ATS-13-638

Form 3160-3
(March 2012)

HOBBS OCD
RECEIVED Hobbs
MAY 20 2013

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMNM 100567

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

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

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

8. Lease Name and Well No. <39913>
RAGIN CAJUN 12 FEDERAL 1H

2. Name of Operator Devon Energy Production Company, L.P. <6137>

9. API Well No.
30025-41188

3a. Address 333 W. Sheridan Ave.
Oklahoma City, OK 73102

3b. Phone No. *(include area code)*
405-552-7848

10. Field and Pool, or Exploratory <97597>
~~MADERA~~ Jabalina; Delaware, SW

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface 10 FSL & 1685.5 FEL Unit O PP: 25 FSL & 1650 FEL
At proposed prod. zone 330 FNL & 1650 FEL Unit B

11. Sec., T. R. M. or Blk. and Survey or Area
12-26S-34E

14. Distance in miles and direction from nearest town or post office*
Approximately 12 miles southwest of Jal, NM

12. County or Parish
Lea County

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
~~330'~~ 10'

16. No. of acres in lease
640 acres

17. Spacing Unit dedicated to this well
160 acres

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
See attached map
50'

19. Proposed Depth
TVD: 9,000' MD: 13,692'

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

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3,280.9' GL

22. Approximate date work will start*

23. Estimated duration
45 days

24. Attachments

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

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

25. Signature
Name *(Printed/Typed)* David H. Cook
Date 3/26/2013

Title
Regulatory Specialist

Approved by *(Signature)* /s/ James Stovall
Name *(Printed/Typed)*
Date MAY 15 2013

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

Approval Subject to General Requirements & Special Stipulations Attached

05/22/13

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

COPY

MAY 23 2013

DRILLING PROGRAM

Devon Energy Production Company, LP

Ragin Cajun 12 Federal 1H

Surface Location: 10 FSL & 1685.5 FEL, Unit O, Sec 12 T26S R34E, Lea, NM
Bottom Hole Location: 330 FNL & 1650 FEL, Unit B, Sec 12 T26S R34E, Lea, NM

1. Geologic Name of Surface Formation

a. Quaternary

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

a.	Fresh Water	180'	
b.	Rustler	727'	
c.	Salado	915'	
d.	Top of Salt	990'	
e.	Castile	3,531'	
f.	Base of Salt	4,911'	
g.	Delaware	5,191'	Oil & Gas
h.	Bell Canyon	5,236'	Oil
i.	Cherry Canyon	6,216'	Oil
j.	Brushy Canyon	7,743'	Oil
	Total Depth	13,692' MD	9,000' TVD

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

See COA

Hole Size	Hole Interval	OD Csg	Casing Interval	Weight	Collar	Grade
17-1/2"	0 – ~~800'~~ 1120'	13-3/8"	0 – ~~800'~~	48#	STC	H-40
12-1/4"	~~800'~~ – 5,250'	9-5/8"	0 – 5,250'	40#	LTC	HCK-55
8-3/4"	5,250' – 8,200'	5-1/2"	0' – 8,200'	17#	LTC	HCP-110
8-3/4"	8,200' – 13,692'	5-1/2"	8,200'– 13,692'	17#	BTC	HCP-110

MAXIMUM LATERAL TVD **9,000'**

Design Parameter Factors:

Casing Size	Collapse Design Factor	Burst Design Factor	Tension Design Factor
13 3/8"	2.06	4.62	8.39
9 5/8"	1.55	1.29	3.00
5 ½"	1.77	2.53	1.91
5 ½"	2.24	2.77	6.08

Cement Program: (cement volumes Surface 100%/ Intermediate 50% Production based on at least 25% excess):

13 3/8" Surface **Lead: 250 sx** Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sx Poly-E-Flake + 4% bwoc Bentonite + 70.1% Fresh Water, 13.5 ppg, Yield: 1.75 cf/sx.

TOC @ surface

Tail: 515 sx Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sx Poly-E-Flake + 63.1% Fresh Water, 14.8 ppg, Yield: 1.35 cf/sx.

9-5/8" Intermediate **Lead: 1080 sx** (65:35) Class C Cement:Poz (Fly Ash): + 5% bwow Sodium Chloride + 0.125 lbs/sx Poly-E-Flake + 6% bwoc Bentonite + 70.9% Fresh Water, 12.9 ppg,
Yield: 1.85 cf/sx.

TOC @ surface

Tail: 360 sx Class C Cement + 0.125 lbs/sx Poly-E-Flake + 63.5% Water, 14.8 ppg,
Yield: 1.33 cf/sx

5-1/2" Production **Lead: 610 sx** (65:35) Class H Cement:Poz (Fly Ash) + 6% bwoc Bentonite + 0.2% bwoc HR-601 + 74.1% Fresh Water, 12.5 ppg, Yield: 1.95 cf/sx.

Tail: 1450 sx (50:50) Class H Cement:Poz (Fly Ash) + 1 lb/sx Sodium Chloride + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.1% bwoc HR-601 + 2% bwoc Bentonite + 58.8% Fresh Water, 14.5 ppg, Yield: 1.22 cf/sx

TOC @ 4,750 ft

The above cement volumes could be revised pending the caliper measurement from the open hole logs.

4. 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). The line will be kept as straight as possible with minimal turns.

5. Proposed Mud Circulation System

Depth	Mud Wt.	Visc	Fluid Loss	Type System
0 – ~~800~~ 1120	8.4-9.0	30-34	N/C	FW
~~800~~ – 5,250	9.8-10.0	28-32	N/C	Brine
5,250 -13,692	8.6-9.0	28-32	N/C-12	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. **Auxiliary Well Control and Monitoring Equipment**:
   a. A Kelly cock will be in the drill string at all times.
   b. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
   c. Hydrogen Sulfide detection equipment will be in operation after drilling out the 13 3/8" casing shoe until the 5 1/2" casing is cemented. Breathing equipment will be on location upon drilling the 13 3/8" shoe until total depth is reached.

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

8. **Potential Hazards:**
   a. No abnormal pressures or temperatures are expected. There is no known presence of H2S in this area. If H2S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6 No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 4,000 psi and Estimated BHT 145°. No H2S is anticipated to be encountered.

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 20 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

Ragin Cajun 12 Federal 1H
Lea County, New Mexico

KB ELEV: 3306
GL ELEV: 3281

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	359.91	0.00	0.00	0.00	0.00	0.00	0.00	
2	8427.04	0.00	359.91	8427.04	0.00	0.00	0.00	0.00	0.00	
3	9327.04	90.00	359.91	9000.00	572.96	-0.87	10.00	359.91	572.96	
4	13692.12	90.00	359.91	9000.00	4938.03	-7.54	0.00	0.00	4938.04	PBHL

WELL DETAILS

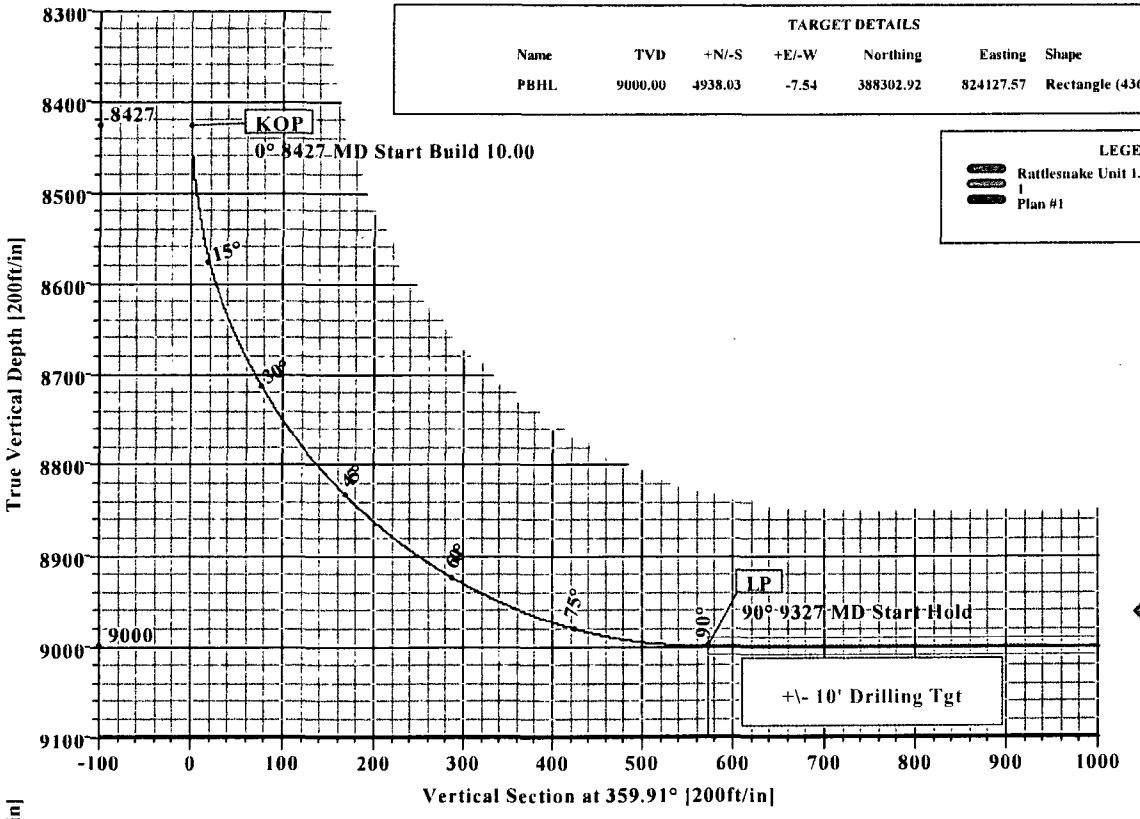
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Ragin Cajun 12 Federal 1H	0.00	0.00	383364.89	824135.11	32°03'02.382N	103°25'14.045W	N/A

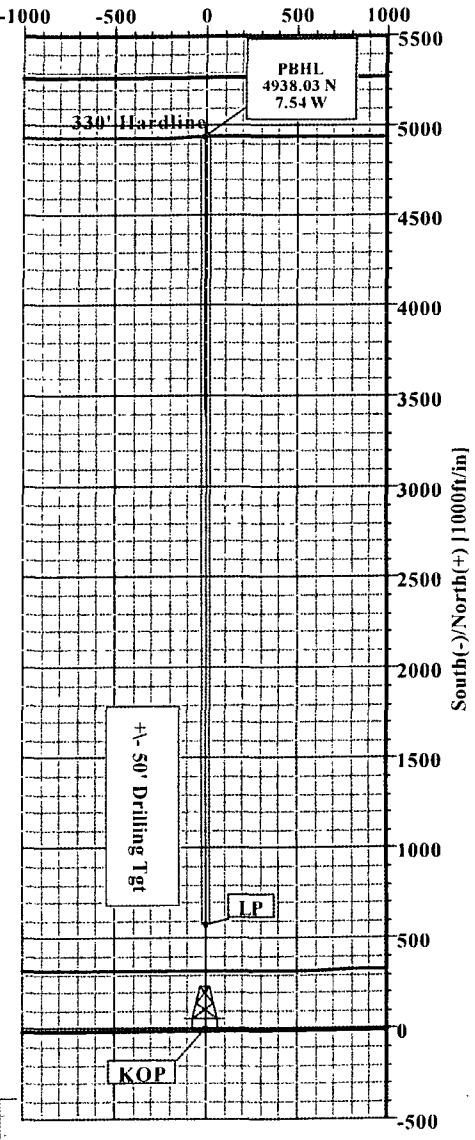
TARGET DETAILS

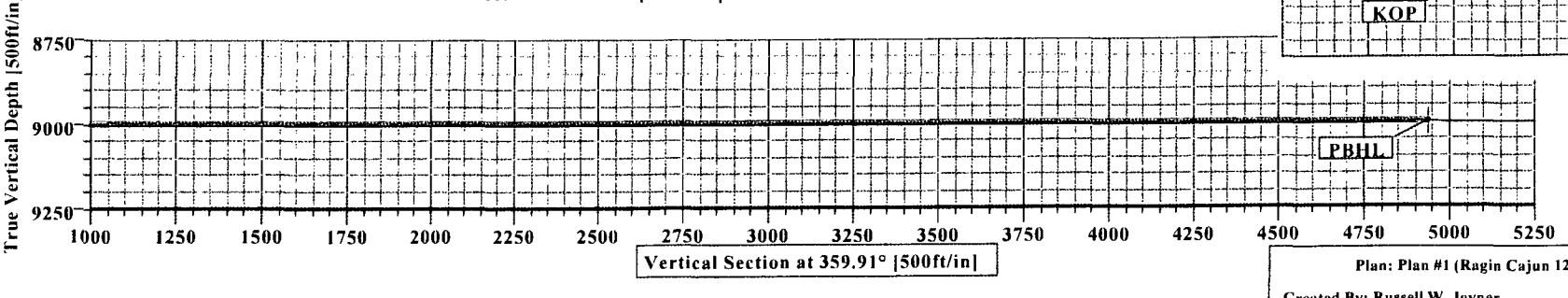
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	9000.00	4938.03	-7.54	388302.92	824127.57	Rectangle (4365x50)

LEGEND

Rattlesnake Unit 13-12 Fed 1H (ST00)
Plan #1







Weatherford

Plan: Plan #1 (Ragin Cajun 12 Federal 1H/1)
Created By: Russell W. Joyner Date: 3/19/2013

Weatherford
Wft Plan Report X Y's.

Company:	Devon Energy	**Date:** 3/19/2013 **Time:** 06:35:02	**Page:** 1
Field:	Lea County, New Mexico (NAD 83)	**Co-ordinate(NE) Reference:**	Well: Ragin Cajun 12 Federal 1H
Site:	Ragin Cajun 12 Federal 1H	**Vertical (TVD) Reference:**	SITE 3306.0
Well:	Ragin Cajun 12 Federal 1H	**Section (VS) Reference:**	Well (0.00N,0.00E,359.91Azi)
Wellpath:	1	**Survey Calculation Method:**	Minimum Curvature **Db:** Sybase

Plan:	Plan #1	**Date Composed:**	3/18/2013
		Version:	1
Principal:	Yes	**Tied-to:**	From Surface

Site: Ragin Cajun 12 Federal 1H

Site Position:		**Northing:**	383364.89 ft	**Latitude:**	32 3 2.382 N		
From:	Map	**Easting:**	824135.11 ft	**Longitude:**	103 25 14.045 W		
Position Uncertainty:	0.00 ft			**North Reference:**	Grid		
Ground Level:	3281.00 ft			**Grid Convergence:**	0.48 deg		

Well: Ragin Cajun 12 Federal 1H **Slot Name:**

Well Position:	+N/-S	0.00 ft	**Northing:**	383364.89 ft	**Latitude:**	32 3 2.382 N	
	+E/-W	0.00 ft	**Easting :**	824135.11 ft	**Longitude:**	103 25 14.045 W	
Position Uncertainty:		0.00 ft					

Wellpath: 1

Current Datum:	SITE	**Height** 3306.00 ft	**Drilled From:** Surface
Magnetic Data:	12/5/2013		**Tie-on Depth:** 0.00 ft
Field Strength:	48306 nT		**Above System Datum:** Mean Sea Level
			Declination: 7.20 deg
			Mag Dip Angle: 59.99 deg

Vertical Section: Depth From (TVD) ft	+N/-S ft	+E/-W ft	Direction deg
0.00	0.00	0.00	359.91

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	359.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8427.04	0.00	359.91	8427.04	0.00	0.00	0.00	0.00	0.00	0.00	
9327.04	90.00	359.91	9000.00	572.96	-0.87	10.00	10.00	0.00	359.91	
13692.12	90.00	359.91	9000.00	4938.03	-7.54	0.00	0.00	0.00	0.00	PBHL

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
8400.00	0.00	359.91	8400.00	0.00	0.00	0.00	0.00	383364.89	824135.11	
8427.04	0.00	359.91	8427.04	0.00	0.00	0.00	0.00	383364.89	824135.11	KOP
8500.00	7.30	359.91	8499.80	4.64	-0.01	4.64	10.00	383369.53	824135.10	
8600.00	17.30	359.91	8597.39	25.91	-0.04	25.91	10.00	383390.80	824135.07	
8700.00	27.30	359.91	8689.79	63.80	-0.10	63.80	10.00	383428.69	824135.01	
8800.00	37.30	359.91	8774.21	117.16	-0.18	117.16	10.00	383482.05	824134.93	
8900.00	47.30	359.91	8848.09	184.37	-0.28	184.37	10.00	383549.26	824134.83	
9000.00	57.30	359.91	8909.17	263.39	-0.40	263.39	10.00	383628.28	824134.71	
9100.00	67.30	359.91	8955.60	351.81	-0.54	351.81	10.00	383716.70	824134.57	
9200.00	77.30	359.91	8985.97	446.95	-0.68	446.95	10.00	383811.84	824134.43	
9300.00	87.30	359.91	8999.36	545.93	-0.83	545.93	10.00	383910.82	824134.28	
9327.04	90.00	359.91	9000.00	572.96	-0.87	572.96	10.00	383937.85	824134.24	LP
9400.00	90.00	359.91	9000.00	645.91	-0.99	645.92	0.00	384010.80	824134.12	
9500.00	90.00	359.91	9000.00	745.91	-1.14	745.92	0.00	384110.80	824133.97	
9600.00	90.00	359.91	9000.00	845.91	-1.29	845.92	0.00	384210.80	824133.82	
9700.00	90.00	359.91	9000.00	945.91	-1.44	945.92	0.00	384310.80	824133.67	
9800.00	90.00	359.91	9000.00	1045.91	-1.60	1045.92	0.00	384410.80	824133.51	
9900.00	90.00	359.91	9000.00	1145.91	-1.75	1145.92	0.00	384510.80	824133.36	
10000.00	90.00	359.91	9000.00	1245.91	-1.90	1245.92	0.00	384610.80	824133.21	
10100.00	90.00	359.91	9000.00	1345.91	-2.06	1345.92	0.00	384710.80	824133.05	
10200.00	90.00	359.91	9000.00	1445.91	-2.21	1445.92	0.00	384810.80	824132.90	
10300.00	90.00	359.91	9000.00	1545.91	-2.36	1545.92	0.00	384910.80	824132.75	
10400.00	90.00	359.91	9000.00	1645.91	-2.51	1645.92	0.00	385010.80	824132.60	

Weatherford
Wft Plan Report X Y's.

Company:	Devon Energy	**Date:** 3/19/2013 **Time:** 06:35:02	**Page:** 2
Field:	Lea County, New Mexico (NAD 83)	**Co-ordinate(NE) Reference:**	Well: Ragin Cajun 12 Federal 1H
Site:	Ragin Cajun 12 Federal 1H	**Vertical (TVD) Reference:**	SITE 3306.0
Well:	Ragin Cajun 12 Federal 1H	**Section (VS) Reference:**	Well (0.00N,0.00E,359.91Azi)
Wellpath: 1		**Survey Calculation Method:**	Minimum Curvature **Db:** Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Comment
10500.00	90.00	359.91	9000.00	1745.91	-2.67	1745.92	0.00	385110.80	824132.44	
10600.00	90.00	359.91	9000.00	1845.91	-2.82	1845.92	0.00	385210.80	824132.29	
10700.00	90.00	359.91	9000.00	1945.91	-2.97	1945.92	0.00	385310.80	824132.14	
10800.00	90.00	359.91	9000.00	2045.91	-3.12	2045.92	0.00	385410.80	824131.99	
10900.00	90.00	359.91	9000.00	2145.91	-3.28	2145.92	0.00	385510.80	824131.83	
11000.00	90.00	359.91	9000.00	2245.91	-3.43	2245.92	0.00	385610.80	824131.68	
11100.00	90.00	359.91	9000.00	2345.91	-3.58	2345.92	0.00	385710.80	824131.53	
11200.00	90.00	359.91	9000.00	2445.91	-3.73	2445.92	0.00	385810.80	824131.38	
11300.00	90.00	359.91	9000.00	2545.91	-3.89	2545.92	0.00	385910.80	824131.22	
11400.00	90.00	359.91	9000.00	2645.91	-4.04	2645.92	0.00	386010.80	824131.07	
11500.00	90.00	359.91	9000.00	2745.91	-4.19	2745.92	0.00	386110.80	824130.92	
11600.00	90.00	359.91	9000.00	2845.91	-4.35	2845.92	0.00	386210.80	824130.76	
11700.00	90.00	359.91	9000.00	2945.91	-4.50	2945.92	0.00	386310.80	824130.61	
11800.00	90.00	359.91	9000.00	3045.91	-4.65	3045.92	0.00	386410.80	824130.46	
11900.00	90.00	359.91	9000.00	3145.91	-4.80	3145.92	0.00	386510.80	824130.31	
12000.00	90.00	359.91	9000.00	3245.91	-4.96	3245.92	0.00	386610.80	824130.15	
12100.00	90.00	359.91	9000.00	3345.91	-5.11	3345.92	0.00	386710.80	824130.00	
12200.00	90.00	359.91	9000.00	3445.91	-5.26	3445.92	0.00	386810.80	824129.85	
12300.00	90.00	359.91	9000.00	3545.91	-5.41	3545.92	0.00	386910.80	824129.70	
12400.00	90.00	359.91	9000.00	3645.91	-5.57	3645.92	0.00	387010.80	824129.54	
12500.00	90.00	359.91	9000.00	3745.91	-5.72	3745.92	0.00	387110.80	824129.39	
12600.00	90.00	359.91	9000.00	3845.91	-5.87	3845.92	0.00	387210.80	824129.24	
12700.00	90.00	359.91	9000.00	3945.91	-6.03	3945.92	0.00	387310.80	824129.08	
12800.00	90.00	359.91	9000.00	4045.91	-6.18	4045.92	0.00	387410.80	824128.93	
12900.00	90.00	359.91	9000.00	4145.91	-6.33	4145.92	0.00	387510.80	824128.78	
13000.00	90.00	359.91	9000.00	4245.91	-6.48	4245.92	0.00	387610.80	824128.63	
13100.00	90.00	359.91	9000.00	4345.91	-6.64	4345.92	0.00	387710.80	824128.47	
13200.00	90.00	359.91	9000.00	4445.91	-6.79	4445.92	0.00	387810.80	824128.32	
13300.00	90.00	359.91	9000.00	4545.91	-6.94	4545.92	0.00	387910.80	824128.17	
13400.00	90.00	359.91	9000.00	4645.91	-7.09	4645.92	0.00	388010.80	824128.02	
13500.00	90.00	359.91	9000.00	4745.91	-7.25	4745.92	0.00	388110.80	824127.86	
13600.00	90.00	359.91	9000.00	4845.91	-7.40	4845.92	0.00	388210.80	824127.71	
13692.12	90.00	359.91	9000.00	4938.03	-7.54	4938.04	0.00	388302.92	824127.57	PBHL

Targets

Name	Description Dip.	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<---- Latitude ----> Deg	Min	Sec	<--- Longitude ---> Deg	Min	Sec
PBHL			9000.00	4938.03	-7.54	388302.92	824127.57	32	3	51.245 N	103	25	13.647 W

Casing Points

MD	TVD	Diameter	Hole Size	Name

Annotation

MD ft	TVD ft	
8427.04	8427.04	KOP
9327.04	9000.00	LP
13692.12	9000.00	PBHL

Weatherford®

Weatherford Drilling Services

GeoDec v5.03

Report Date:	March 18, 2013
Job Number:	
Customer:	Devon Energy
Well Name:	Ragin Cajun 12 Federal 1H
API Number:	
Rig Name:	
Location:	Lea County, NM
Block:	
Engineer:	RWJ

US State Plane 1983	Geodetic Latitude / Longitude
System: New Mexico Eastern Zone	System: Latitude / Longitude
Projection: Transverse Mercator/Gauss Kruger	Projection: Geodetic Latitude and Longitude
Datum: North American Datum 1983	Datum: North American Datum 1983
Ellipsoid: GRS 1980	Ellipsoid: GRS 1980
North/South 383364.890 USFT	Latitude 32.0506637 DEG
East/West 824135.110 USFT	Longitude -103.4205626 DEG
Grid Convergence: .48°	
Total Correction: +6.83°	

Geodetic Location WGS84	Elevation =	0.0 Meters
Latitude =	32.05066° N	32° 3 min 2.389 sec
Longitude =	103.42056° W	103° 25 min 14.025 sec

Magnetic Declination =	7.31°	[True North Offset]	
Local Gravity =	.9988 g	CheckSum =	6807
Local Field Strength =	48265 nT	Magnetic Vector X =	23980 nT
Magnetic Dip =	59.94°	Magnetic Vector Y =	3075 nT
Magnetic Model =	bggm2012	Magnetic Vector Z =	41773 nT
Spud Date =	Dec 05, 2013	Magnetic Vector H =	24177 nT

Signed:_____ Date:_____

NOTES REGARDING BLOWOUT PREVENTERS

Devon Energy Production Company, LP
Ragin Cajun 12 Fed 1H

Surface Location: 10 FSL & 1685.5 FEL, Unit O, Sec 12 T26S R34E, Lea, NM
Bottom Hole Location: 330 FNL & 1650 FEL, Unit B, Sec 12 T26S R34E, Lea, 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.

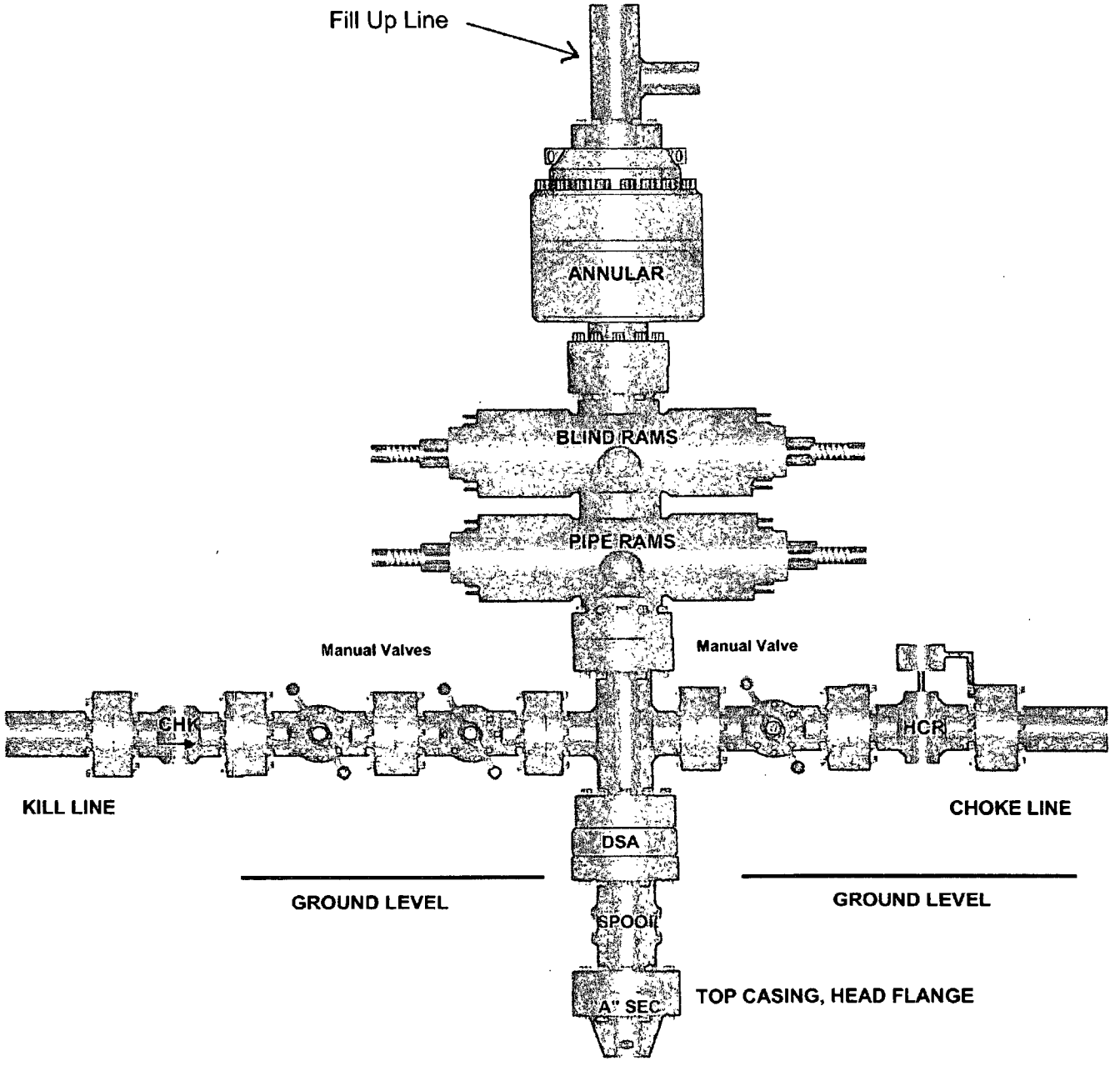
8. Will maintain a kelly cock attached to the kelly.

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.

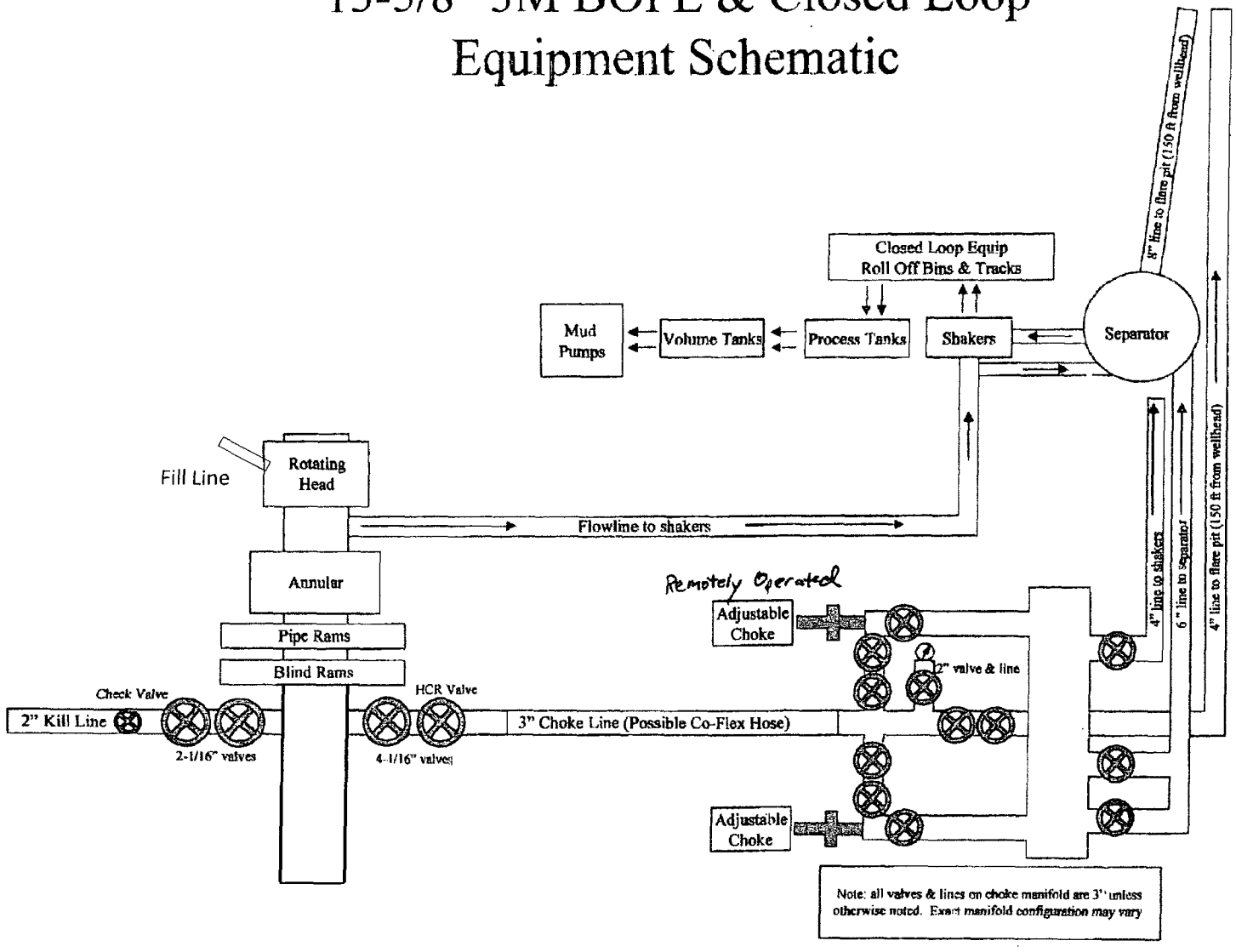
11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

13-5/8" x 3,000 psi BOP Stack



L:\Western\Drilling\Wes Handley\Drawings\BOPS\BOPs.xls

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



Continental CONTITECH

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
www.contitechbeattie.com

H&P 416

Continental CONTITECH

Fluid Technology

Quality Document

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE				CERT. N°:	1713	
PURCHASER:	ContiTech Beattie Co.			P.O. N°:	002808	
CONTITECH ORDER N°:	426127	HOSE TYPE:	3" ID	Choke and Kill Hose		
HOSE SERIAL N°:	53622	NOMINAL / ACTUAL LENGTH:		10,67 m		
W.P. 68,96 MPa	10000 psi	T.P. 103,4 MPa	15000 psi	Duration:	60	min.

Pressure test with water at ambient temperature

See attachment. (1 page)

↑ 10 mm = 10 Min.

→ 10 mm = 25 MPa

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

INFOCHIP INSTALLED

API Spec 16 C
Temperature rate:"B"

All metal parts are flawless

Hose conform to NACE MR 01-75

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

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

COUNTRY OF ORIGIN HUNGARY/EU

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

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

Page: 1/1

H&P 416