and seals shall be H_2S trim.

7. **Communication:**

   A. Radio communications in company vehicles including cellular telephones and 2-way radio

   B. Land line (telephone) communications at Office

8. **Well testing:**

   A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safety and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill-stem-testing operations conducted in an H_2S environment will use the closed chamber method of testing.

   B. There will be no drill stem testing.

Devon Energy Corp. Company Call List

Artesia (575)	Cellular	Office	Home
Foreman – Robert Bell	748-7448	748-0178	746-2991
Asst. Foreman –Tommy Polly	748-5290	748-0165	748-2846
Don Mayberry	748-5235	748-0164	746-4945
Montral Walker	390-5182	748-0193	936-414-6246
Engineer – Marcos Ortiz	(405) 317-0666	(405) 552-8152	(405) 381-4350

Agency Call List

Lea County (575)

Hobbs

State Police	392-5588
City Police	397-9265
Sheriff's Office	393-2515
Ambulance	911
Fire Department	397-9308
LEPC (Local Emergency Planning Committee)	393-2870
NMOCD	393-6161
US Bureau of Land Management	393-3612

Eddy County (575)

Carlsbad

State Police	885-3137
City Police	885-2111
Sheriff's Office	887-7551
Ambulance	911
Fire Department	885-2111
LEPC (Local Emergency Planning Committee)	887-3798
US Bureau of Land Management	887-6544
New Mexico Emergency Response Commission (Santa Fe)	(505)476-9600
24 HR	(505) 827-9126
National Emergency Response Center (Washington, DC)	(800) 424-8802

Emergency Services

Boots & Coots IWC	1-800-256-9688 or (281) 931-8884
Cudd Pressure Control	(915) 699-0139 or (915) 563-3356
Halliburton	(575) 746-2757
B. J. Services	(575) 746-3569

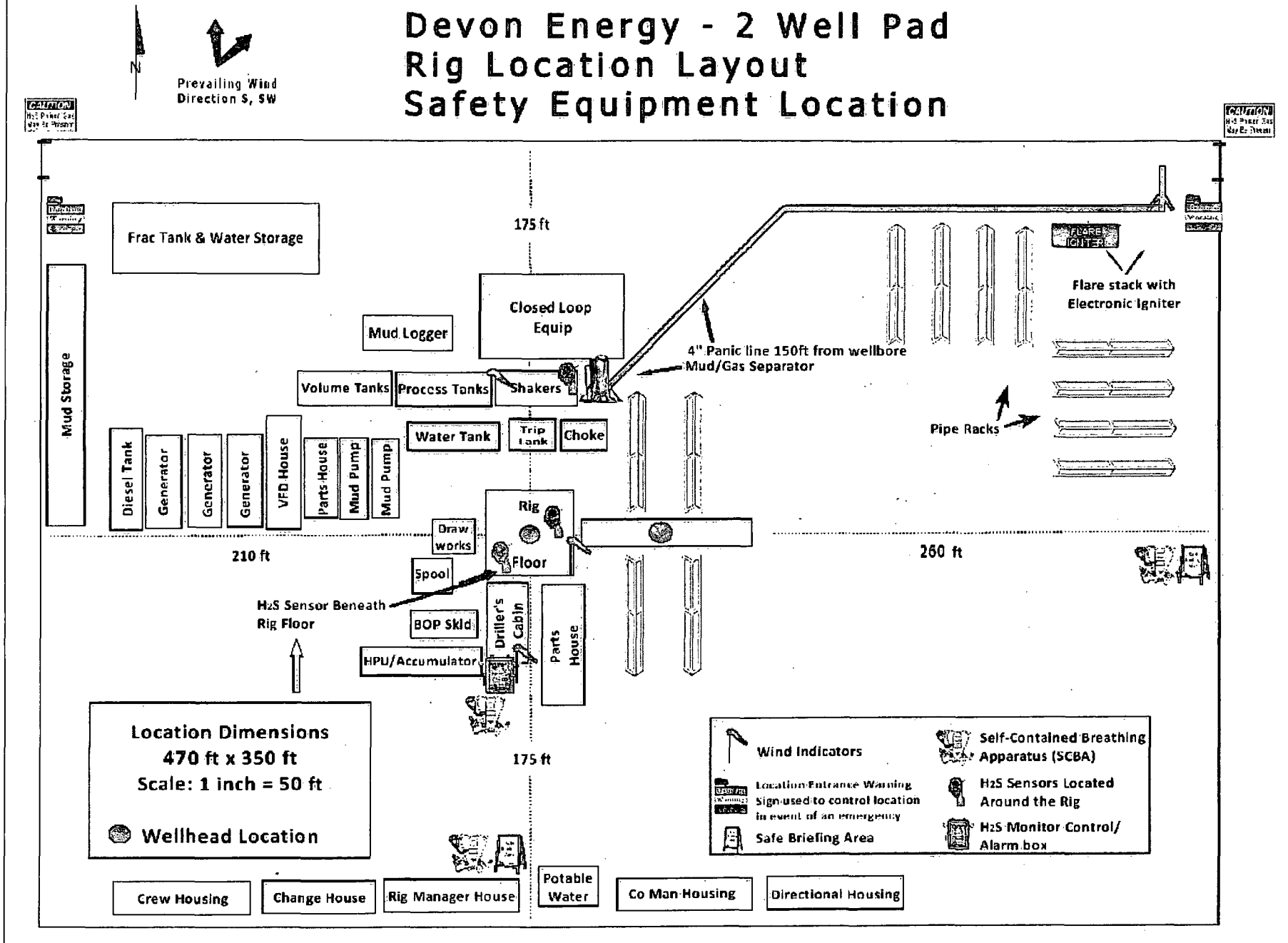
Give GPS position:

