			Δ	N 15	5-420	
OCD Hobbs	SIDENT	HOBB	5/40%	EN 9 EN 1.		
Form 3160-3 (March 2012)		JUN 2	0 2016	FORM AP OMB No. 1 Expires Octol	PROVED 004-0137 per 31, 2014	
UNITED STATE Department of the Bureau of Land Ma	ES INTERIOR	REC	EIVE	5. Lease Serial No. NMLC0063798		
APPLICATION FOR PERMIT TO	DRILL OF	REENTER		6. If Indian, Allotee or	Tribe Name	
la. Type of work: 🗸 DRILL 📃 REEN	TER			7. If Unit or CA Agreeme	ent, Name and No.	
h Type of Well Oil Well Gas Well Other	<b>S</b> isi	ngle Zone 🔲 Multir	ale Zone	8. Lease Name and Wel	1 No. 31594	
2. Name of Operator Devon Energy Production Company,	L.P. 613	7)	JIC LONG	9. API Well No.	133175	
3a. Address 333 W. Sheridan Avenue	3b. Phone No 405,552,76	). (include area code) 848		10. Field and Pool, or Exp	loratory	
Location of Well (Report location clearly and in accordance with	any State requiren	nonts *)		11 Sec. T.R.M. or Blk	and Survey or Area	
At surface 225 FNL & 1450 FWL, Unit C	PP: 800 FN	NL & 1932 FWL	0000	SHL: Sec 14, T24S, BHL: Sec 23, T24S,	R33E R33E	
<ol> <li>At proposed prod. Zone 330 FSL &amp; 1450 FWL, Unit N</li> <li>4. Distance in miles and direction from nearest town or post office*</li> <li>Approximately 26 miles NW of Jal. NM</li> </ol>		LOCAT	MON	12: County or Parish LEA	13. State	
5. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of a <b>2,480 ac</b>	acres in lease	17. Spacin 320 ac	g Unit dedicated to this well		
B. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed TVD: 11,2	9. Proposed Depth         20. BLM/BIA Bond           VD: 11,207'; MD: 20,962'         CO-1104; NMB				
Elevations (Show whether DF, KDB, RT, GL, etc.) 3,599.7' GL	22. Approxim	mate date work will star 8	rt*	23. Estimated duration 45 Days		
	24. Atta	chments		line in		
e following, completed in accordance with the requirements of Onsh	hore Oil and Gas	Order No.1, must be at	ttached to thi	s form:		
<ul> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office).</li> </ul>	m Lands, the	<ol> <li>Bond to cover the ltem 20 above).</li> <li>Operator certification.</li> <li>Such other site and BLM</li> </ol>	he operation cation specific info	ns unless covered by an exi	sting bond on file (see	
5. Signature ()	Name David	(Printed/Typed) H. Cook		Da O	te 3/08/2016	
tle						
Regulatory Compliance Protessional	Name	(Printed/Typed)		Ds	te	
James A. Amos	Ivanie	(Trunea Typea)		0.	JUN 17 2016	
FIELD MANAGER	Office		CAR	LSBAD FIELD OFFIC	E	
pplication approval does not warrant or certify that the applicant ho induct operations thereon. onditions of approval, if any,	olds legal or equi	table title to those right	ts in the sub	APPROVAL I	le the applicant to	
itle 18 U.S.C. Section 1001 and ates any false, fictitious or fra	/IOCD proval	owingly and w jurisdiction.	villfully to m	ake to any department or a	gency of the United	
Continued on page 2)		KE	11	*(Instruc	ctions on page 2)	
Carlsbad Controlled Water Basin		0612	0110	Kr.		
		SEE ATTA	CHE	D FOR		
			on a	ADDDOU	T	

Approval Subject to General Requirements & Special Stipulations Attached

CONDITIONS OF APPROVAL

## 1. Geologic Formations

TVD of target	11,207'	Pilot hole depth	N/A
MD at TD:	20,962'	Deepest expected fresh water:	90'

## Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Rustler	1,290	Fresh Water	
Top of Salt	1,770		
Delaware	5,190	Oil/Gas	
Cherry Canyon	6,060	Oil/Gas	
Brushy Canyon	7,640	Oil/Gas	
Bone Spring	9,070	Oil/Gas	
2 <sup>nd</sup> Bone Spring	10,640	Oil/Gas	

\*H2S, water flows, loss of circulation, abnormal pressures, etc.

Hole	Casin	g Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF
Size	From	То	Size	(lbs)			Collapse	Burst	Tension
17.5"	0	1,315 1400'	13.375"	48	H40	BTC	1.22	2.75	8.57
10.05?	0	4,300'	9.625"	40	J55	BTC	1.15	1.77	4.15
12.25	4,300'	5,150'	9.625"	40	HCK55	BTC	1.58	1.47	4.50
Option #	#1								
8.75"	0	20,962'	5.5"	17	HCP110	BTC	1.60	1.98	2.13
Option #	<i>‡</i> 2								
8.75"	0	10,584'	7"	29	HCP110	BTC	1.82	2.22	3.11
8.75"	10,584'	20,962'	5.5"	17	HCP110	BTC	1.60	1.98	6.52
				BLI	M Minimun	n Safety	1.125	1	1.6 Dry
						Factor			1.8 Wet

## 2. Casing Program

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Must have table for contingency casing

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	Ser Specific
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	1 1 5 1 5
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

## 3. Cementing Program

See

	Casing	# Sks	Wt. lb/ gal	H <sub>2</sub> 0 gal/sk	Yld ft3/ sack	500# Comp. Strength (hours)	Slurry Description
	13-3/8" Surface	620	12.9	9.81	1.85	14	Lead: (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 Ibs/sack Poly-E-Flake
		550	14.8	6.32	1.33	6	Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake
	9-5/8" Inter.	1080	12.9	9.81	1.85	14	Lead: (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 Ibs/sack Poly-E-Flake
		430	14.8	6.32	1.33	6	Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake
See	5-1/2"	540	10.9	20.6	3.31	24	Lead: (50:40:10) Class C: Silicalite: Enhancer 923 + 10% BWOC Bentonite + 0.05% BWOC SA-1015 + 0.3% BWOC HR-800 + 0.2% BWOC FE-2 + 0.125 lb/sk Pol-E- Flake + 0.5 lb/sk D-Air 5000
	PTOU	2720	14.5	5.31	1.2	25	Tail: (50:50) Class H Cement: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% BWOC HR-601 + 2% bwoc Bentonite
		520	10.9	20.6	3.31	24	1 <sup>st</sup> Stage Lead: (50:40:10) Class C: Silicalite: Enhancer 923 + 10% BWOC Bentonite + 0.05% BWOC SA-1015 + 0.3% BWOC HR-800 + 0.2% BWOC FE-2 + 0.125 lb/sk Pol-E-Flake + 0.5 lb/sk D-Air 5000
See	5-1/2" Prod	2720	14.5	5.31	1.2	25	1 <sup>st</sup> Stage Tail: (50:50) Class H Cement: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% BWOC HR-601 + 2% bwoc Bentonite
	Two					DV	/ Tool = 5200ft
	Stage	20	10.9	20.6	3.31	24	2 <sup>nd</sup> Stage Lead: (50:40:10) Class C: Silicalite: Enhancer 923 + 10% BWOC Bentonite + 0.05% BWOC SA-1015 + 0.3% BWOC HR-800 + 0.2% BWOC FE-2 + 0.125 lb/sk Pol-E-Flake + 0.5 lb/sk D-Air 5000
		30	14.8	6.32	1.33	6	2 <sup>nd</sup> Stage Tail: Class C Cement + 0.125 lbs/sack Poly-E- Flake
	7 x 5-	330	9	13.5	3.27	21	Lead: Tuned Light <sup>®</sup> Cement
	1/2" Prod	2720	14.5	5.31	1.2	25	Tail: (50:50) Class H Cement: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% BWOC HR-601 + 2% bwoc Bentonite
		320	9	13.5	3.27	21	1 <sup>st</sup> Stage Lead: Tuned Light <sup>®</sup> Cement
	7x 5-1/2"	2720	14.5	5.31	1.2	25	1 <sup>st</sup> Stage Tail: (50:50) Class H Cement: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% BWOC HR-601 + 2% bwoc Bentonite
	Prod					DV	Tool = 5200ft
	i wo stage	10	9	13.5	3.27	21	2 <sup>nd</sup> Stage Lead: Tuned Light <sup>®</sup> Cement
		20	14.8	6.32	1.33	6	2 <sup>nd</sup> Stage Tail: Class C Cement + 0.125 lbs/sack Poly- E-Flake

DV tool depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

Casing String	TOC	% Excess
13-3/8" Surface	0'	100%
9-5/8" Intermediate	0'	75%
5-1/2" Production Casing	4950'	25%
5-1/2" Production Casing Two Stage Option	1 <sup>St</sup> Stage = 5200' / 2 <sup>nd</sup> Stage = 4950'	25%
7 x 5-1/2" Production Casing	4950'	25%
7 x 5-1/2" Production Casing Two Stage Option	1 <sup>St</sup> Stage = 5200' / 2 <sup>nd</sup> Stage = 4950'	25%

#### 4. Pressure Control Equipment

N A variance is requested for the use of a diverter on the surface casing. See attached for schematic.

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Туре		-	Tested to:
			An	nular	X	50% of working pressure
			Blin	d Ram		
12-1/4"	13-5/8"	3M	Pip	e Ram		214
			Doub	ole Ram	X	5111
			Other*			
			An	inular	X	50% testing pressure
	13-5/8"	3M	Blin	Blind Ram		
8 3/1"			Pip	Pipe Ram		
0-3/4			Doub	Double Ram		3M
			Other *			
			An	nular		
			Blind Ram			
			Pipe Ram			
			Double Ram			
			Other *			

\*Specify if additional ram is utilized.

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

	Y	Formation integrity test will be performed per Onshore Order #2.
		On Exploratory wells or on that portion of any well approved for a 5M BOPE system or
		greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in
		accordance with Onshore Oil and Gas Order #2 III.B.1.i.
		A variance is requested for the use of a flexible choke line from the BOP to Choke
Sel	Y	Manifold. See attached for specs and hydrostatic test chart.
COR		Y Are anchors required by manufacturer?
	Y	A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after
		installation on the surface casing which will cover testing requirements for a maximum of
		30 days. If any seal subject to test pressure is broken the system must be tested.
		Devon proposes using a multi-bowl wellhead assembly. This assembly will only be tested
		when installed on the surface casing. Minimum working pressure of the blowout
		preventer (BOP) and related equipment (BOPE) required for drilling below the surface
		casing shoe shall be 3000 (3M) psi.
		<ul> <li>Wellhead will be installed by wellhead's representatives.</li> </ul>
		• If the welding is performed by a third party, the wellhead's representative will
		monitor the temperature to verify that it does not exceed the maximum
de	RA	temperature of the seal.
C	071	<ul> <li>Wellhead representative will install the test plug for the initial BOP test.</li> </ul>
		• Wellhead will install a solid steel body pack-off to completely isolate the lower
		head after cementing intermediate casing. After installation of the pack-off, the
		pack-off and the lower flange will be tested to 3M, as shown on the attached
		schematic. Everything above the pack-off will not have been altered whatsoever
		from the initial nipple up. Therefore the BOP components will not be retested at
		that time.
		• If the cement does not circulate and one inch operations would have been possible
		with a standard wellhead, the well head will be cut and top out operations will be
		conducted.
		• Devon will pressure test all seals above and below the mandrel (but still above the
		casing) to full working pressure rating.
		• Devon will test the casing to 0.22 psi/ft or 1500 psi, whichever is greater, as per
		Onshore Order #2.

After running the 13-3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum rating of 3M will be installed on the Uni-head wellhead system and will undergo a 250 psi low pressure test followed by a 3,000 psi high pressure test. The 3,000 psi high and 250 psi low test will cover testing requirements a maximum of 30 days, as per Onshore Order #2. If the well is not complete within 30 days of this BOP test, another full BOP test will be conducted, as per Onshore Order #2.

After running the 9-5/8' intermediate casing with a mandrel hanger, the 13-5/8" BOP/BOPE system with a minimum rating of 3M will already be installed on the Unihead.

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

See attached schematic.

### 5. Mud Program

rel a	Depth		Туре	Weight (ppg)	Viscosity	Water Loss	
COTI	From	То					
· ····································	0	1,315 1400	FW Gel	8.6-8.8	28-34	N/C	
1400	1;315'	5,150'	Saturated Brine	10.0-10.2	28-34	N/C	
	5,150'	20,962'	Cut Brine	8.5-9.3	28-34	N/C	

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain	PVT/Pason/Visual Monitoring
of fluid?	

#### 6. Logging and Testing Procedures

Logg	ing, Coring and Testing.
X	Will run GR/CNL fromTD to surface (horizontal well – vertical portion of hole). Stated
	logs run will be in the Completion Report and submitted to the BLM.
	No Logs are planned based on well control or offset log information.
	Drill stem test? If yes, explain
	Coring? If yes, explain

#### Devon Energy, Boomslang 14-23 Fed 2H

Addi	tional logs planned	Interval
	Resistivity	Int. shoe to KOP
	Density	Int. shoe to KOP
Х	CBL	Production casing
Х	Mud log	Intermediate shoe to TD
	PEX	

#### 7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	5419 psi
Abnormal Temperature	No

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers.

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

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(L	n

 N
 H2S is present

 Y
 H2S Plan attached

#### 8. Other facets of operation

Is this a walking operation? No. Will be pre-setting casing? No.

Attachments

<u>x</u> Directional Plan Other, describe



## Ontinental S CONTITECH

Fluid Technology

ContiTech Beattie 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 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 www.contitechbeattie.com



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HARTMANN &

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# ATTACHMENT OF QUALITY CONTROL INSPECTION AND TEST CERTIFICATE



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Fluid Technology

Quality Document

QUAL INSPECTION	LITY CONT AND TEST	ROL CERTIFIC/	ATE	CERT. N	1º:	1713			
PURCHASER:	ContiTech B	eattie Co.		P.O. Nº:		002808			
CONTITECH ORDER N°:	426127	HOSE TYPE:	3" ID	Cho	Choke and Kill Hose				
HOSE SERIAL N°:	53622	NOMINAL / ACTU	JAL LENGTH	:	10,67 r	n			
W.P. 68,96 MPa	10000 psi	T.P. 103,4 M	MPa 1500	)O psi	Duration:	60	min		
Pressure test with water at ambient temperature	S	See attachmen	it. (1 page	)					
10 mm = 10 ₪ → 10 mm = 25 ₪	1in. 1Pa					1991 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -			
COUPLINGS Type		Serial Nº		Quality		Heat N°			
3" coupling with	5503	2029	AI	SI 4130		N1590P			
4 1/16" Flange end			AI	SI 4130		27566			
INFOCHIP INSTAL	LED				A Temp	PI Spec 16 perature rat	C e:"B"		
All metal parts are flawless			Н	ose cor	nform to	NACE MR (	1-75		
VE CERTIFY THAT THE ABO	VE HOSE HAS BE	EN MANUFACTURE	D IN ACCORD	ANCE WITH	H THE TERMS	OF THE ORDER	2		
TATEMENT OF CONFORM onditions and specifications occordance with the referenced	TY: We hereby c of the above Purch d standards, codes a COUNTR	ertify that the above laser Order and that and specifications and Y OF ORIGIN HU	items/equipme t these items/e d meet the rele JNGARY/EL	ent supplied equipment v vant accept	by us are in vere fabricate ance criteria a	conformity with th d inspected and πd design require	te terms, tested in ments.		
25 August 2008	Inspector		Quality Contr		ontiTech Rul Industrial K ality Control I	bber ft. Dept. (			

P.O.Box 152 Szeged H-6701 Hungary

e-mail: info@fluid.contitech.hu Internet; www.contitech-rubber.hu

 Registry Court No: HU 06-09-002502
 Szeged

 EU VAT No: HU11087209
 14220108-26830003-00000000







Commitment Runs Deep



Design Plan Operation and Maintenance Plan Closure Plan

SENM - Closed Loop Systems February 2015

#### 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.



*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



#### 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 day of \_\_February, 2015. Printed Name: David H. Cook Signed Name: \_\_\_\_\_\_ Position Title: Regulatory Compliance Professional Address: 333 W. Sheridan, OKC OK 73102 Telephone: (405)-552-7848