

Form 3160-3
(March 2012)

OCD Hobbs

HOBBS OCD

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

MAY 05 2014

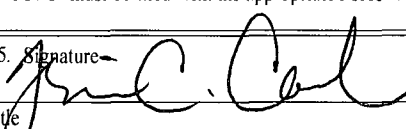
APPLICATION FOR PERMIT TO DRILL OR REENTER

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. Lippizzan 4 Fed 1H	
2. Name of Operator Devon Energy Production Company, L.P.		9. API Well No. 70-025-41829	
3a. Address 333 W. Sheridan Ave. Oklahoma City, OK 73102	3b. Phone No. (include area code) 405-228-7203	10. Field and Pool, or Exploratory WC 025 G-08 52532094, AS	
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 200' FNL & 660' FWL, Sec 4 PP: 200' FNL & 660' FWL At proposed prod. zone 330' FSL & 660' FWL Unit M		11. Sec., T. R. M. or Blk. and Survey or Area Sec 4, T25S-R32E	
14. Distance in miles and direction from nearest town or post office* Approximately 29 miles northwest of Jal, NM		12. County or Parish Lea	13. State NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of acres in lease NMLC 061863A - 1241.92	17. Spacing Unit dedicated to this well W/2 W/2 of Section 4, T25S-R32E = 160.26 ac	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. See attached 1 mile radius map	19. Proposed Depth MD: 15220' PH: 10850' TVD 10850' 712	20. BLM/BIA Bond No. on file CO-1104 & NMB-000801	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3475.5' GL	22. Approximate date work will start* 03/01/2014	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:

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

25. Signature 	Name (Printed/Typed) Trina C. Couch	Date 01/13/2014
Title Regulatory Associate		

Approved by (Signature) Steve Caffey	Name (Printed/Typed)	Date MAY 1 - 2014
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.

(Continued on page 2)

*(Instructions on page 2)

Carlsbad Controlled Water Basin

SEE ATTACHED FOR
CONDITIONS OF APPROVALApproval Subject to General Requirements
& Special Stipulations Attached

MAY 13 2014

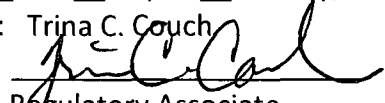
Certification

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 13th day of January, 2014.

Printed Name: Trina C. Couch

Signed Name: 

Position Title: Regulatory Associate

Address: 333 W. Sheridan, OKC OK 73102

Telephone: (405)-228-7203

DRILLING PROGRAM

Devon Energy Production Company, L.P.
Lippizzan 4 Fed 1H

1. **Geologic Name of Surface Formation: Quaternary**

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

a. Fresh Water	300'	
b. Rustler	599'	Barren
c. Salado/Top of Salt	994'	Barren
d. Castile	4420'	Barren
e. Bell Canyon	4680'	Oil & Gas shows
f. Cherry Canyon	5568'	Oil & Gas shows
g. Brushy Canyon	6922'	Oil & Gas shows
h. 1 st Bone Spring Lime	8571'	Oil & Gas shows
i. 1 st Bone Spring Sand	9607'	Oil & Gas shows
j. 2 nd Bone Spring Lime	9966'	Oil & Gas shows
k. 2 nd Bone Spring Sand	10213'	Oil & Gas shows
Total Depth	10690' TVD 15220' MD	PH: 10,850'

3. Pressure Control Equipment:

A 3M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the surface casing shoe. The BOP system used to drill the intermediate hole will be tested per BLM Onshore Oil and Gas Order 2.

A 3M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the intermediate casing shoe. The BOP system used to drill the production hole will be tested per BLM Onshore Oil and Gas Order 2.

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 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); **if an H&P rig drills this well. Otherwise no flex line is needed.** The line will be kept as straight as possible with minimal turns.

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.

4. Casing Program:

See
COR

Hole Size	Hole Interval	Casing OD	Casing Interval	Weight (lb/ft)	Collar	Grade	Collapse Design Factor	Burst Design Factor	Tension Design Factor
17-1/2"	0 - 775' ^{825'}	13-3/8"	0 - 775'	48	STC	H-40	2.22	4.99	8.66
12-1/4"	775-4475' ^{4600'}	9-5/8"	0 - 4475'	40	LTC	J-55	1.19	1.83	3.13
8-3/4"	4475-15220'	5-1/2"	0-15220'	17	BTC	P-110	1.51	1.87	2.19

Casing Notes:

- An 8-3/4" pilot hole will be drilled to 10850' and plugged back to KOP (for volumes and TOC see cement table)
- All casing is new and API approved

Maximum Lateral TVD: 10712'

5. Proposed mud Circulations System:

Depth	Mud Weight	Viscosity	Fluid Loss	Type System
0 - 775' ^{825'}	8.4-8.7	30-34	N/C	FW
775-4475' ^{4600'}	9.8-10.0	28-32	N/C	Brine
4475-15220'	8.5-9.0	28-32	N/C	FW

The necessary mud products for weight addition and fluid loss control will be on location at all times. Visual mud monitoring equipment will be in place to detect volume changes indicating loss or gain of circulating fluid volume. If abnormal pressures are encountered, electronic/mechanical mud monitoring equipment will be installed.

6. Cementing Table:

String	Number of sx	Weight lbs/gal	Water Volume g/sx	Yield cf/sx	Stage; Lead/Tail	Slurry Description
Surface	840	14.8	6.32	1.33	Lead	Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Fresh Water
Intermediate	965	12.9	9.81	1.85	1 st Lead	(65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake + 70.9 % Fresh Water
	430	14.8	6.32	1.33	1 st Tail	Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Fresh Water, 14.8 ppg
Production	670	12.5	10.79	1.96	1 st Lead	(65:35) Class H Cement: Poz (Fly Ash) + 6% BWOC Bentonite + 0.25% BWOC HR-601 + 0.125 lbs/sack Poly-E-Flake + 74.1 % Fresh Water
	1325	14.5	5.38	1.22	1 st Tail	(50:50) Class H Cement: Poz (Fly Ash) + 1 lb/sk Sodium Chloride + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% bwoc HR-601 + 2% bwoc Bentonite + 58.8% Fresh Water
	DVT @ 6000'					
	265	12.5	10.79	1.96	2 nd Lead	(65:35) Class H Cement: Poz (Fly Ash) + 6% BWOC Bentonite + 0.25% BWOC HR-601 + 0.125 lbs/sack Poly-E-Flake + 74.1 % Fresh Water
	120	14.8	6.32	1.33	2 nd Tail	Class C Cement + 0.2% BWOC HR-800 + 64.4% Fresh Water
PH Plug	350	15.6	5.39	1.19	Plug cmt	Class H Cement + 0.2% Halad-9 + 0.3% HR-601 + 60.5 % Fresh Water

TOC for all Strings:

Surface	@	0'
Intermediate	@	0'
Pilot Hole plug back	@	9939'
Production	@	1 st stage - 6000'
		2 nd Stage – 3650'

Notes:

- Cement volumes Surface 100%, Intermediate 75%, Pilot hole 10% and Production based on at least 25% excess
- Actual cement volumes will be adjusted based on fluid caliper and caliper log data

7. 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:
 - Dual Laterolog
 - Micro Laterolog with SP & Gamma Ray
 - Compensated Neutron
 - Z-Density Log with Gamma Ray and Caliper
 - Sonic
 - 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 5-1/2" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows, and drill stem tests.

8. Potential Hazards:

- a. No abnormal pressures or temperatures are expected. There is no known presence of H₂S in this area, and none is anticipated to be encountered. 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 being used to drill this well. Estimated BHP: 4900 psi, and estimated BHT: 169 degrees.
- b. 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.