Flight For Life - Lubbock, TX	(806) 743-9911
Aerocare - Lubbock, TX	(806) 747-8923
Med Flight Air Amb - Albuquerque, NM	(575) 842-4433
Lifeguard Air Med Svc. Albuquerque, NM	(575) 272-3115

Prepared in conjunction with
Wade Rohloff

Graphic Safety LLC
Safety is an Art
GraphicSafety.com
PO Box 2734 • Hobbs NM 88240
575.631.9661 • Fax 866.352.2183

Devon Energy - 2 Well Pad
Rig Location Layout
Safety Equipment Location



devon

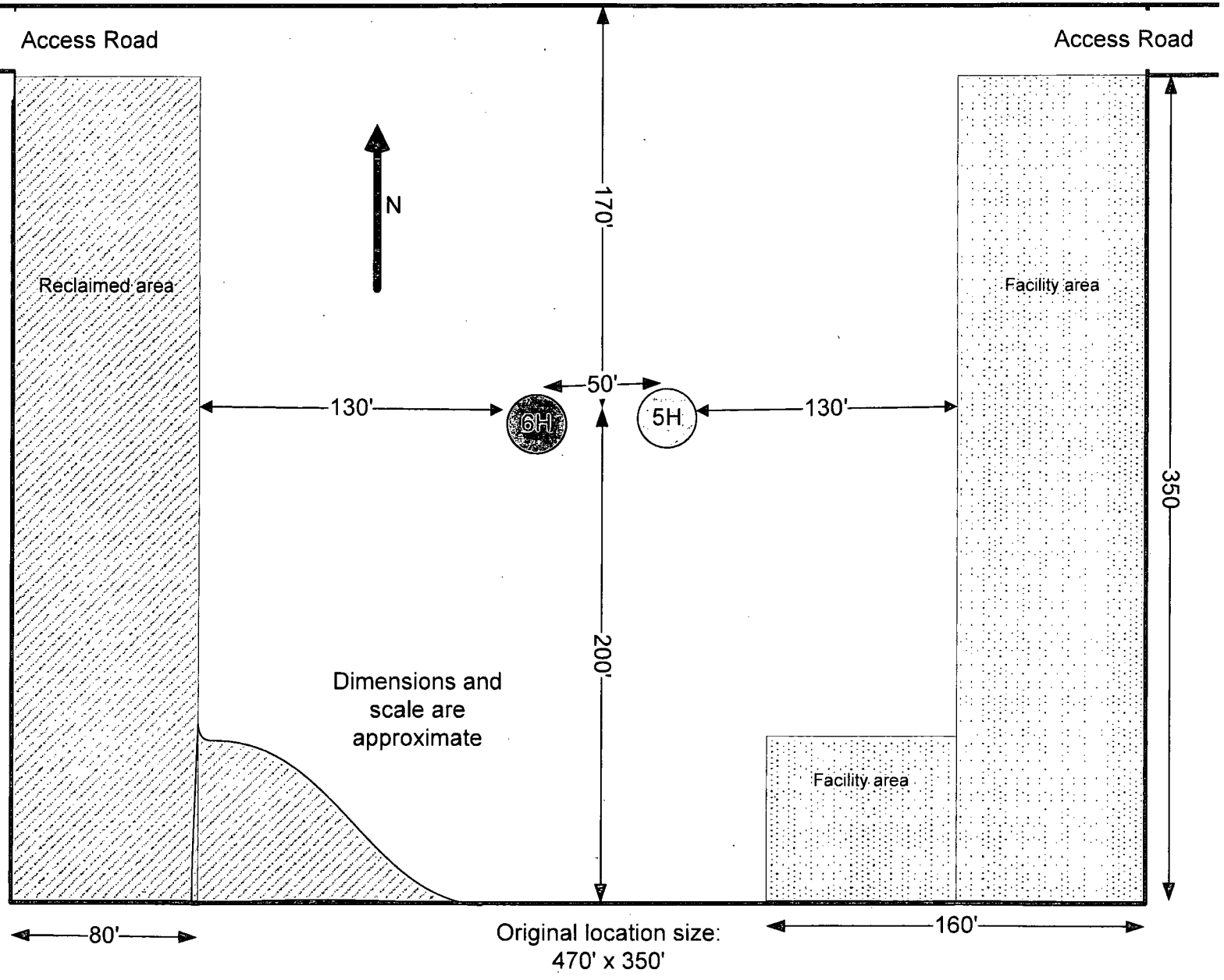
Proposed Interim Site Configuration

Devon Energy Production Co.
Snapping 10 Federal #6H
175' FSL & 210' FEL
Sec. 10 T26S R31E
Eddy County, NM

Well to occupy a 2-well pad with well #6H. Both wells will produce to the same facility.

Proposed Reclamation Area

50'



PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	DEVON ENERGY PRODUCTION CO.
LEASE NO.:	NM89057
WELL NAME & NO.:	6H-SNAPPING 10 FEDERAL
SURFACE HOLE FOOTAGE:	175'/S. & 210'/E.
BOTTOM HOLE FOOTAGE	330'/N. & 990'/E.
LOCATION:	Section 10, T. 26 S., R. 31 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Stipulations/Condition of Approval for Phantom Banks Heronries: Surface disturbance will not be allowed within up to 200 meters of active heronries or by delaying activity for up to 120 days, or a combination of both. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-6235 at least working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall stockpile the topsoil in a low profile manner in order to prevent wind/water erosion of the topsoil. The topsoil to be stripped is approximately inches in depth. The topsoil will be used for interim and final reclamation.

There is no measurable soil on this well pad to stockpile. No topsoil stockpile is required.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. ON LEASE ACCESS ROADS

Road Width
The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty (20) feet.

Surfacing
Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

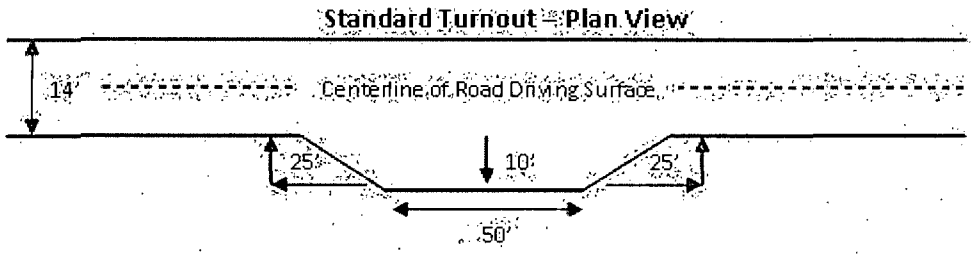
The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching
Ditching shall be required on the uphill side of the road.

Ditching shall be required on both sides of the road.

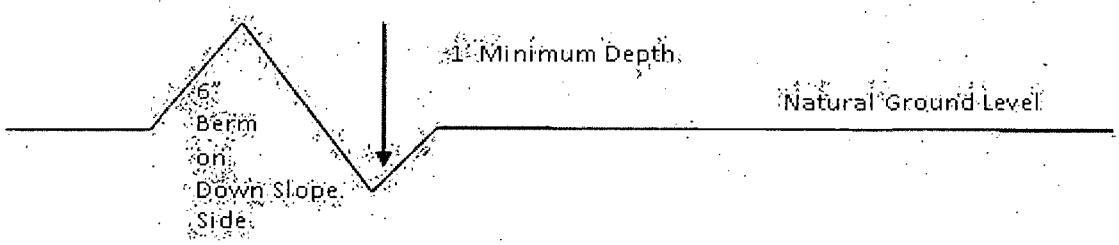
Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:



Drainage
Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$\text{400 foot road with 4\% road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

