Form 3160-3				1	FORM APPR	OVED
(August 2007)	UNITED ST	LATES	·		OMB No. 100 Expires July 31	4-0137 , 2010
	DEPARTMENT OF	THE INTERIOR	OCD Artesi	a 5. NM	Lease Serial No. NM-44594	BHL - NM 93
	APPLICATION FOR PERMIT	T TO DRILL OR	REENTER	. 6.	If Indian, Allotee or T	ribe Name <i>I</i> b
la. Type of work		REENTER	<u></u>	7.	If Unit or CA Agreeme	nt, Name and No.
lb. Type of Well	✓ Oil Well Gas Well Othe	er Sin	gle Zone 🔲 Multip	ele Zone 8. Aqu	Lease Name and Well uila 22 Fed Com 3H	No. 2 394
2. Name of Oper	ator Devon Energy Production, Com	pany L. P.	<6137		API Well No. 30-015-5	110.75
3a. Address 333 Okl	W. Sheridan ahoma City, OK 73102	3b. Phone No. 405-235-36	(include area code) 11	10. Lus	Field and Pool, or Expl sk; Bone Spring W.	
4. Location of W	ell (Report location clearly and in accordance	e with any State requireme	nts. *)	11.	Sec., T. R. M. or Blk.a	nd Survey or Area
At surface I	2080 FSL & 225 FEL			SE	C 22 T19S R31E	
At proposed p	rod. zone L 1980 FSL & 340 FWL				County or Parish	12 State
Approximately	es and direction from nearest town or post of 14 miles soustheast of Loco Hills, N	.tice* M.		Ed	dy	NM
15. Distance from location to near property or lea (Also to neares	proposed* 50' est 50' se line, ft. t drig. unit line, if any)	16. No. of ac 520 A	res in lease c + 120 = 640	17. Spacing Un 160	it dedicated to this well	
<ol> <li>Distance from p to nearest well, applied for, on</li> </ol>	roposed location* drilling, completed, this lease, ft.	D 19. Proposed TVD 9130	Depth MD 13,610'	20. BLM/BIA I CO-1104;NI	Bond No. on file MB 000801	
21. Elevations (SI 3542' GL	ow whether DF, KDB, RT, GL, etc.)	22. Approxin	nate date work will sta	rt* 23. 4	Estimated duration 5 days	
<ol> <li>Well plat certifie</li> <li>A Drilling Plan.</li> <li>A Surface Use SUPO must be</li> </ol>	d by a registered surveyor. Plan (if the location is on National Forest filed with the appropriate Forest Service Of	System Lands, the	<ol> <li>Bond to cover 1 Item 20 above).</li> <li>Operator certifi</li> <li>Such other site</li> </ol>	he operations un cation	nless covered by an exi	sting bond on file
25. Signature		Name	(Printed/Typed)			
Title Title	a Sarmer	Judy	A. Barnett		1	0/05/2012
Regulatory	Specialist		( <b>D</b> ) 1/2 1/2			
Approved by (Signa	/s/ Don Peterson	Name	(Printed Typed)			JAN 24
Title	FIELD MANAGER	Office	C	ARLSBAD F	IELD OFFICE	٦
Application approv conduct operations Conditions of appr	al does not warrant or certify that the appli thereon. oyal, if any, are attached.	cant holds legal or equit	able title to those rig	nts in the subject	lease which would entite FOR TWO Y	le the applicant to
Title 18 U.S.C. Sect States any false, fic	ion 1001 and Title 43 U.S.C. Section 1212, ma itious or fraudulent statements or represent	ike it a crime for any perations as to any matter w	erson knowingly and ithin its jurisdiction.	willfully to make	to any department or a	gency of the Unite
(Continued or	n page 2)		<u> </u>		*(Instrue	ctions on page
Capitan	Controlled Water Basin		Ap	proval Subje & Special	ect to General Rec Stipulations Atta	quirements ched
<b>-</b> \.	JAN 8 0 201 NMOCD ARTE	3 SIA	SEE A	ATTACH DITION	HED FOR	OVAL

<u>District 1</u> 1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> 1301 W. Grand Avenue, Artesia, NM 88210 <u>District III</u> 1000 Rio Brazos Rd., Aztee, NM 87410 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505

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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

		W	ELL LC	DCATIO	<u>N AND AC</u>	CREAGE DEDIC	CATION PLA	<u>.[</u>				
30-0	APT Number 15-5	11035	- 4	1480	5	LUSK; BONE SPRING W.						
<sup>4</sup> Property	Code				<sup>3</sup> Proper	rty Name		~	Well Number			
3941	14				AQUILA 22	2 FED COM			3H			
OGRID	No			tor Name			" Elevation					
6137		3542.0										
	<sup>10</sup> Surface Location											
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County			
I	22	19 S	31 E		2080	SOUTH	225	EAST	EDDY			
		·	" Bo	ttom Ho	le Location	If Different From	n Surface					
UL or lot no.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County			
L	22	19 S	31 E		1980	SOUTH	340	WEST	EDDY			
12 Dedicated Acres	s <sup>13</sup> Joint o	r Infill	onsolidation	Code Or	der No.		(	· · · · · · · · · · · · · · · · · · ·	set			
160									13610			

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.

		\$89'39'32"W	2658.98 F	T		S89139	00"W 2	641.2	5 57			17 OPERATOR CERTIFICATION
	NW CORNE	B SEC. 22	······································	N 0 COF	RHER SEC. C	3		NE :	CORNE	R SEC. 22		Thereby certify that the information contained herein is true and complete
	147. = 3	2.6531943'N		iAi, =	32.6532052	N		LAT.	= 32.	6532167%	1	n the best of my knowledge and belief, and that this organization either
	LONG. = 1	03.8657142W		LUNG. =	10,5.8571400	W	•	LONG.	= 100	9460063 9 101 (TT)		owns a working interest or unleased mineral interest in the land including
	NMSP EAST	(FT)		NMSP M -	EAST (F1) - BOURDE RZ				MMSF - M =	- 1AGE (F) - 801711-78		the proposed bottom hole location or has a right to drill this well at this
i S	0 = 50167   F = 63575	9.9.5 7.46		E	687896.37				£ =	690537.57	8	location pursuant to a contract with an invuer of such a mineral or working
12											.24	interest, or to a voluntary pooling agreement or a compulsory pooling order
1	·j										i.	herewfore energy by the division.
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								LONG.	- 10,	3.5433374 5. <b>5</b> .21 (m	74   m	Sumature Date
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11	LONG. = 10	03.8656908"W							5 8	990555 I	5	Judy A. Barnett Regulatory Specialist
	NMSP CAST	(FT)										SURVEYOR CERTIFICATION
1	N = 59909 F = 68527	0.17 8-29						0	SURFA	.CE		I have by a well logation shown on this place
	+	астом					-	L	OCAP	ON N		r nereny certify that the well inclution shown on this plat
	Lian'e	OF HOLE								-205 - <b>9</b> -	12	was plotted from field notes of actual surveys made by
3		POTTON O			A	QUILA 2.	2 FED 5151 -	COM . 35 !	3H 5 0'		ŏ	me or under my supervision and that the same is true
0.2		LAT = 32.64	41234'N		LAT.	= 32.64-	2027 14208 N	- Do4 ChiAE	283)		6	and correct to the best of my belief 2.
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### 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 \_October, 2012. Printed Name: Judy A. Barnett Signed Name: \_\_\_\_\_\_ 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 Aquila 22 Fed Com 3H

Surface Location: 2080' FSL & 225' FEL, Unit I, Sec 22 T19S R31E, Eddy, NM Bottom Hole Location: 1980' FSL & 340' FWL, Unit L, Sec 22 T19S R31E, Eddy, NM

### 1. Geologic Name of Surface Formation

a. Quaternary Alluvium

'n.

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

a.	Fresh Water	170'	
b.	Rustler	585'	Barren
c.	Salado	835'	Barren
d.	Tansil Dolomite	2240'	Barren
e.	Yates	2340'	Barren
f.	Seven Rivers	2560'	Barren
g.	Capitan	2675'	Barren
h.	B/Capitan	4100'	Barren
i.	Delaware	4540'	Oil
j.	Bone Spring	6955'	Oil
k.	1 <sup>st</sup> Bone Spring Ss	8265'	Oil
<b>l</b> .	2 <sup>nd</sup> Bone Spring Lime	8520'	Oil
m.	2 <sup>nd</sup> Bone Spring Ss	8995'	Oil
n.	2 <sup>nd</sup> Bone Spring Upr Ss	9035'	Oil
0.	2 <sup>nd</sup> Bone Sring Upr Ss Base	9115'	Oil
p.	2 <sup>nd</sup> Bone Spring Middle Ss	9130'	Oil
q.	2 <sup>nd</sup> Bone Spring Middle Ss Base	e 9205'	Oil
r.	3 <sup>rd</sup> Bone Spring Lm	9385'	Oil
To	otal Depth	13,610'	

### **Casing Program:** All casing is new and API approved

Hole	Hole	<b>OD</b> Csg	Casing	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>
Size	Interval		Interval			
26"	0 - 650'	20"	0'-650'	94#	BT&C	J/K-55
17 ½"	650-2500'	13 3/8"	0'-2500'	68#	BT&C	J/K-55
12 ¼".	2500-4300'	9 5/8"	0'-4300'	40#	LT&C	J-55
8 <sup>3</sup> ⁄4"	4300'-8300'	5 1/2"	0'-8300'	17#	LT&C	HCP110
8 ¾"	8300-13610	5 ½"	8300-13610'	17#	BT&C	HCP110

### **Design Parameter Factors:**

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<b>Casing Size</b>	<u>Collapse Design</u>	<b>Burst Design</b>	<u>Tension Design</u>
	<b>Factor</b>	<b>Factor</b>	<b>Factor</b>
20"	1.71	6.94	22.95
13 3/8"	1.67	2.95	6.71
9 5/8"	1.15	1.77	3.02
5 1/2"	2.14	2.65	1.92
5 1/2"	2.01	2.49	6.63

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

String	Slurry	Amount and Type of Cement
<u>Curr</u> <b>F</b> orm	Lead	800 sacks Class C Cement + 1% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 4% bwoc Bentonite + 81.1% Fresh Water, 13.5 ppg, 1.73 cf/sk
Surface	Tail	300 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 56.3% Fresh Water, 14.8 ppg, 1.35 cf/sk <b>(TOC: Surface)</b>
13 3/9" Intermediate	Lead	1340 sacks (60:40) Poz (Fly Ash):Class C Cement +5% bwow Sodium Chloride + 0.4% bwoc R-3 +0.125 Ibs/sack Cello Flake + 3 lbs/sack LCM-1 + 0.25% bwoc FL-52 + 1% bwoc Sodium Metasilicate+ 89.5% Fresh Water, 12.6 ppg, 1.74 cf/sk <b>(TOC: Surface)</b>
13-5/6 Intermediate	Tail	450 sacks (60:40) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.5% bwoc Sodium Metasilicate + 0.5% bwoc BA-10A + 4% bwoc MPA-5 + 65.3% Fresh Water, 13.8 ppg, 1.38 cf/sk
		1 <sup>st</sup> STAGE
	Lead	480 sacks (60:40) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.3% bwoc R-3 + 0.125 lbs/sack Cello Flake + 3 lbs/sack LCM-1 + 0.25% bwoc FL-52 + 1% bwoc Sodium Metasilicate + 89.6% Fresh Water, 12.6 ppg, 1.73 cf/sk
	Tail	300 sacks (60:40)Poz Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.4% bwoc Sodium Metasilicate + 4% bwoc MPA-5 + 65.2% Fresh Water, 13.8 ppg, 1.38 cf/sk
9-5/8" Intermediate		below 2 <sup>nd</sup> STAGE – DV tool and ECP at 2,600' (min 50' from 13 3/8" Shoe)
	Lead	450 sacks (60:40) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.3% bwoc R-3 + 0.125 Ibs/sack Cello Flake + 3 lbs/sack LCM-1 + 0.25% bwoc FL-52 + 1% bwoc Sodium Metasilicate + 89.6% Fresh Water, 12.6 ppg, 1.73 cf/sk (TOC: Surface)
	Tail	150 sacks (60:40)Poz Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.1% bwoc Sodium Metasilicate + 4% bwoc MPA-5 + 65.2% Water, 13.8 ppg, 1.38 cf/sk
		1 <sup>st</sup> STAGE
	Lead	660 sacks (35:65) Poz (Fly Ash):Class H Cement + 3% bwow Sodium Chloride + 0.2% bwoc R-3 + 0.125 Ibs/sack Cello Flake + 0.7% bwoc FL-52 + 0.3% bwoc ASA-301 + 6% bwoc Bentonite + 105.5% Fresh Water, 12.5 ppg, 2.01 cf/sk
Production	Tail	1365 sacks (50:50) Poz (Fly Ash):Class H Cement + 5% bwow Sodium Chloride + 0.3% bwoc CD-32 + 0.5% bwoc FL-25 + 0.5% bwoc FL-52 + 0.25% bwoc Sodium Metasilicate + 57.2% Fresh Water, 14.2 ppg, 1.28 cf/sk
		2 <sup>nd</sup> STAGE – DV tool at 5,500'
	Lead	400 sacks Class C Cement + 1% bwoc R-3 + 0.125 lbs/sack Cello Flake + 0.3% bwoc FL-52 + 3% bwoc Sodium Metasilicate + 157% Fresh Water, 11.4 ppg, 2.88 cf/sk <b>TOC: 2000'</b> (675' above reef top)
	Tail	150 sacks (60:40) Poz (Fly Ash):Class C Cement + 1% bwow Sodium Chloride + 0.2% bwoc R-3 + 0.125 Ibs/sack Cello Flake + 0.5% bwoc BA-10A + 4% bwoc MPA-5 + 63.2% Fresh Water, 13.8 ppg, 1.38 cf/sk

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### **Pressure Control Equipment**

BOP DESIGN: The BOP system used to drill the 17-1/2" hole will consist of a 20" 2M Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a 2M system prior to drilling out the surface casing shoe.

The BOP system used to drill the 12-1/4" and 8-3/4" holes will consist of a 13-5/8" 3M Triple 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 each of the previous casing shoes. All tests will be in accordance with BLM Onshore Oil and Gas Order No. 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). The line will be kept as straight as possible with minimal turns.

### **Proposed Mud Circulation System**

-				
Depth	Mud Wt.	Visc	Fluid Loss	<b>Type System</b>
0 - 650'	8.4-9.0	28-34	NC	FW
650-2500'	9.8-10	28-32	NC	Brine
2500-4300'	8.4-9.0	28-32	NC	FW
4300-13,610'	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.

### 4. 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 20" 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.

#### Logging, Coring, and Testing Program: See COA 5.

- 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. Compensated Neutron with Gamma Ray
  - ii. Total Depth to Surface
  - 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.

#### **Potential Hazards:** 6.

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 140°. No H2S is anticipated to be encountered.

#### 7. **Anticipated Starting Date and Duration of Operations:**

Road and location construction will begin after the BLM has approved the APD. Anticipated a. 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.



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A Schlumberger Company

# Devon Energy, Inc.

Eddy County (NAD83) Aquila 22 Fed Com #3H OH

Plan: Plan #1

# A Pathfinder X&Y Report

02 October, 2012





PATHEIN	DER		Pathfi	inder		
A Schlumberger C	ompany		Pathfinder X	(&Y Report		devon
Company: Project: Site: Wellbore: Design:	Devon Energy, Irr Eddy County (NA Aquila 22 Fed Co 13H DH Plan #1	ిస్ . రాజ్ రాష్ కాయంలో 16. 1083) m 2011: మర్గియ్ కాయంలోకాము		Local Co-ordinate, TVD Reference: MD Reference North Reference Survey Calculation Database:	Reference: Well #3H KB = 26'@ 3568.0ustt (H KB = 26'@ 3568.0ustt (H KB = 26'@ 3568.0ustt (H Grid Minimum Curvature EDM 5000.1 Single User	l&P300)  &P300) 
Project Map System: Geo Datum: Map Zone:	US State Plan North America New Mexico I	County (NAD83) ne 1983 an Datum 1983 Eastern Zone		System Datum:	Mean Sea Level	a a and the second of the
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Page 2

COMPASS 5000.1 Build 56

Pathyinde	ER Pathfinder									
A Schlumberger Compa	ny			Pathinde	er X&Y Report				aev	on
Company:     Devon       Project:     Eddy C       Site:     Aquila       Well:     #3H       Wellbore:     OH       Design:     Plan #1	Energy, Inc. ounty (NAD83) 22 Fed Com				Loc: T/D MD Nori Suñ Data	al Co-ordinate Refe Reference: th Reference: rey Calculation Me base:	rrence: Well KB KB Grid thod: Mini EDN	#3H = 26' @ 3568.0usft (I = 26' @ 3568.0usft (I = 26' @ 3568.0usft (I mum Curvature 1 5000.1 Single Use	H&P300) H&P300) r Db	۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲. ۲
Survey Tool Program From (usft) 0.0 8,567.0	To, (usft) Survey (We 8,567.0 Plan #1 (Of 13,610.2 Plan #1 (Of	ilibore) H) H)	Tre N M	ool Name S-GYRO-MS WD	Description North sensing gyre MWD - Standard	ocompassing m/s				
Planned Survey	داد اف به مد <del>رمیشد. در</del> مهردچچه مارد م	ا مینانومان بنام تا بیم میسان از ا بیا پایوند از این اما مود ا می ارزوا	nationalis su process a generalis consistent s a		a i na sina na sina na si n	a ana ana ana ana ana ana ana ana ana a	an an marana an ar a'	م المحد الم محمد المحارك . الم الم الما المحمد المحارك .	and and a second se	and in the second of the secon
MD. (usft)	Inc +, Azi (a	azimuth) .(°)	TVD (usft)	TVDSS ((usft)	N/S E/ (usft) (us	W V.	Sec 0 Isft) (*/1	Leg )Ousft)	titude L (°)	ongitude (°)
0.0	0.00	0.00	0.0	-3,568.0	0.0	0.0	0.0	0.00	32.64	-103.85
100.0	0.00	0.00	100.0	-3,468.0	0.0	0.0	0.0	0.00	32.64	-103.85
200.0	0.00	0.00	200.0	-3,368.0	0.0	0.0	0.0	0.00	32.64	-103.85
300.0	0.00	0.00	300.0	-3,268.0	0.0	0.0	0.0	0.00	32.64	-103.85
400.0	0.00	0.00	400.0	-3,168.0	0.0	0.0	0.0	0.00	32.64	-103.85
500.0	0.00	0.00	500.0	-3,068.0	0.0	0.0	0.0	0.00	32.64	-103.85
600.0	0.00	0.00	600.0	-2,968.0	0.0	0.0	0.0	0.00	32.64	-103.85
700.0	0.00	0.00	700.0	-2,868.0	0.0	0.0	0.0	0.00	32.64	-103.85
800.0	0.00	0.00	800.0	-2,768.0	0.0	0.0	0.0	0.00	32.64	-103.85
900.0	0.00	0.00	900.0	-2,668.0	0.0	0.0	0.0	0.00	32.64	-103.85
1,000.0	0.00	0.00	1,000.0	-2,568.0	0.0	0.0	0.0	0.00	32.64	-103.85
1,100.0	0.00	0.00	1,100.0	-2,468.0	0.0	0.0	0.0	0.00	32.64	-103.85
1,200.0	0.00	0.00	1,200.0	-2,368.0	0.0	0.0	0.0	0.00	32.64	-103.85
1,300.0	0.00	0.00	1,300.0	-2,268.0	0.0	0.0	0.0	0.00	32.64	-103.85
1,400.0	0.00	0.00	1,400.0	-2,168.0	0.0	0.0	0.0	0.00	32.64	-103.85
1,500.0	0.00	0.00	1,500.0	-2,068.0	0.0	0.0	0.0	0.00	32.64	-103.85
1,600.0	0.00	0.00	1,600.0	-1,968.0	0.0	0.0	0.0	. 0.00	32.64	-103.85
1,700.0	0.00	0.00	1,700.0	-1,868.0	0.0	0.0	0.0	0.00	32.64	-103.85
1,800.0	0.00	0.00	1,800.0	-1,768.0	0,0	0.0	0.0	0.00	32.64	-103.85
1,900.0	0.00	0.00	1,900.0	-1,668.0	0.0	0.0	0.0	0.00	32.64	-103.85
2,000.0	0.00	0.00	2,000.0	-1,568.0	0.0	0.0	0.0	0.00	32.64	-103.85

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COMPASS 5000.1 Build 56

PATHY	INDE	R			Pat	hfinder			60003 6000 6000000 7000000 7000000			
A Schlumberg	er Comoa	ny			Pathfinde	er X&Y Report				dev	on	
Company Project Site Well Wellbore Design	Devon E Eddy Ci Aquila 2 #3H OH Ptan #1	Energy, Inc. ounly (NAD83) 22 Fed Com	Lander Barrott Fra			, Li M M S S	ocal Co-ordinate Ref VD Reference D Reference orth Reference Urvey Calculation M atabase	erence: Wel KB KB thod: Min ED	II #3H = 26' @ 3568.0usft   = 26' @ 3568.0usft   d imum Curvature M 5000.1 Single Use	(H&P300) (H&P300) er Db		
Planned Surve MD (usft) 4	Y	Inc. ()	azimuth)	.TVD (usft)	TVDSS (usft)	N/S (usft)	E/W usft)	Sec.	DLeg 00usft), a 4	atitude (î)	ongitude.	
2,1	00.0	0.00	0.00	2,100.0	-1.468.0	0.0	0.0	0.0	0.00	32.64	-103.85	
2,2	200.0	0.00	0.00	2,200.0	-1,368.0	0.0	0.0	0.0	0.00	32.64	-103.85	
2,3	100.0 100.0	0.00	0.00 0.00	2,300.0 2,400.0	-1,268.0 -1,168.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00 0.00	32.64 32.64	-103.85 -103.85	
2,5	600.0	0.00	0.00	2,500.0	-1,068.0	0.0	0.0	0.0	0.00	32.64	-103.85	
2,6	00.0	0.00	0.00	2,600.0	-968.0	0.0	0.0	0.0	0.00	32.64	-103.85	
2,7	00.0	0.00	0.00	2,700.0	-868.0	0.0	0.0	0.0	0.00	32.64	-103.85	
2,8	300.0	0.00	0.00	2,800.0	-768.0	. 0.0	0.0	0.0	0.00	32.64	-103.85	
2,9	0.006	0.00	0.00	2,900.0	-668.0	0.0	0.0	0.0	0.00	32.64	-103.85	
3,0	0.00	0.00	0.00	3,000.0	-568.0	0.0	0.0	0.0	0.00	32.64	-103.85	
3,1	100.0	0.00	0.00	3,100.0	-468.0	0.0	0.0	0.0	0.00	32.64	-103.85	
3,2	200.0	0.00	0.00	3,200.0	-368.0	0.0	0.0	0.0	0.00	32.64	-103.85	
3,3	300.0	0.00	0.00	3,300.0	-268.0	0.0	0.0	0.0	0.00	32.64	-103.85	
3.4	400.0	0.00	0.00	3,400.0	-168.0	0.0	0.0	0.0	0.00	32.64	-103.85	
3.5	500.0	0.00	0.00	3,500.0	-68.0	0.0	0.0	0.0	0.00	32.64	-103.85	
3,6	500.0	0.00	0.00	3,600.0	32.0	0.0	0.0	0.0	0.00	32.64	-103.85	
3,7	700.0	0.00	0.00	3,700.0	132.0	0.0	0.0	0.0	0.00	32.64	-103.85	
3,8	800.0	0.00	0.00	3,800.0	232.0	0.0	0.0	0.0	0.00	32.64	-103.85	
3,9	900.0	0.00	0.00	3,900.0	332.0	0.0	0.0	0.0	0.00	32.64	-103.85	
4,0	000.0	0.00	0.00	4,000.0	432.0	0.0	0.0	0.0	0.00	32.64	-103.85	
4.	100.0	0.00	0,00	4,100,0	532.0	0.0	0.0	0.0	0.00	32.64	-103.85	
4.:	200.0	0.00	0.00	4,200.0	632.0	0.0	0.0	0.0	0.00	32.64	-103,85	
4,5	300.0	0.00	0.00	4,300.0	732.0	0.0	0.0	0.0	0.00	32.64	-103.85	
4,4	400.0	0.00	0.00	4,400.0	832.0	0.0	0.0	0.0	0.00	32.64	-103.85	
4,	500.0	0.00	0.00	4,500.0	932.0	0.0	0.0	0.0	0.00	32.64	-103.85	
4,6	600.0	0.00	0.00	4,600.0	1,032.0	0.0	0.0	0.0	0.00	32.64	-103.85	
4,	700.0	0.00	0.00	4,700.0	1,132.0	0.0	0.0	0.0	0.00	32.64	-103.85	
10/2/2012 2:32	:31 <i>PM</i>				Page 4					COMPASS	5000.1 Build 56	

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COMPASS 5000.1 Build 56

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PAT	THIVINDER	R			Path	finder				-	
A Sebi					Pathfinder	X&Y Report				dev	on
Comp Projec Site: Well: Well: Desig	aniy: Eddy Con Eddy Con Aquila 22 #3H OH n: Plan #1	y nergy, Inc. Jinty (NAD83) : Fed Com				Lo TV ME Su Da	cal Co-ordinate Refe D Reference: Reference: th Reference: vey Calculation Me tabase:	rence Well KB KB Grid Inód	#3H = 26' @ 3568.0usft ( = 26' @ 3568.0usft ( i mum Curvature & 5000.1 Single Use	H&P300) H&P300)	
Plann	ed Survey MD (usft)	Inc Azi (	(azimuth)	TVD (usft)	TVDSS (usft)	v/S	/W V	Sec	Leg Dousft)	atitude	ongitude
والمعطمة والروا	4,800.0		0.00	4,800.0	1,232.0	0.0	8 - 19 - 19 - 19 - 19 - 19 - 19 - 19 - 1	,0.0 0.0	0.00	32.64	-103.85
	4,900.0	0.00	0.00	4,900.0	1,332.0	0.0	0.0	0.0	0.00	32.64	-103.85
	5,000,0	0.00	0.00	5,000.0	1,432.0	0.0	0.0	0.0	0.00	32.64	-103.85
	5,100.0	0.00	0.00	5,100.0	1,532.0	0.0	0.0	0.0	0.00	32.64	-103.85
	5,200.0	0.00	0.00	5,200.0	1,632.0	0.0	0.0	0.0	0.00	32.64	-103.85
	5,300.0	0.00	0.00	5,300.0	1,732.0	0.0	0.0	0.0	0.00	32.64	-103.85
	5,400.0	0.00	0.00	5,400.0	1,832.0	0.0	0.0	0.0	0.00	32.64	-103.85
	5,500.0	0.00	0.00	5,500.0	1,932.0	0.0	0.0	0.0	0.00	32.64	-103.85
	5,600.0	0.00	0.00	5,600.0	2,032.0	0.0	0.0	0.0	0.00	32.64	-103.85
	5,700.0	0.00	0.00	5,700.0	2,132.0	0.0	0.0	0.0	0.00	32.64	-103.85
	5,800.0	0.00	0.00	5,800.0	2,232.0	0.0	0.0	0.0	0.00	32.64	-103.85
1	5,900.0	0.00	0.00	5,900.0	2,332.0	0.0	0.0	0.0	0.00	32.64	-103.85
	6,000.0	0.00	0.00	6,000.0	2,432.0	0.0	0.0	0.0	0.00	32.64	-103.85
	6,100.0	0.00	0.00	6,100.0	2,532.0	0.0	0.0	0.0	0.00	32.64	-103.85
	6,200.0	. 0.00	0.00	6,200.0	2,632.0	0.0	0.0	0.0	0.00	32.64	-103.85
	6,300.0	0.00	0.00	6,300.0	2,732.0	0.0	0.0	0.0	0.00	32.64	-103.85
	6.400.0	0.00	0.00	6,400.0	2,832.0	0.0	0.0	0.0	0.00	32.64	-103.85
	6,500.0	0.00	0.00	6,500.0	2,932.0	0.0	0.0	0.0	0.00	32.64	-103.85
	6,600.0	0.00	0.00	6,600.0	3,032.0	0.0	0.0	0.0	0.00	32.64	-103.85
	6,700.0	0.00	0.00	6,700.0	3,132.0	0.0	0.0	0.0	0.00	32.64	-103.85
1	6,800.0	0.00	0.00	6,800.0	3,232.0	0.0	0.0	0.0	0.00	32.64	-103.85
	6,900.0	0.00	0.00	6,900.0	3,332.0	0.0	0.0	0.0	0.00	32.64	-103.85
	7,000.0	0.00	0.00	7,000.0	3,432.0	0.0	0.0	0.0	0.00	32.64	-103.85
	7,100.0	0.00	0.00	7,100.0	3,532.0	0.0	0.0	0.0	0.00	32.64	-103.85
	7,200.0	0.00	0.00	7,200.0	3,632.0	0.0	0.0	0.0	0.00	32.64	-103.85
	7,300.0	0.00	0.00	7,300.0	3,732.0	0.0	0.0	0.0	0.00	32.64	-103.85
	7,400.0	0.00	0.00	7,400.0	3,832.0	0.0	0.0	0.0	0.00	32.64	-103.85

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COMPASS 5000.1 Build 56

### PATHCINDER A Schlumberger Company

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### Pathfinder

#### Pathfinder X&Y Report



Company: Project: Site: Well Wellbore: Design:	Devor Eddy Aquila #3H OH Plan	n Energy, Inc. County (NAD83) a 22 Fed Com					Local Co-ordinate TVD.Reference MD.Reference North Reference Survey Calculation Database	Reference Ki Ki Method	ell #3H 3 = 26' @ 3568.0ust 3 = 26' @ 3568.0ust rid inimum Curvature DM 5000.1 Single U	t (H&P300) t (H&P300) ser Db	
Planned Su MD (usfi	irvey	.inc Az	i (azimuth)	TVD- (usft)	TVDSS ((usft))	N/S (úsft)	E/W (usft)	V Sec (usft)	DLeg (100usft)	Latitude	Longitudes ()
	7,500.0	0.00	0.00	7,500.0	3,932.0	0.0	0.0,	0,0	0.00	32.64	-103.85
	7,600.0	0.00	0.00	7,600.0	4,032.0	0.0	0.0	0.0	0,00	32.64	-103.85
	7,700.0	0.00	0.00	7,700.0	4,132.0	0.0	0.0	0.0	0:00	32.64	-103.85
	7,800.0	0.00	0.00	7,800.0	4,232.0	0.0	0.0	0.0	0.00	32.64	-103.85
	7,900.0	0.00	0.00	7,900.0	4,332.0	0.0	0.0	0.0	0.00	32.64	-103.85
	8,000.0	0.00	0.00	8,000.0	4,432.0	0.0	0.0	0.0	0:00	32.64	-103.85
	8,100.0	0,00	0.00	8,100.0	4,532.0	0.0	0.0	0.0	0.00	32.64	-103,85
	8,200.0	0.00	0.00	8,200.0	4,632.0	0.0	0.0	0.0	0.00	32.64	-103.85
	8,300.0	0.00	0.00	8,300.0	4,732.0	0.0	0.0	0.0	0.00	32.64	-103.85
	8,400.0	0.00	0.00	8,400.0	4,832.0	0.0	0.0	0.0	0.00	32.64	-103.85
	8,500:0	0.00	0.00	8,500.0	4,932.0	0.0	0.0	0.0	0.00	32.64	-103.85
	8,567.0	0.00	0.00	8,567.0	4,999.0	0.0	0.0	0.0	0.00	32.64	-103.85
	8,600.0	3.30	268.43	8,600.0	5,032.0	0.0	-0.9	1.0	10.00	32.64	-103.85
	8,650.0	8.30	268.43	8,649.7	5,081.7	-0.2	-6.0	6.0	10.00	32.64	-103.85
	8,700.0	13.30	268.43	8,698.8	5,130.8	-0.4	-15.4	15.4	10.00	32.64	-103.85
	8,750.0	18.30	268.43	8,746,9	5,178.9	-0.8	~29.0	29.0	10.00	32.64	-103.85
	8,800.0	23.30	268.43	8,793.6	5,225.6	-1.3	-46.7	46.7	10.00	32.64	-103.85
	8,850.0	28,30	268.43	8,838.6	5,270.6	-1.9	-68.5	68.5	10.00	32.64	-103.85
	8,900.0	33.30	268.43	8,881.6	5,313.6	-2.6	-94.0	94.1	10.00	32.64	-103.85
	8,950.0	38.30	268.43	8,922.1	5,354.1	-3.4	-123.3	123.3	10.00	32.64	-103.85
	9,000.0	43.30	268.43	8,959.9	5,391.9	-4.3	-155.9	156.0	10.00	32.64	-103.85
	9,050.0	48.30	268.43	8,994.8	5,426.8	-5.3	-191.7	191.8	10.00	32.64	-103.85
	9,100.0	53,30	268.43	9,026.4	5,458.4	-6.3	-230.5	. 230.5	10.00	32.64	-103.85
	9,150.0	58.30	268.43	9,054.5	5,486.5	-7.5	-271.8	271.9	10.00	32.64	-103.85
	9.200.0	63.30	268.43	9,078.9	5,510.9	-8.7	-315.4	315.5	10.00	32.64	-103.85
	9,250.0	68.30	268.43	9,099.4	5.531.4	-9.9	-361.0	361.1	10.00	32.64	-103.85
	9,300.0	73.30	268.43	9,115.8	5,547.8	-11.2	-408.2	408.3	10.00	32.64	-103.85
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COMPASS 5000.1 Build 56

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# Pathyinder

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#### Pathfinder Pathfinder X&Y Report



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Company: V Devon Energy, Inc.	Local Co-ordinate Reference:	kriga Well #3H
Project: Eddy County (NAD83)	TVD Reference: 1	KB = 26' @ 3568.0usft (H&P300)
Site: Site: Aquila 22 Fed Com	MD Reference:	KB = 26' @ 3568.0usft (H&P300)
Wen #3H	North Reference	Grid
		Manineum Cuntaturo
wellbore: CH	Survey Calculation Method:	N Standing Conversion
Design: Plan #1	Database:	🕯 🖋 EDM 5000.1 Single User Db 👘 🦉
and the standard and share still all of the standard respective respective respective respective respective standard	We have the mark of the Statistics of the first of the first of the set of the set	לא היים ענהיים ער ישראב אברכיב ארביים, איז ישראל איז
Sand B. Harris and State and State and State and States and S	CP - a '	the way the answer was a second of the second state of the
Planed Survey	. In the second s	and the second
	TUDOC THE AND THE TRUE TO A THE AND A THE	a data Di agituda a bi es l'atitudate à cal angituda à
MD, S. S. W. Luc William Wall as M. M. A.	TADOOLA SU SUADO AND TA CANADA SU CANADA SU CA OBCANA	a service of the serv
(usft) ((usft)) (()) (()) (() (()) (()) (()) (()) (	usft) (usft) (usft)	(?/100usft) #****(*) ****(*) *********************
(usft) (()	(usft) (usft) (usft) (usft)	【 本 (*/100üśft) (* - そ、 張 ・ (*)、 美 ・ (*)、 (3)、 * (3)、 * (3)、 * * *

(usft)	(°), •	(?)	(usf	) (us	ft):	usf	t) <sub>11</sub> (usft	(*/100usfi	) <i>f</i> = (°) .	(?)	
9,	350.0	78.30	268.43	9,128.1	5,560.1	-12.5	-456.6	456.8	10.00	32.64	-103.85
9.4	400.0	83.30	268.43	9,136.0	5,568.0	-13.9	-505.9	506.1	10.00	32.64	-103.85
9,4	450.0	88.30	268.43	9,139.7	5,571.7	-15.2	-555.8	556.0	10.00	32.64	-103.85
9.	468.4	90.14	268.43	9,140.0	5,572.0	-15.8	-574.1	574.3	10.00	32.64	-103.85
9,	500.0	90.14	268.43	9,139.9	5,571.9	-16.6	-605.7	606.0	0.00	32.64	-103.85
9,	600.0	90.14	268.43	9,139.6	5,571.6	-19.4	-705.7	706.0	0.00	32.64	-103.85
9,	700.0	90.14	268.43	9,139.4	5,571.4	-22.1	-805.7	806.0	0.00	32.64	-103.85
9,	800.0	90.14	268.43	9,139.2	5,571.2	-24.8	-905.6	906.0	0.00	32.64	-103.85
9,	900.0	90.14	268.43	9,138.9	5,570.9	-27.6	-1,005.6	1,006.0	0.00	32.64	-103.85
10,	000.0	90.14	268.43	9,138.7	5,570.7	-30.3	-1,105.5	1,106.0	0.00	32.64	-103.85
10,	100.0	90.14	268.43	9,138.4	5,570.4	-33.1	-1,205.5	1,206.0	0.00	32.64	-103.85
10,	200.0	90.14	268.43	9,138.2	5,570.2	-35.8	-1,305.5	1,306.0	0.00	32.64	-103.85
10,	300.0	90.14	268.43	9,138.0	5,570,0	-38.6	-1,405.4	1,406.0	0.00	32.64	-103.85
10,	400.0	90.14	268.43	9,137.7	5.569.7	-41.3	-1,505.4	1,506.0	0.00	32.64	-103.85
10.	500.0	90.14	268.43	9,137.5	5,569.5	-44.0	-1,605.4	1,606.0	0.00	32.64	-103.85
10,	600.0	90.14	268.43	9,137.2	5,569.2	-46.8	-1,705.3	1,706.0	0.00	32.64	-103.85
10,	700.0	90.14	268.43	9,137.0	5,569.0	-49.5	-1,805.3	1,806.0	0.00	32.64	-103.86
10,	.800.0	90.14	268.43	9,136.8	5,568.8	-52.3	-1,905.2	1,906.0	0.00	32,64	-103.86
10.	.900.0	90.14	268.43	9,136.5	5,568.5	-55.0	-2,005.2	2,006.0	0.00	32.64	-103.86
11,	,000.0	90.14	268.43	9,136.3	5,568.3	-57,8	-2,105.2	2,106.0	0.00	32.64	-103.86
11.	.100.0	90.14	268.43	9,136.0	5,568.0	-60.5	-2,205.1	2,206.0	0.00	32.64	-103.86
11	,200.0	90.14	268.43	9,135.8	5,567.8	-63.2	-2,305.1	2,306.0	0.00	32.64	-103.86
11	,300.0	90.14	268,43	9,135.6	5,567.6	-66.0	-2,405.0	2,406.0	0.00	32.64	-103.86
11	,400.0	90.14	268.43	9,135.3	5,567.3	-68.7	-2,505.0	2,506.0	0.00	32.64	-103.86
11	,500.0	90.14	268.43	9,135.1	5,567.1	-71.5	-2,605.0	2,606.0	0.00	32.64	-103.86
11	,600.0	90.14	268.43	9,134.8	5,566.8	-74.2	-2,704.9	2,706.0	0.00	32.64	-103,86
11	,700.0	90.14	268.43	9,134.6	5,566.6	-77.0	-2,804.9	2,806.0	0.00	32.64	-103.86
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COMPASS 5000.1 Build 56

Pathyinde	Patl Pathfinde	h <b>finder</b> r X&Y Report				dov				
A Schlumberger Comp	any								aev	OIL
Company: Devon Project Eddy C Site: Aquila Well Wellbore: OH Design: OH Plan #	Energy, Inc. County (NAD83) 22 Fed Com	n elemente de la company				Local Co-ordinate R TVD Reference: MDiReference: North Reference Survey Calculation Database:	eference: We KB KB Grin Min Min ED	II #3H = 26' @ 3568.0usft I = 26' @ 3568.0usft I d imum Curvature M 5000.1 Single Use	(H&P300) (H&P300) ar Db	
Planned Survey MD (usft)	Inc	(azimuth)	TVD (ust)	TVDSS (usft)	N/S (usft)	E/W (usit))	V: Sec) (usft)	DLeg	atitude ()	ongitude
11,000.0	90.14	208.43	9,134.4	5,566.4	-79.7	-2,904.9	2,906.0	0.00	32.64	-103.86
11,900.0	90.14	268.43	9,134.1	5,566.1	-82.4	-3,004.8	3.006.0	0.00	32.64	-103.86
12,000.0	90.14	268.43	9,133.9	5,565.9	-85.2	-3,104.8	3,106.0	0.00	32.64	-103.86
12,100.0	90.14	268.43	9,133.6	5,565.6	-87.9	-3,204.7	3,206.0	0.00	32.64	-103.86
12,200.0	90.14	268.43	9,133.4	5,565.4	-90.7	-3,304.7	3,305.9	0.00	32.64	-103.86
12,300.0	90.14	268.43	9,133.1	5,565.1	-93.4	-3,404.7	3,405.9	0.00	32.64	-103.86
12,400.0	90.14	268.43	9,132.9	5,564.9	-96.2	-3,504.6	3,505.9	0.00	32.64	-103.86
12,500.0	90.14	268.43	9,132.7	5,564.7	-98.9	-3,604.6	3,605.9	0.00	32.64	-103.86
12,600.0	90.14	268.43	9,132.4	5,564.4	-101.6	-3,704.6	3,705.9	0.00	32.64	-103.86
12,700.0	90.14	268.43	9,132.2	5,564.2	-104,4	-3,804.5	3,805.9	0.00	32.64	-103.86
12,800.0	90.14	268.43	9,131.9	5,563.9	-107.1	-3,904.5	3,905.9	0.00	32,64	-103.86
12,900.0	90.14	268.43	9,131.7	5,563.7	-109.9	-4,004.4	4,005.9	0.00	32.64	-103.86
13,000.0	90.14	268.43	9,131.5	5,563.5	-112.6	-4,104.4	4,105.9	0.00	32.64	-103.86
13,100.0	90.14	268.43	9,131.2	5,563.2	-115.4	-4,204.4	4,205.9	0.00	32.64	-103.86
13,200.0	90.14	268.43	9,131.0	5,563.0	-118.1	~4,304.3	4,305.9	0.00	32.64	-103.86
13,300.0	90.14	268.43	9,130.7	5,562.7	-120.8	-4,404.3	4,405.9	0.00	32.64	-103.86
13,400.0	90,14	268.43	9,130.5	5,562.5	-123.6	-4.504.3	4.505.9	0.00	32.64	-103.86
13,500.0	90.14	268.43	9,130.3	5,562.3	-126.3	-4.604.2	4,605.9	0.00	32.64	-103.86
13,600.0	90,14	268.43	9,130.0	5,562.0	-129.1	-4,704.2	4,705.9	0.00	32.64	-103.86
13,610.2	90.14	268.43	9,130.0	5,562.0	-129.3	-4,714.4	4,716.2	0.00	32.64	-103.86
Checked By:			•	Approved By:				Date:		

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COMPASS 5000.1 Build 56

# H&P Flex Rig Location Layout 2 Well Pad

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### NOTES REGARDING BLOWOUT PREVENTERS Devon Energy Production Company, LP Aquila 22 Fed Com 3H

Surface Location: 2080' FSL & 225' FEL, Unit I, Sec 22 T19S R31E, Eddy, NM Bottom Hole Location: 1980' FSL & 340' FWL, Unit L, Sec 22 T19S R31E, Eddy, NM

- 1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.
- 2. Wear ring will be properly installed in head.
- 3. Blowout preventer and all associated fittings will be in operable condition to withstand a minimum 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.



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### Ontinental & continech

Fluid Technology

ConfiTech Beattié Corp. Website: <u>www.contitechbeattie.com</u>

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 safely equipment, this has the added benefit of easing the lifting and handling of each hose assembly whilst affording hose longevity by ensuing 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.

Contillech 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 Beattle Corp

ContiTech Beattle Corp, 13535 Britimoore Park Drive, Houston, TX 77041 Phone: +1 (S32) 327-0141 Fax: +1 (S32) 327-0148 www.contriechineartie.com



# Hydrostatic Test Certificate

(Onl	Înea	níal	16
-13	COM		ECH

Certificate Number: 452	0 PBC No:	10321		Customer.	Name & Add RILLING CO	ress
Customer Purchase Order N	1437 SOUTH BOULDER TULSA, OK 74119					
Project:		· · ·				•
Test Centre Address	Accept	d by Conti Tech E	eattle inspection	Accepted by	Client Insp	cuon
11535 Brittmoore Park Drive Houston, TX 77041	Signed:	USAN GINIS	A.			,
USA	Date:	10/27/10				• • •••••
We certily that the goods detailed her	eon have been inspecte standards within the re	d by our Quality Manage quirements of the purch	ment System, and to the ase order as issued to Co	a best of our knowledge are found ontiTech Beattle Corporation,	i lo conform to re	ISVANI INDUSINAI
	رور میں	These goods were made	In the United States of /	America.		
Part No.		Description		Cinty Sonal Length	(m) Pross	Test Test (minutes)
1 3" ID	10K Choke & Kill Hose	x 35ft OAL		1 49106	10 kpsi	15 kpsi 60
End / End	A: 4.1/16" 10Kpsl API S B: 4.1/16" 10Kpsl API S	pec 6A Type 6BX Flang pec 6A Type 6BX Flang :	•			r.
Test Seria	Pressure: 15,000psi Il#: 49106					
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Page 1 of 1





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

# Hydrogen Sulfide (H<sub>2</sub>S) Contingency Plan

# For

# Aquila "22" FED COM 3H

Sec-22, T-19S R-31E 2080' FSL & 225' FEL, LAT. = 32.6444208'N (NAD83) LONG = 103.8492630'W

**Eddy County NM** 

Devon Energy Corp. Cont Plan. Page 1

# Aquila "22" FED COM 3H

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.



#### Escape

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated from the location entrance road, West then Northwest 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<sub>2</sub>S concentration shall trigger activation of this plan.

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### **Emergency Procedures**

In the event of a release of gas containing H<sub>2</sub>S, 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<sub>2</sub>S 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
  - $\circ$  Detection of H<sub>2</sub>S, 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<sub>2</sub>). 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

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H₂S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO <sub>2</sub>	2.21 Air = 1	2 ppm	N/A	1000 ppm

### Characteristics of H<sub>2</sub>S and SO<sub>2</sub>

### **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)

### I. HYDROGEN SULFIDE (H<sub>2</sub>S) 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<sub>2</sub>S 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<sub>2</sub>S detection and monitoring equipment:

 A. Portable H<sub>2</sub>S monitors positioned on location for best coverage and response. These unites have warning lights and audible sirens when H<sub>2</sub>S levels of 20 PPM are reached. These units are usually capable of detecting SO<sub>2</sub>, which is a byproduct of burning H<sub>2</sub>S.

### 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<sub>2</sub>S trim.
- B. All elastomers used for packing and seals shall be H<sub>2</sub>S 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<sub>2</sub>S 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)	<u>Cellular</u>	<u>Office</u>	Home
Foreman – Robert Bell			746-2991
Asst. Foreman –Tommy Po	olly.748-5290		748-2846
Don Mayberry	748-5235		746-4945
Montral Walker	390-5182		936-414-6246
Engineer – Marcos Ortiz	(405) 317-0666	(405) 552-8152	(405) 381-4350

# **Agency Call List**

Lea	Hobbs		
<u>County</u>	State Police		392-5588
(575)	City Police		397-9265
	Sheriff's Office		393-2515
	Ambulance		911
	Fire Department		397-9308
	LEPC (Local Emergency P	lanning Committee)	393-2870
	NMOCD		393-6161
	US Bureau of Land Manag	ement	393-3612
<u>Eddy</u>	Carlsbad		
<u>County</u>	State Police		885-3137
<u>(575)</u>	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 Man	agement	887-6544
	New Mexico Emergency	Response Commission (Santa Fe).	(505)476-9600
	24 HR	•	(505) 827-9126
	National Emergency Res	sponse Center (Washington, DC)	(800) 424-8802

# **Emergency Services**

	Boots & Coots IWC		931-8884
	Cudd Pressure Control	(915) 699-0139 or (915)	563-3356
•	Halliburton		
	B. J. Services	(575) 746-3569	
Give	Flight For Life - Lubbock	, TX(806) 7	43-9911
GPS	Aerocare - Lubbock, TX		47-8923
position:	Med Flight Air Amb - All	buquerque, NM(575) 8	42-4433
-	Lifeguard Air Med Svc	Albuquerque, NM(575) 2	272-3115

Prepared in conjunction with Wade Rohloff





Devon Energy Corp. Cont Plan. Page 8



# PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	DEVON ÈNERGY
LEASE NO :	NM92767
WELL NAME & NO :	3H-AQUILA 22 FEDERAL COM
SURFACE HOLE FOOTAGE:	2080'/S. & 225'/E.
BOTTOM HOLE FOOTAGE	1980'/S. & 340'/W.
LOCATION:	Section 22, T. 19 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.