9. Anticipated Starting Date and Duration of Operations:

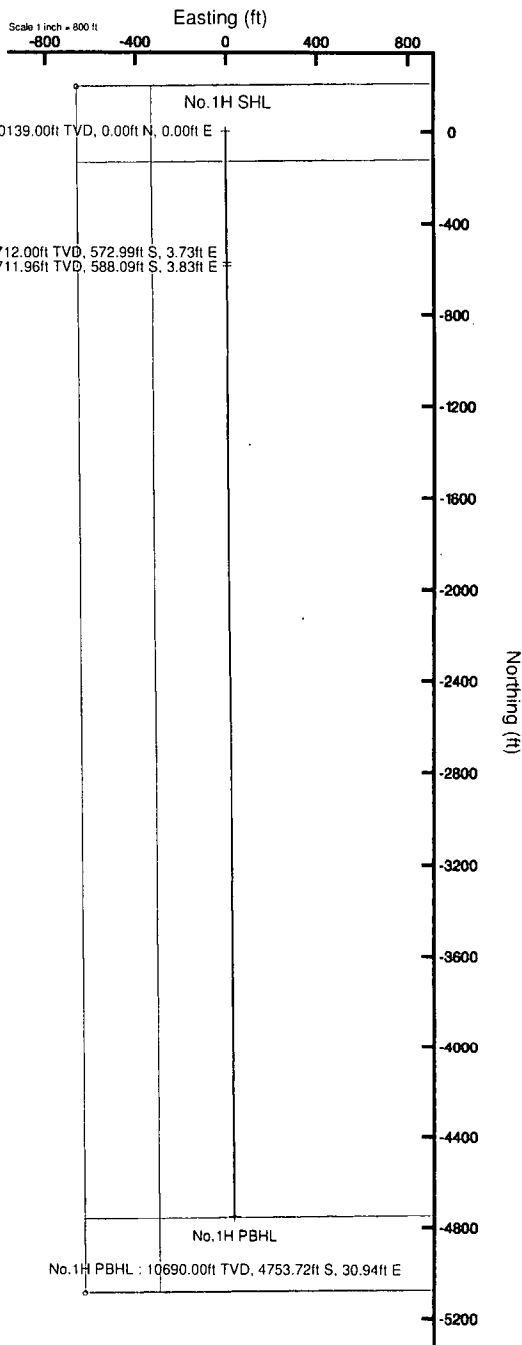
- a. Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 32 days. If production casing is run then an additional 30 days will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



Devon Energy

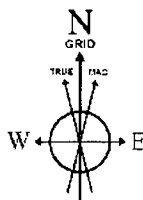
Location: Lea County, NM
Field: (Lippizzan) Sec 4, T25S, R32E
Facility: Lippizzan 4 Fed No.1H

Slot: No.1H SHL
Well: No.1H
Wellbore: No.1H PWB

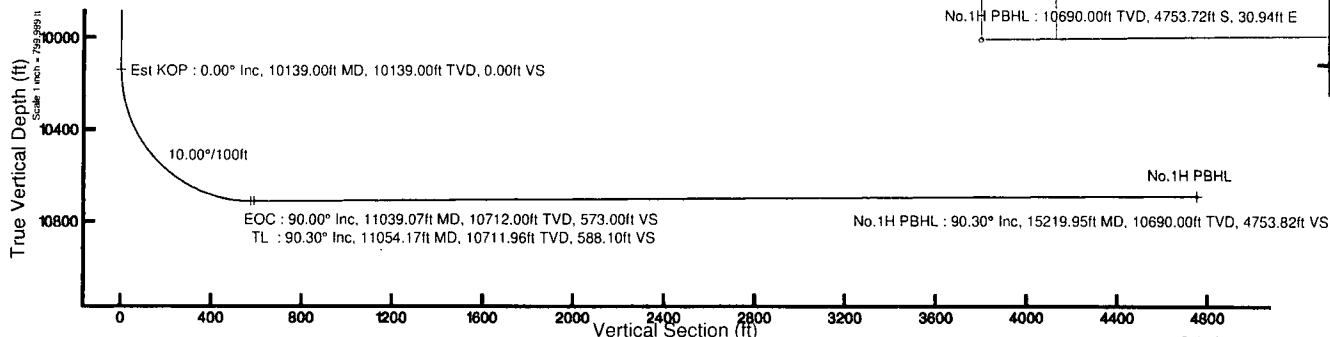


Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	28.00	0.000	179.627	28.00	0.00	0.00	0.00	0.00
Est KOP	10139.00	0.000	179.627	10139.00	0.00	0.00	0.00	0.00
EOC	11039.07	90.000	179.627	10712.00	-572.99	3.73	10.00	573.00
TL	11054.17	90.302	179.627	10711.96	-588.09	3.83	2.00	588.10
No.1H PBHL	15219.95	90.302	179.627	10690.00	-4753.72	30.94	0.00	4753.82

Plot reference wellpath is Rev-A.0	
True vertical depths are referenced to Rig on No.1H SHL (KB)	Grid System: NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No.1H SHL (KB)	North Reference: Grid north
Rig on No.1H SHL (KB) to Mean Sea Level: 3503.5 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: No.1H SHL): -3475.5 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: genbry on 11/14/2013



BGGM (1945.0 to 2015.0) Dip: 60.06° Field: 48326.8 nT
Magnetic North is 7.38 degrees East of True North (at 11/14/2013)
Grid North is 0.42 degrees East of True North
To correct azimuth from True to Grid subtract 0.42 degrees
To correct azimuth from Magnetic to Grid add 6.96 degrees



Azimuth 179.63° with reference 0.00 N, 0.00 E

Rev-A.0



Planned Wellpath Report

Rev-A.0
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REFERENCE WELLPATH IDENTIFICATION

Operator	Devon Energy	Slot	No.1H SHL
Area	Lea County, NM	Well	No.1H
Field	(Lippizzan) Sec 4, T25S, R32E	Wellbore	No.1H PWB
Facility	Lippizzan 4 Fed No.1H		

REPORT SETUP INFORMATION

Projection System	NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect® 4.0.1
North Reference	Grid	User	Gentbry
Scale	0.999976	Report Generated	11/14/2013 at 4:08:34 PM
Convergence at slot	0.42° East	Database/Source file	MidlandDB/No.1H_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	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W
Facility Reference Pt			741483.83	424778.32	32°09'55.532"N	103°33'10.606"W
Field Reference Pt			741483.83	424778.32	32°09'55.532"N	103°33'10.606"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No.1H SHL (KB) to Facility Vertical Datum	28.00ft
Horizontal Reference Pt	Slot	Rig on No.1H SHL (KB) to Mean Sea Level	3503.50ft
Vertical Reference Pt	Rig on No.1H SHL (KB)	Rig on No.1H SHL (KB) to Mud Line at Slot (No.1H SHL)	28.00ft
MD Reference Pt	Rig on No.1H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	179.63°



Planned Wellpath Report

Rev-A.0
Page 2 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	Devon Energy	Slot	No.1H SHL
Area	Lea County, NM	Well	No.1H
Field	(Lippizzan) Sec 4, T25S, R32E	Wellbore	No.1H PWB
Facility	Lippizzan 4 Fed No.1H		

WELLPATH DATA (167 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	179.627	0.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
28.00	0.000	179.627	28.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	Tie On
128.00†	0.000	179.627	128.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
228.00†	0.000	179.627	228.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
328.00†	0.000	179.627	328.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
428.00†	0.000	179.627	428.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
528.00†	0.000	179.627	528.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
599.00†	0.000	179.627	599.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	Rustler
628.00†	0.000	179.627	628.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
728.00†	0.000	179.627	728.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
828.00†	0.000	179.627	828.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
928.00†	0.000	179.627	928.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
994.00†	0.000	179.627	994.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	Top Salt
1028.00†	0.000	179.627	1028.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
1128.00†	0.000	179.627	1128.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
1228.00†	0.000	179.627	1228.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
1328.00†	0.000	179.627	1328.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
1428.00†	0.000	179.627	1428.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
1528.00†	0.000	179.627	1528.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
1628.00†	0.000	179.627	1628.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
1728.00†	0.000	179.627	1728.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
1828.00†	0.000	179.627	1828.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
1928.00†	0.000	179.627	1928.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
2028.00†	0.000	179.627	2028.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
2128.00†	0.000	179.627	2128.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
2228.00†	0.000	179.627	2228.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
2328.00†	0.000	179.627	2328.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
2428.00†	0.000	179.627	2428.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
2528.00†	0.000	179.627	2528.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
2628.00†	0.000	179.627	2628.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
2728.00†	0.000	179.627	2728.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
2800.00†	0.000	179.627	2800.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	Castille
2828.00†	0.000	179.627	2828.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
2928.00†	0.000	179.627	2928.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
3028.00†	0.000	179.627	3028.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
3128.00†	0.000	179.627	3128.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
3228.00†	0.000	179.627	3228.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
3328.00†	0.000	179.627	3328.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
3428.00†	0.000	179.627	3428.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
3528.00†	0.000	179.627	3528.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
3628.00†	0.000	179.627	3628.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
3728.00†	0.000	179.627	3728.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
3828.00†	0.000	179.627	3828.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
3928.00†	0.000	179.627	3928.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
4028.00†	0.000	179.627	4028.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	



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REFERENCE WELLPATH IDENTIFICATION

Operator	Devon Energy	Slot	No.1H SHL
Area	Lea County, NM	Well	No.1H
Field	(Lippizzan) Sec 4, T25S, R32E	Wellbore	No.1H PWB
Facility	Lippizzan 4 Fed No.1H		

WELLPATH DATA (167 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
4128.00†	0.000	179.627	4128.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
4228.00†	0.000	179.627	4228.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
4328.00†	0.000	179.627	4328.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
4407.00†	0.000	179.627	4407.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	Bell Canyon
4428.00†	0.000	179.627	4428.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
4528.00†	0.000	179.627	4528.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
4628.00†	0.000	179.627	4628.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
4728.00†	0.000	179.627	4728.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
4828.00†	0.000	179.627	4828.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
4928.00†	0.000	179.627	4928.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
5028.00†	0.000	179.627	5028.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
5128.00†	0.000	179.627	5128.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
5228.00†	0.000	179.627	5228.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
5296.00†	0.000	179.627	5296.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	Cherry Canyon
5328.00†	0.000	179.627	5328.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
5428.00†	0.000	179.627	5428.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
5528.00†	0.000	179.627	5528.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
5628.00†	0.000	179.627	5628.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
5728.00†	0.000	179.627	5728.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
5828.00†	0.000	179.627	5828.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
5928.00†	0.000	179.627	5928.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
6028.00†	0.000	179.627	6028.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
6128.00†	0.000	179.627	6128.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
6228.00†	0.000	179.627	6228.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
6328.00†	0.000	179.627	6328.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
6428.00†	0.000	179.627	6428.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
6528.00†	0.000	179.627	6528.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
6621.00†	0.000	179.627	6621.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	Bruhzy Canyon
6628.00†	0.000	179.627	6628.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
6728.00†	0.000	179.627	6728.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
6828.00†	0.000	179.627	6828.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
6928.00†	0.000	179.627	6928.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
7028.00†	0.000	179.627	7028.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
7128.00†	0.000	179.627	7128.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
7228.00†	0.000	179.627	7228.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
7328.00†	0.000	179.627	7328.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
7428.00†	0.000	179.627	7428.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
7528.00†	0.000	179.627	7528.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
7628.00†	0.000	179.627	7628.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
7728.00†	0.000	179.627	7728.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
7828.00†	0.000	179.627	7828.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
7928.00†	0.000	179.627	7928.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
8028.00†	0.000	179.627	8028.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
8128.00†	0.000	179.627	8128.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
8203.00†	0.000	179.627	8203.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	1st Bone Spring Lime



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REFERENCE WELLPATH IDENTIFICATION

Operator	Devon Energy	Slot	No.1H SHL
Area	Lea County, NM	Well	No.1H
Field	(Lippizzan) Sec 4, T25S, R32E	Wellbore	No.1H PWB
Facility	Lippizzan 4 Fed No.1H		

WELLPATH DATA (167 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
8228.00†	0.000	179.627	8228.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
8328.00†	0.000	179.627	8328.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
8428.00†	0.000	179.627	8428.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
8528.00†	0.000	179.627	8528.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
8628.00†	0.000	179.627	8628.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
8728.00†	0.000	179.627	8728.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
8828.00†	0.000	179.627	8828.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
8928.00†	0.000	179.627	8928.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
9028.00†	0.000	179.627	9028.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
9128.00†	0.000	179.627	9128.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
9228.00†	0.000	179.627	9228.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
9328.00†	0.000	179.627	9328.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
9334.00†	0.000	179.627	9334.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	1st Bone Spring Sand
9428.00†	0.000	179.627	9428.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
9528.00†	0.000	179.627	9528.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
9628.00†	0.000	179.627	9628.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
9711.00†	0.000	179.627	9711.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	2nd Bone Spring Lime
9728.00†	0.000	179.627	9728.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
9828.00†	0.000	179.627	9828.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
9890.00†	0.000	179.627	9890.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	2nd Bone Spring Sand
9928.00†	0.000	179.627	9928.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
10028.00†	0.000	179.627	10028.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
10128.00†	0.000	179.627	10128.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	
10139.00	0.000	179.627	10139.00	0.00	0.00	0.00	741483.83	424778.32	32°09'55.532"N	103°33'10.606"W	0.00	Est KOP
10228.00†	8.899	179.627	10227.64	6.90	-6.90	0.04	741483.87	424771.42	32°09'55.464"N	103°33'10.606"W	10.00	
10328.00†	18.899	179.627	10324.59	30.89	-30.89	0.20	741484.03	424747.43	32°09'55.227"N	103°33'10.606"W	10.00	
10428.00†	28.898	179.627	10415.90	71.35	-71.35	0.46	741484.29	424706.97	32°09'54.826"N	103°33'10.606"W	10.00	
10528.00†	38.897	179.627	10498.80	127.05	-127.05	0.83	741484.66	424651.28	32°09'54.275"N	103°33'10.607"W	10.00	
10628.00†	48.896	179.627	10570.77	196.30	-196.29	1.28	741485.11	424582.03	32°09'53.590"N	103°33'10.608"W	10.00	
10728.00†	58.896	179.627	10629.62	276.99	-276.98	1.80	741485.63	424501.34	32°09'52.791"N	103°33'10.608"W	10.00	
10828.00†	68.895	179.627	10673.56	366.67	-366.67	2.39	741486.22	424411.66	32°09'51.904"N	103°33'10.609"W	10.00	
10928.00†	78.894	179.627	10701.27	462.63	-462.62	3.01	741486.84	424315.71	32°09'50.954"N	103°33'10.610"W	10.00	
11028.00†	88.893	179.627	10711.89	561.93	-561.92	3.66	741487.49	424216.41	32°09'49.972"N	103°33'10.611"W	10.00	
11039.07	90.000	179.627	10712.00	573.00	-572.99	3.73	741487.56	424205.35	32°09'49.862"N	103°33'10.611"W	10.00	EOC
11054.17	90.302	179.627	10711.96	588.10	-588.09	3.83	741487.66	424190.25	32°09'49.713"N	103°33'10.611"W	2.00	TL
11128.00†	90.302	179.627	10711.57	661.93	-661.92	4.31	741488.14	424116.42	32°09'48.982"N	103°33'10.612"W	0.00	
11228.00†	90.302	179.627	10711.04	761.93	-761.92	4.96	741488.79	424016.42	32°09'47.993"N	103°33'10.612"W	0.00	
11328.00†	90.302	179.627	10710.52	861.93	-861.91	5.61	741489.44	423916.43	32°09'47.003"N	103°33'10.613"W	0.00	
11428.00†	90.302	179.627	10709.99	961.93	-961.91	6.26	741490.09	423816.44	32°09'46.014"N	103°33'10.614"W	0.00	
11528.00†	90.302	179.627	10709.46	1061.93	-1061.90	6.91	741490.74	423716.44	32°09'45.024"N	103°33'10.615"W	0.00	
11628.00†	90.302	179.627	10708.94	1161.93	-1161.90	7.56	741491.39	423616.45	32°09'44.035"N	103°33'10.616"W	0.00	
11728.00†	90.302	179.627	10708.41	1261.92	-1261.90	8.21	741492.04	423516.46	32°09'43.045"N	103°33'10.617"W	0.00	
11828.00†	90.302	179.627	10707.88	1361.92	-1361.89	8.86	741492.69	423416.46	32°09'42.055"N	103°33'10.618"W	0.00	
11928.00†	90.302	179.627	10707.35	1461.92	-1461.89	9.52	741493.35	423316.47	32°09'41.066"N	103°33'10.618"W	0.00	
12028.00†	90.302	179.627	10706.83	1561.92	-1561.89	10.17	741494.00	423216.47	32°09'40.076"N	103°33'10.619"W	0.00	



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REFERENCE WELLPATH IDENTIFICATION			
Operator	Devon Energy	Slot	No.1H SHL
Area	Lea County, NM	Well	No.1H
Field	(Lippizzan) Sec 4, T25S, R32E	Wellbore	No.1H PWB
Facility	Lippizzan 4 Fed No.1H		

WELLPATH DATA (167 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
12128.00†	90.302	179.627	10706.30	1661.92	-1661.88	10.82	741494.65	423116.48	32°09'39.087"N	103°33'10.620"W	0.00	
12228.00†	90.302	179.627	10705.77	1761.92	-1761.88	11.47	741495.30	423016.49	32°09'38.097"N	103°33'10.621"W	0.00	
12328.00†	90.302	179.627	10705.25	1861.92	-1861.88	12.12	741495.95	422916.49	32°09'37.108"N	103°33'10.622"W	0.00	
12428.00†	90.302	179.627	10704.72	1961.91	-1961.87	12.77	741496.60	422816.50	32°09'36.118"N	103°33'10.623"W	0.00	
12528.00†	90.302	179.627	10704.19	2061.91	-2061.87	13.42	741497.25	422716.50	32°09'35.129"N	103°33'10.624"W	0.00	
12628.00†	90.302	179.627	10703.66	2161.91	-2161.87	14.07	741497.90	422616.51	32°09'34.139"N	103°33'10.625"W	0.00	
12728.00†	90.302	179.627	10703.14	2261.91	-2261.86	14.72	741498.55	422516.52	32°09'33.150"N	103°33'10.625"W	0.00	
12828.00†	90.302	179.627	10702.61	2361.91	-2361.86	15.37	741499.20	422416.52	32°09'32.160"N	103°33'10.626"W	0.00	
12928.00†	90.302	179.627	10702.08	2461.91	-2461.86	16.02	741499.85	422316.53	32°09'31.170"N	103°33'10.627"W	0.00	
13028.00†	90.302	179.627	10701.56	2561.91	-2561.85	16.67	741500.50	422216.53	32°09'30.181"N	103°33'10.628"W	0.00	
13128.00†	90.302	179.627	10701.03	2661.90	-2661.85	17.33	741501.16	422116.54	32°09'29.191"N	103°33'10.629"W	0.00	
13228.00†	90.302	179.627	10700.50	2761.90	-2761.84	17.98	741501.81	422016.55	32°09'28.202"N	103°33'10.630"W	0.00	
13328.00†	90.302	179.627	10699.97	2861.90	-2861.84	18.63	741502.46	421916.55	32°09'27.212"N	103°33'10.631"W	0.00	
13428.00†	90.302	179.627	10699.45	2961.90	-2961.84	19.28	741503.11	421816.56	32°09'26.223"N	103°33'10.631"W	0.00	
13528.00†	90.302	179.627	10698.92	3061.90	-3061.83	19.93	741503.76	421716.57	32°09'25.233"N	103°33'10.632"W	0.00	
13628.00†	90.302	179.627	10698.39	3161.90	-3161.83	20.58	741504.41	421616.57	32°09'24.244"N	103°33'10.633"W	0.00	
13728.00†	90.302	179.627	10697.86	3261.90	-3261.83	21.23	741505.06	421516.58	32°09'23.254"N	103°33'10.634"W	0.00	
13828.00†	90.302	179.627	10697.34	3361.90	-3361.82	21.88	741505.71	421416.58	32°09'22.265"N	103°33'10.635"W	0.00	
13928.00†	90.302	179.627	10696.81	3461.89	-3461.82	22.53	741506.36	421316.59	32°09'21.275"N	103°33'10.636"W	0.00	
14028.00†	90.302	179.627	10696.28	3561.89	-3561.82	23.18	741507.01	421216.60	32°09'20.286"N	103°33'10.637"W	0.00	
14128.00†	90.302	179.627	10695.76	3661.89	-3661.81	23.83	741507.66	421116.60	32°09'19.296"N	103°33'10.637"W	0.00	
14228.00†	90.302	179.627	10695.23	3761.89	-3761.81	24.48	741508.31	421016.61	32°09'18.306"N	103°33'10.638"W	0.00	
14328.00†	90.302	179.627	10694.70	3861.89	-3861.81	25.14	741508.97	420916.61	32°09'17.317"N	103°33'10.639"W	0.00	
14428.00†	90.302	179.627	10694.17	3961.89	-3961.80	25.79	741509.62	420816.62	32°09'16.327"N	103°33'10.640"W	0.00	
14528.00†	90.302	179.627	10693.65	4061.89	-4061.80	26.44	741510.27	420716.63	32°09'15.338"N	103°33'10.641"W	0.00	
14628.00†	90.302	179.627	10693.12	4161.88	-4161.80	27.09	741510.92	420616.63	32°09'14.348"N	103°33'10.642"W	0.00	
14728.00†	90.302	179.627	10692.59	4261.88	-4261.79	27.74	741511.57	420516.64	32°09'13.359"N	103°33'10.643"W	0.00	
14828.00†	90.302	179.627	10692.07	4361.88	-4361.79	28.39	741512.22	420416.65	32°09'12.369"N	103°33'10.643"W	0.00	
14928.00†	90.302	179.627	10691.54	4461.88	-4461.79	29.04	741512.87	420316.65	32°09'11.380"N	103°33'10.644"W	0.00	
15028.00†	90.302	179.627	10691.01	4561.88	-4561.78	29.69	741513.52	420216.66	32°09'10.390"N	103°33'10.645"W	0.00	
15128.00†	90.302	179.627	10690.48	4661.88	-4661.78	30.34	741514.17	420116.66	32°09'09.401"N	103°33'10.646"W	0.00	
15219.95	90.302	179.627	10690.00†	4753.82	-4753.72	30.94	741514.77	420024.72	32°09'08.491"N	103°33'10.647"W	0.00	No.1H PBHL



Planned Wellpath Report

Rev-A.0
Page 6 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	Devon Energy	Slot	No.1H SHL
Area	Lea County, NM	Well	No.1H
Field	(Lippizzan) Sec 4, T25S, R32E	Wellbore	No.1H PWB
Facility	Lippizzan 4 Fed No.1H		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
1) No.1H PBHL	15219.95	10690.00	-4753.72	30.94	741514.77	420024.72	32°09'08.491"N	103°33'10.647"W	point

SURVEY PROGRAM - Ref Wellbore: No.1H PWB Ref Wellpath: Rev-A.0				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
28.00	15219.95	NaviTrak (Standard)		No.1H PWB

PLANNED WELLPATH REPORT (CSV version)

Prepared by Baker Hughes

Software System: WellArchitect® 4.0.1

REFERENCE WELLPATH IDENTIFICATION

Operator Devon Energy
 Area Lea County, NM
 Field (Lippizan) Sec 4, T25S, R32E
 Facility Lippizan 4 Fed No.1H
 Slot No.1H SHL
 Well No.1H
 Wellbore No.1H PWB
 Wellpath Rev-A.0
 Sidetrack (none)

REPORT SETUP INFORMATION

Projection NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet
 North Refe Grid
 Scale 0.999976
 Convergen 0.42° East
 Software S WellArchitect® 4.0.1
 User Gentbry
 Report Ger 11/14/2013 at 4:08:35 PM
 DataBase/ MidlandDB/ev12.xml

WELLPATH	Local North	Local East	Easting	Northing	Latitude	Longitude
	[ft]	[ft]	[US ft]	[US ft]		
Slot Locati	0	0	741483.8	424778.3	32°09'55.5"	103°33'10.606"W
Facility Ref			741483.8	424778.3	32°09'55.5"	103°33'10.606"W
Field Refer			741483.8	424778.3	32°09'55.5"	103°33'10.606"W

WELLPATH DATUM

Calculation Minimum curvature
 Horizontal Slot
 Vertical Re Rig on No.1H SHL (KB)
 MD Refere Rig on No.1H SHL (KB)
 Field Vertic Mean Sea Level
 Rig on No.128.00ft
 Rig on No.13503.50ft
 Rig on No.128.00ft
 Section Ori N 0.00, E 0.00 ft
 Section Azi 179.63°

WELLPATH DATA † = interpolated/extrapolated station

	MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	DLS	Comments
	[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]			[°/100ft]	
†	0	0	179.627	0	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
	28	0	179.627	28	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	Tie On
†	128	0	179.627	128	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
†	228	0	179.627	228	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
†	328	0	179.627	328	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
†	428	0	179.627	428	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
†	528	0	179.627	528	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
†	599	0	179.627	599	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	Rustler
†	628	0	179.627	628	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
†	728	0	179.627	728	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
†	828	0	179.627	828	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
†	928	0	179.627	928	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
†	994	0	179.627	994	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	Top Salt
†	1028	0	179.627	1028	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
†	1128	0	179.627	1128	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
†	1228	0	179.627	1228	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
†	1328	0	179.627	1328	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
†	1428	0	179.627	1428	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
†	1528	0	179.627	1528	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
†	1628	0	179.627	1628	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
†	1728	0	179.627	1728	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
†	1828	0	179.627	1828	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
†	1928	0	179.627	1928	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
†	2028	0	179.627	2028	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
†	2128	0	179.627	2128	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
†	2228	0	179.627	2228	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
†	2328	0	179.627	2328	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
†	2428	0	179.627	2428	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	
†	2528	0	179.627	2528	0	0	0	0 741483.8	424778.3	32°09'55.5"	103°33'10.606"	0	

[illegible]

†	9628	0	179.627	9628	0	0	0	741483.8	424778.3	32°09'55.5" 103°33'10.1"	0
†	9711	0	179.627	9711	0	0	0	741483.8	424778.3	32°09'55.5" 103°33'10.1"	0 2nd Bone Spring Lime
†	9728	0	179.627	9728	0	0	0	741483.8	424778.3	32°09'55.5" 103°33'10.1"	0
†	9828	0	179.627	9828	0	0	0	741483.8	424778.3	32°09'55.5" 103°33'10.1"	0
†	9890	0	179.627	9890	0	0	0	741483.8	424778.3	32°09'55.5" 103°33'10.1"	0 2nd Bone Spring Sand
†	9928	0	179.627	9928	0	0	0	741483.8	424778.3	32°09'55.5" 103°33'10.1"	0
†	10028	0	179.627	10028	0	0	0	741483.8	424778.3	32°09'55.5" 103°33'10.1"	0
†	10128	0	179.627	10128	0	0	0	741483.8	424778.3	32°09'55.5" 103°33'10.1"	0
†	10139	0	179.627	10139	0	0	0	741483.8	424778.3	32°09'55.5" 103°33'10.1"	0 Est KOP
†	10228	8.899	179.627	10227.64	6.9	-6.9	0.04	741483.9	424771.4	32°09'55.4" 103°33'10.1"	10
†	10328	18.899	179.627	10324.59	30.89	-30.89	0.2	741484	424747.4	32°09'55.2" 103°33'10.1"	10
†	10428	28.898	179.627	10415.9	71.35	-71.35	0.46	741484.3	424707	32°09'54.8" 103°33'10.1"	10
†	10528	38.897	179.627	10498.8	127.05	-127.05	0.83	741484.7	424651.3	32°09'54.2" 103°33'10.1"	10
†	10628	48.896	179.627	10570.77	196.3	-196.29	1.28	741485.1	424582	32°09'53.5" 103°33'10.1"	10
†	10728	58.896	179.627	10629.62	276.99	-276.98	1.8	741485.6	424501.3	32°09'52.7" 103°33'10.1"	10
†	10828	68.895	179.627	10673.56	366.67	-366.67	2.39	741486.2	424411.7	32°09'51.9" 103°33'10.1"	10
†	10928	78.894	179.627	10701.27	462.63	-462.62	3.01	741486.8	424315.7	32°09'50.9" 103°33'10.1"	10
†	11028	88.893	179.627	10711.89	561.93	-561.92	3.66	741487.5	424216.4	32°09'49.9" 103°33'10.1"	10
	11039.07	90	179.627	10712	573	-572.99	3.73	741487.6	424205.4	32°09'49.8" 103°33'10.1"	10 EOC
	11054.17	90.302	179.627	10711.96	588.1	-588.09	3.83	741487.7	424190.3	32°09'49.7" 103°33'10.1"	2 TL
†	11128	90.302	179.627	10711.57	661.93	-661.92	4.31	741488.1	424116.4	32°09'48.9" 103°33'10.1"	0
†	11228	90.302	179.627	10711.04	761.93	-761.92	4.96	741488.8	424016.4	32°09'47.9" 103°33'10.1"	0
†	11328	90.302	179.627	10710.52	861.93	-861.91	5.61	741489.4	423916.4	32°09'47.0" 103°33'10.1"	0
†	11428	90.302	179.627	10709.99	961.93	-961.91	6.26	741490.1	423816.4	32°09'46.0" 103°33'10.1"	0
†	11528	90.302	179.627	10709.46	1061.93	-1061.9	6.91	741490.7	423716.4	32°09'45.0" 103°33'10.1"	0
†	11628	90.302	179.627	10708.94	1161.93	-1161.9	7.56	741491.4	423616.5	32°09'44.0" 103°33'10.1"	0
†	11728	90.302	179.627	10708.41	1261.92	-1261.9	8.21	741492	423516.5	32°09'43.0" 103°33'10.1"	0
†	11828	90.302	179.627	10707.88	1361.92	-1361.89	8.86	741492.7	423416.5	32°09'42.0" 103°33'10.1"	0
†	11928	90.302	179.627	10707.35	1461.92	-1461.89	9.52	741493.4	423316.5	32°09'41.0" 103°33'10.1"	0
†	12028	90.302	179.627	10706.83	1561.92	-1561.89	10.17	741494	423216.5	32°09'40.0" 103°33'10.1"	0
†	12128	90.302	179.627	10706.3	1661.92	-1661.88	10.82	741494.7	423116.5	32°09'39.0" 103°33'10.1"	0
†	12228	90.302	179.627	10705.77	1761.92	-1761.88	11.47	741495.3	423016.5	32°09'38.0" 103°33'10.1"	0
†	12328	90.302	179.627	10705.25	1861.92	-1861.88	12.12	741496	422916.5	32°09'37.1" 103°33'10.1"	0
†	12428	90.302	179.627	10704.72	1961.91	-1961.87	12.77	741496.6	422816.5	32°09'36.1" 103°33'10.1"	0
†	12528	90.302	179.627	10704.19	2061.91	-2061.87	13.42	741497.3	422716.5	32°09'35.1" 103°33'10.1"	0
†	12628	90.302	179.627	10703.66	2161.91	-2161.87	14.07	741497.9	422616.5	32°09'34.1" 103°33'10.1"	0
†	12728	90.302	179.627	10703.14	2261.91	-2261.86	14.72	741498.6	422516.5	32°09'33.1" 103°33'10.1"	0
†	12828	90.302	179.627	10702.61	2361.91	-2361.86	15.37	741499.2	422416.5	32°09'32.1" 103°33'10.1"	0
†	12928	90.302	179.627	10702.08	2461.91	-2461.86	16.02	741499.9	422316.5	32°09'31.1" 103°33'10.1"	0
†	13028	90.302	179.627	10701.56	2561.91	-2561.85	16.67	741500.5	422216.5	32°09'30.1" 103°33'10.1"	0
†	13128	90.302	179.627	10701.03	2661.9	-2661.85	17.33	741501.2	422116.5	32°09'29.1" 103°33'10.1"	0
†	13228	90.302	179.627	10700.5	2761.9	-2761.84	17.98	741501.8	422016.6	32°09'28.2" 103°33'10.1"	0
†	13328	90.302	179.627	10699.97	2861.9	-2861.84	18.63	741502.5	421916.6	32°09'27.2" 103°33'10.1"	0
†	13428	90.302	179.627	10699.45	2961.9	-2961.84	19.28	741503.1	421816.6	32°09'26.2" 103°33'10.1"	0
†	13528	90.302	179.627	10698.92	3061.9	-3061.83	19.93	741503.8	421716.6	32°09'25.2" 103°33'10.1"	0
†	13628	90.302	179.627	10698.39	3161.9	-3161.83	20.58	741504.4	421616.6	32°09'24.2" 103°33'10.1"	0
†	13728	90.302	179.627	10697.86	3261.9	-3261.83	21.23	741505.1	421516.6	32°09'23.2" 103°33'10.1"	0
†	13828	90.302	179.627	10697.34	3361.9	-3361.82	21.88	741505.7	421416.6	32°09'22.2" 103°33'10.1"	0
†	13928	90.302	179.627	10696.81	3461.89	-3461.82	22.53	741506.4	421316.6	32°09'21.2" 103°33'10.1"	0
†	14028	90.302	179.627	10696.28	3561.89	-3561.82	23.18	741507	421216.6	32°09'20.2" 103°33'10.1"	0
†	14128	90.302	179.627	10695.76	3661.89	-3661.81	23.83	741507.7	421116.6	32°09'19.2" 103°33'10.1"	0
†	14228	90.302	179.627	10695.23	3761.89	-3761.81	24.48	741508.3	421016.6	32°09'18.3" 103°33'10.1"	0
†	14328	90.302	179.627	10694.7	3861.89	-3861.81	25.14	741509	420916.6	32°09'17.3" 103°33'10.1"	0
†	14428	90.302	179.627	10694.17	3961.89	-3961.8	25.79	741509.6	420816.6	32°09'16.3" 103°33'10.1"	0
†	14528	90.302	179.627	10693.65	4061.89	-4061.8	26.44	741510.3	420716.6	32°09'15.3" 103°33'10.1"	0
†	14628	90.302	179.627	10693.12	4161.88	-4161.8	27.09	741510.9	420616.6	32°09'14.3" 103°33'10.1"	0
†	14728	90.302	179.627	10692.59	4261.88	-4261.79	27.74	741511.6	420516.6	32°09'13.3" 103°33'10.1"	0
†	14828	90.302	179.627	10692.07	4361.88	-4361.79	28.39	741512.2	420416.7	32°09'12.3" 103°33'10.1"	0
†	14928	90.302	179.627	10691.54	4461.88	-4461.79	29.04	741512.9	420316.7	32°09'11.3" 103°33'10.1"	0
†	15028	90.302	179.627	10691.01	4561.88	-4561.78	29.69	741513.5	420216.7	32°09'10.3" 103°33'10.1"	0
†	15128	90.302	179.627	10690.48	4661.88	-4661.78	30.34	741514.2	420116.7	32°09'09.4" 103°33'10.1"	0
	15219.95	90.302	179.627	10690	4753.82	-4753.72	30.94	741514.8	420024.7	32°09'08.4" 103°33'10.1"	0 No.1H PBF 1

TARGETS

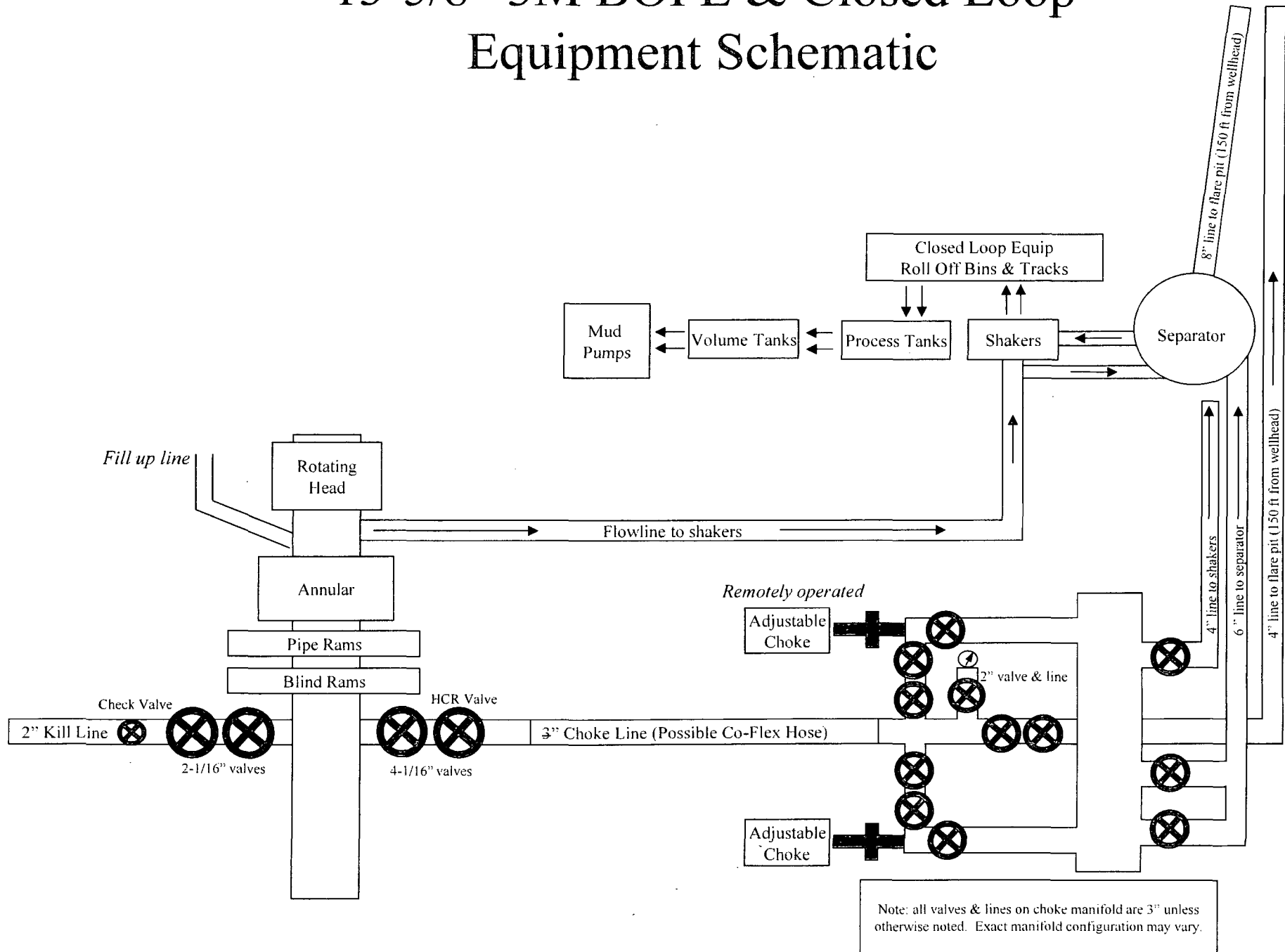
Name	MD	TVD	North	East	Grid East	Grid North	Latitude	Longitude	Shape	Comment
	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]				
(1) No.1H F	15219.95	10690	-4753.72	30.94	741514.8	420024.7	32°09'08.4" 103°33'10.1"	point		

SURVEY PROGRAM Ref Wellbore: No.1H PWB Ref Wellpath: Rev-A.0

Start MD End MD Pos Unc M Log Name/ Wellbore
[ft] [ft]

28 15219.95 NaviTrak (Standard) No.1H PWB

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



NOTES REGARDING BLOWOUT PREVENTERS

Devon Energy Production Company, L.P.
Lippizzan 4 Fed 1H

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 filings will be in operable condition to withstand a minimum of 3000 psi working pressure.
4. All fittings will be flanged.
5. A fill bore safety valve tested to a minimum of 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.

RIG 212



QUALITY DOCUMENT

PHOENIX RUBBER

INDUSTRIAL LTD.

6728 Szeged, Budapesti út 10, Hungary • H-6701 Szeged, P. O. Box 152
 Phone: (3662) 556-737 • Fax: (3662) 556-738

SALES & MARKETING: H-1092 Budapest, Ráday u. 42-44, Hungary • H-1440 Budapest, P. O. Box 26
 Phone: (361) 456-4200 • Fax: (361) 217-2972, 456-4273 • www.taurusemerge.hu

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE				CERT. N°: 552	
PURCHASER: Phoenix Beattie Co.				P.O. N°: 1519FA-871	
PHOENIX RUBBER order N°: 170466		HOSE TYPE: 3" ID Choke and Kill Hose			
HOSE SERIAL N°: 34128		NOMINAL / ACTUAL LENGTH: 11,43 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 4 1/16" Flange end	720 719		AISI 4130	C7626	
			AISI 4130	47357	
API Spec 16 C Temperature rate: "B"					
All metal parts are flawless					
WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.					
Date:	Inspector		Quality Control		
29. April. 2002.			PHOENIX RUBBER Industrial Ltd. Hose Inspection and VESSELS TRUE COMP PHOENIX RUBBER Q.C.		

40920-0-00015 N800C 14094-66

8	GNL	+0.000	PC	14.00		
	RDL	+0.000	PC	14.00		
	SL	+10.441	PC	14.00		
7	GNL	+0.000	PC	40	3.40	60
	RDL	+0.000	PC	40	3.40	60
	SL	+10.441	PC	40	3.40	60
6	GNL	+0.000	PC	13.20		
	RDL	+0.000	PC	13.20		
	SL	+10.530	PC	13.20		
5	GNL	+0.000	PC	3.00		
	RDL	+0.000	PC	3.00		
	SL	+10.556	PC	3.00		
4						
3						
2						

[Signature]
PHOENIX RUBBER
 Industrial Ltd.
 Hose Inspection and
 Certification Dept.

VERIFIED TRUE CO.
 PHOENIX RUBBER CO.



Fluid Technology

ContiTech Beattie Corp.
Website: www.contitechbeattie.com

Monday, June 14, 2010

RE: Drilling & Production Hoses
Lifting & Safety Equipment

To Helmerich & Payne,

A Continental ContiTech hose assembly can perform as intended and suitable for the application regardless of whether the hose is secured or unsecured in its configuration. As a manufacturer of High Pressure Hose Assemblies for use in Drilling & Production, we do offer the corresponding lifting and safety equipment, this has the added benefit of easing the lifting and handling of each hose assembly whilst affording hose longevity by ensuring correct handling methods and procedures as well as securing the hose in the unlikely event of a failure; but in no way does the lifting and safety equipment affect the performance of the hoses providing the hoses have been handled and installed correctly. It is good practice to use lifting & safety equipment but not mandatory.

Should you have any questions or require any additional information/clarifications then please do not hesitate to contact us.

ContiTech Beattie is part of the Continental AG Corporation and can offer the full support resources associated with a global organization.

Best regards,

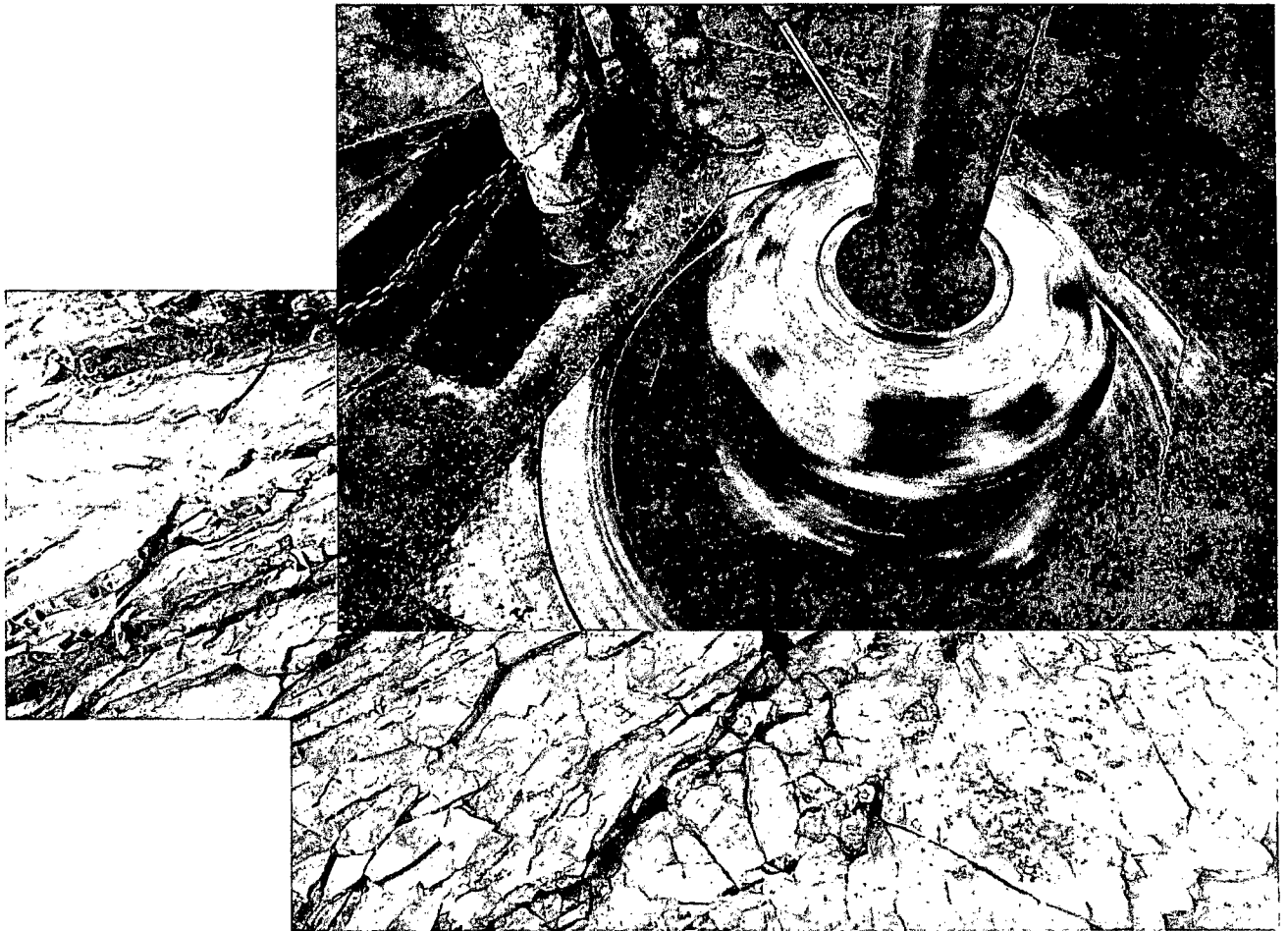
Robin Hodgson
Sales Manager
ContiTech Beattie Corp

ContiTech Beattie Corp,
11535 Brittmoore Park Drive,
Houston, TX 77041
Phone: +1 (832) 327-0141
Fax: +1 (832) 327-0148
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Commitment Runs Deep



Design Plan
Operation and Maintenance Plan
Closure Plan

SENM - Closed Loop Systems
June 2010

I. Design Plan

Devon uses MI SWACO closed loop system (CLS). The MI SWACO CLS is designed to maintain drill solids at or below 5%. The equipment is arranged to progressively remove solids from the largest to the smallest size. Drilling fluids can thus be reused and savings is realized on mud and disposal costs. Dewatering may be required with the centrifuges to insure removal of ultra fine solids.

The drilling location is constructed to allow storm water to flow to a central sump normally the cellar. This insures no contamination leaves the drilling pad in the event of a spill. Storm water is reused in the mud system or stored in a reserve fluid tank farm until it can be reused. All lubricants, oils, or chemicals are removed immediately from the ground to prevent the contamination of storm water. An oil trap is normally installed on the sump if an oil spill occurs during a storm.

A tank farm is utilized to store drilling fluids including fresh water and brine fluids. The tank farm is constructed on a 20 ml plastic lined, bermed pad to prevent the contamination of the drilling site during a spill. Fluids from other sites may be stored in these tanks for processing by the solids control equipment and reused in the mud system. At the end of the well the fluids are transported from the tank farm to an adjoining well or to the next well for the rig.

Prior to installing a closed-loop system on site, the topsoil, if present, will be stripped and stockpiled for use as the final cover or fill at the time of closure.

Signs will be posted on the fence surrounding the closed-loop system unless the closed-loop system is located on a site where there is an existing well, that is operated by Devon.

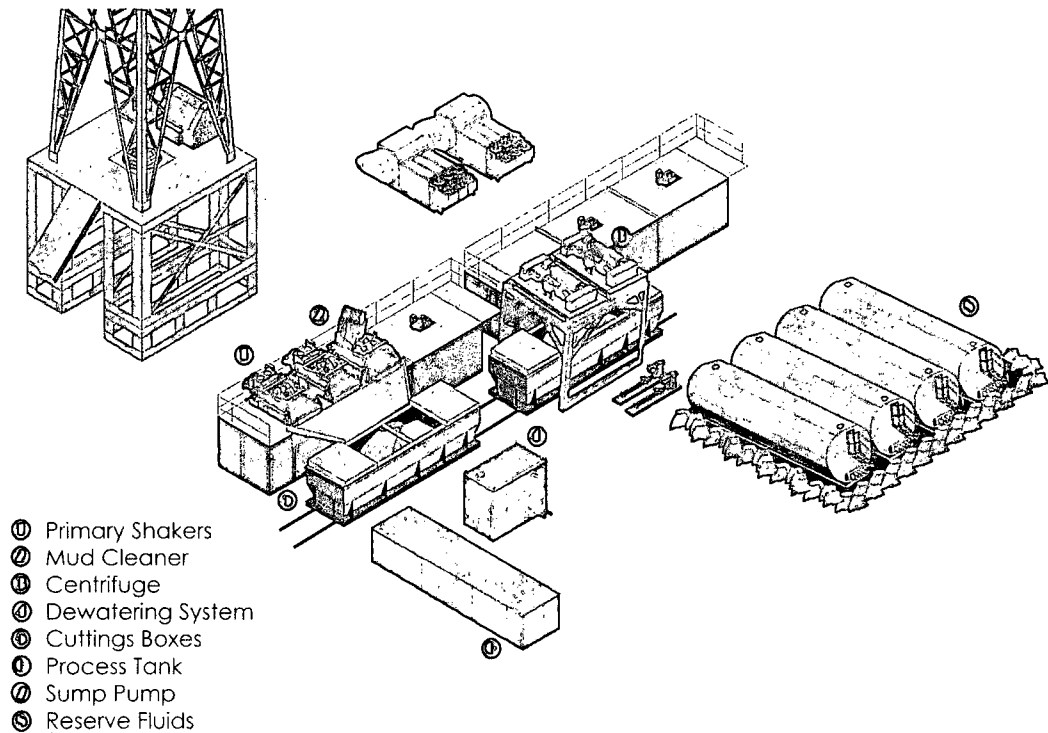
II. Operations and Maintenance Plan

Primary Shakers: The primary shakers make the first removal of drill solids from the drilling mud as it leaves the well bore. The shakers are sized to handle maximum drilling rate at optimal screen size. The shakers normally remove solids down to 74 microns.

Mud Cleaner: The Mud Cleaner cleans the fluid after it leaves the shakers. A set of hydrocyclones are sized to handle 1.25 to 1.5 times the maximum circulating rate. This ensures all the fluid is being processed to an average cut point of 25 microns. The wet discharged is dewatered on a shaker equipped with ultra fine mesh screens and generally cut at 40 microns.



Closed Loop Schematic



Centrifuges: The centrifuges can be one or two in number depending on the well geometry or depth of well. The centrifuges are sized to maintain low gravity solids at 5% or below. They may or may not need a dewatering system to enhance the removal rates. The centrifuges can make a cut point of 8-10 microns depending on bowl speed, feed rate, solids loading and other factors.

The centrifuge system is designed to work on the active system and be flexible to process incoming fluids from other locations. This set-up is also dependant on well factors.

Dewatering System: The dewatering system is a chemical mixing and dosing system designed to enhance the solids removal of the centrifuge. Not commonly used in shallow wells. It may contain pH adjustment, coagulant mixing and dosing, and polymer mixing and dosing. Chemical flocculation binds ultra fine solids into a mass that is within the centrifuge operating design. The

dewatering system improves the centrifuge cut point to infinity or allows for the return of clear water or brine fluid. This ability allows for the ultimate control of low gravity solids.

Cuttings Boxes: Cuttings boxes are utilized to capture drill solids that are discarded from the solids control equipment. These boxes are set upon a rail system that allows for the removal and replacement of a full box of cuttings with an empty one. They are equipped with a cover that insures no product is spilled into the environment during the transportation phase.

Process Tank: (Optional) The process tank allows for the holding and process of fluids that are being transferred into the mud system. Additionally, during times of lost circulation the process tank may hold active fluids that are removed for additional treatment. It can further be used as a mixing tank during well control conditions.

Sump and Sump Pump: The sump is used to collect storm water and the pump is used to transfer this fluid to the active system or to the tank for to hold in reserve. It can also be used to collect fluids that may escape during spills. The location contains drainage ditches that allow the location fluids to drain to the sump.

Reserve Fluids (Tank Farm): A series of frac tanks are used to replace the reserve pit. These are steel tanks that are equipped with a manifold system and a transfer pump. These tanks can contain any number of fluids used during the drilling process. These can include fresh water, cut brine, and saturated salt fluid. The fluid can be from the active well or reclaimed fluid from other locations. A 20 ml liner and berm system is employed to ensure the fluids do not migrate to the environment during a spill.

If a leak develops, the appropriate division district office will be notified within 48 hours of the discovery and the leak will be addressed. Spill prevention is accomplished by maintaining pump packing, hoses, and pipe fittings to insure no leaks are occurring. During an upset condition the source of the spill is isolated and repaired as soon as it is discovered. Free liquid is removed by a diaphragm pump and returned to the mud system. Loose topsoil may be used to stabilize the spill and the contaminated soil is excavated and placed in the cuttings boxes. After the well is finished and the rig has moved, the entire location is scrapped and testing will be performed to determine if a release has occurred.

All trash is kept in a wire mesh enclosure and removed to an approved landfill when full. All spent motor oils are kept in separate containers and they are removed and sent to an approved recycling center. Any spilled lubricants, pipe

dope, or regulated chemicals are removed from soil and sent to landfills approved for these products.

These operations are monitored by Mi Swaco service technicians. Daily logs are maintained to ensure optimal equipment operation and maintenance. Screen and chemical use is logged to maintain inventory control. Fluid properties are monitored and recorded and drilling mud volumes are accounted for in the mud storage farm. This data is kept for end of well review to insure performance goals are met. Lessons learned are logged and used to help with continuous improvement.

A MI SWACO field supervisor manages from 3-5 wells. They are responsible for training personnel, supervising installations, and inspecting sites for compliance of MI SWACO safety and operational policy.

III. Closure Plan

A maximum 340' X 340' caliche pad is built per well. All of the trucks and steel tanks fit on this pad. All fluid cuttings go to the steel tanks to be hauled by various trucking companies to an agency approved disposal.

H&P Flex Rig Location Layout