Culvert Installations
Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

Cattleguards
An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

Fence Requirement

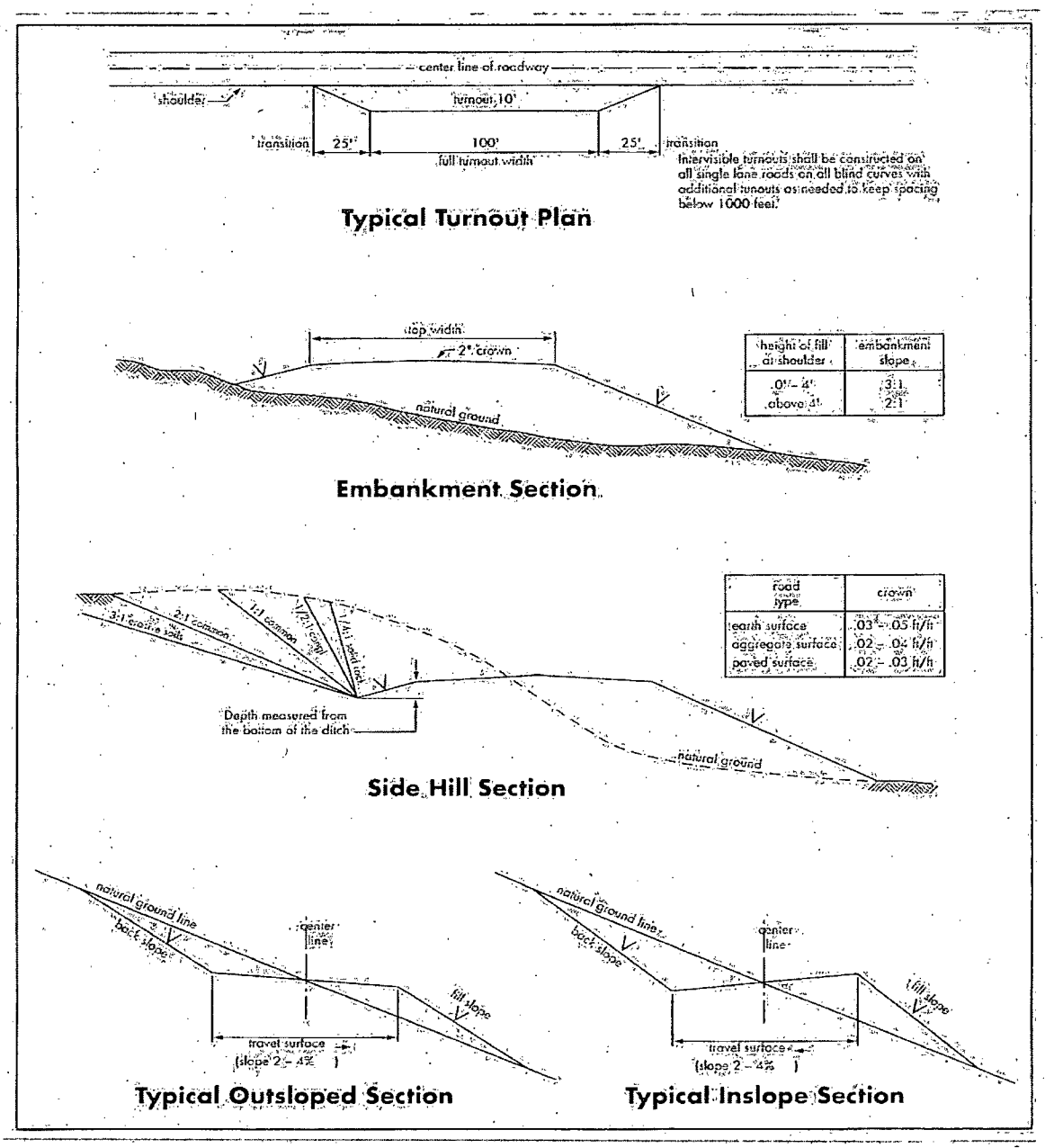
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Figure 1 – Cross Sections and Plans For Typical Road Sections



VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

a. Spudding well
b. Setting and/or Cementing of all casing strings
c. BOPE tests

☒ **Eddy County**
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

1. **Although Hydrogen Sulfide has not been reported in the area, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts and formations to the BLM.**

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

4. **The record of the drilling rate along with the CAL/GR/N well log run from TD to surface will be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Possible lost circulation in the Delaware and Bone Spring Groups.

1. The **13-3/8** inch surface casing shall be set at **approximately 1440 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface.

This well is located within a solution trough; the operator shall employ a mud logger to pick the surface casing setting depth for the first of the three wells drilled on this pad.

   a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

   b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.

   c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

   d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

   ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above.

Centralizers required on horizontal leg, must be type for horizontal service and minimum of one every other joint.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

   ☒ Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification. **Additional cement may be required – excess calculates to -5%.**

4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. **Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review**. If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M)** psi.

4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

   a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips or where the float does not hold, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (18 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

c. The results of the test shall be reported to the appropriate BLM office.

d. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**

e. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

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VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities
Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Containment Structures
The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Painting Requirement
All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color
Shale Green, Munsell Soil Color Chart # 5Y 4/2

VRM Facility Requirement
Low-profile tanks not greater than eight-feet-high shall be used.

B. PIPELINES

C. ELECTRIC LINES

IX. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

X. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Seed Mixture 2, for Sandy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed