

13-697

Form 3160-3
(March 2012)

HOBBS OCD

JUL 18 2013

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTRECEIVED
APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED

OCD Artesia 1 2013

NMOC D ARTESIA

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 20145. Lease Serial No.
NMNM 100568

6. If Indian, Allottee or Tribe Name

1a. Type of work: ☒ DRILL ☐ REENTER1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

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

3a. Address 333 W. Sheridan
Oklahoma City, OK 731023b. Phone No. (include area code)
405.235.3611

4. Location of Well (Report location clearly and in accordance with any State requirements.)*

At surface 330' FSL & 1295' FWL, Unit M

At proposed prod. zone 330' FNL & 660' FWL, Unit D; PP: 330' FSL & 1295' FWL

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

8. Lease Name and Well No.
Ragin Cajun 13 Federal 2H

9. API Well No.

10. Field and Pool, or Exploratory
Delaware, Brushy Canyon, Jabalina, SW11. Sec., T. R. M. or Blk. and Survey or Area
Sec 13, T26S, R34E14. Distance in miles and direction from nearest town or post office*
12 miles SW from Jal, NM12. County or Parish
Eddy Co13. State
NM15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any)

See attached map

16. No. of acres in lease
1920 ac17. Spacing Unit dedicated to this well
160 ac18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft.

See attached map

19. Proposed Depth
TVD: 9000'; MD: 13378'20. BLM/BIA Bond No. on file
CO-1104; NBM-00080121. Elevations (Show whether DF, KDB, RT, GL, etc.)
3245.2 GL22. Approximate date work will start*
05/16/201323. Estimated duration
45 Days

24. Attachments To be pad drilled w/Ragin Cajun 13 Federal 1H

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)
Ryan DeLongDate
4/16/2013

Title

Regulatory Compliance Professional

Approved by (Signature)

/s/George MacDonell

Name (Printed/Typed)

Date
JUL - 8 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 AttachedSEE ATTACHED FOR
CONDITIONS OF APPROVAL

JUL 18 2013

DRILLING PROGRAM
Devon Energy Production Company, LP
Ragin Cajun 13 Federal 2H

Surface Location: 330' FSL & 1295' FWL, Unit M, Sec 13 T26S R34E, Lea, NM
Bottom Hole Location: 330' FNL & 660' FWL, Unit D, Sec 13 T26S R34E, Lea, NM

1. Geologic Name of Surface Formation

a. Quat Alluvium

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. Castile	3531'	
e. Delaware	5191'	Oil / Gas
f. Bell Canyon	5236'	Oil
g. Cherry Canyon	6216'	Oil
h. Brushy Canyon	7743'	Oil
Total Depth	13378'	

3. Casing Program:

<u>Hole Size</u>	<u>Hole Interval</u>	<u>OD Csg</u>	<u>Casing Interval</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>
17-1/2"	0-800' 1100'	13-3/8"	0-800' 1100'	48#	STC	H-40
12-1/4"	800-5250'	9-5/8"	0-5250'	40#	LTC	HCK-55
8-3/4"	5250-8200'	5-1/2"	0-8200'	17#	LTC	HCP-110
8-3/4"	8200-13378'	5-1/2"	8200-13378'	17#	BTC	HCP-110

All casing is new and API approved.

Design Parameter Factors:

<u>Casing Size</u>	<u>Collapse Design Factor</u>	<u>Burst Design Factor</u>	<u>Tension Design Factor</u>
13-3/8"	2.06	4.62	8.39
9-5/8"	1.55	1.29	3.00
5-1/2"	1.77	2.53	1.91
5-1/2"	2.24	2.77	6.08

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

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

Tail: 515 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Poly-E-Flake + 63.1% Fresh Water, 14.8 ppg.
Yield: 1.35 cf/sk. **TOC @ surface.**

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

Tail: 360 sacks Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Water, 14.8 ppg. **Yield:** 1.33 cf/sk. **TOC @ surface.**

c. 5-1/2" Production **1st Stage**
Lead: 610 sacks (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/sk.

Tail: 1450 sacks (50:50) Class H Cement:Poz (Fly Ash) + 1 lb/sk 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/sk. **TOC @ 4750 ft.**

Actual cement volumes will be adjusted based on fluid caliper and caliper log data.

The above cement volumes could be revised pending the caliper measurement from the open hole logs. The top of cement is designed to reach approximately 500' above the 9 5/8" casing shoe.

5. 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.

*See
COA* Devon requests a variance to use a flexible line with flanged ends between the BOP and the choke manifold (choke line); if an H&P rig drills this well. Otherwise no flex line is needed. The line will be kept as straight as possible with minimal turns.

Proposed Mud Circulation System

<i>See COA</i>	<u>Depth</u>	<u>Mud Wt.</u>	<u>Visc</u>	<u>Fluid Loss</u>	<u>Type System</u>
	0-800' / 1100'	8.4-9.0	30-34	N/C	FW
	800-5250'	9.8-10.0	28-32	N/C	Brine
	5250-13378'	8.6-9.0	28-32	N/C	FW

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

6. 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.
- See
COA* 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:

- 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 1/2" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

8. Potential Hazards:

- a. No abnormal pressures or temperatures are expected. There is no known presence of H₂S in this area. 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 4000 psi and Estimated BHT 142°. 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 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.



Ragin Cajun 13 Federal 2H
Lea County, New Mexico

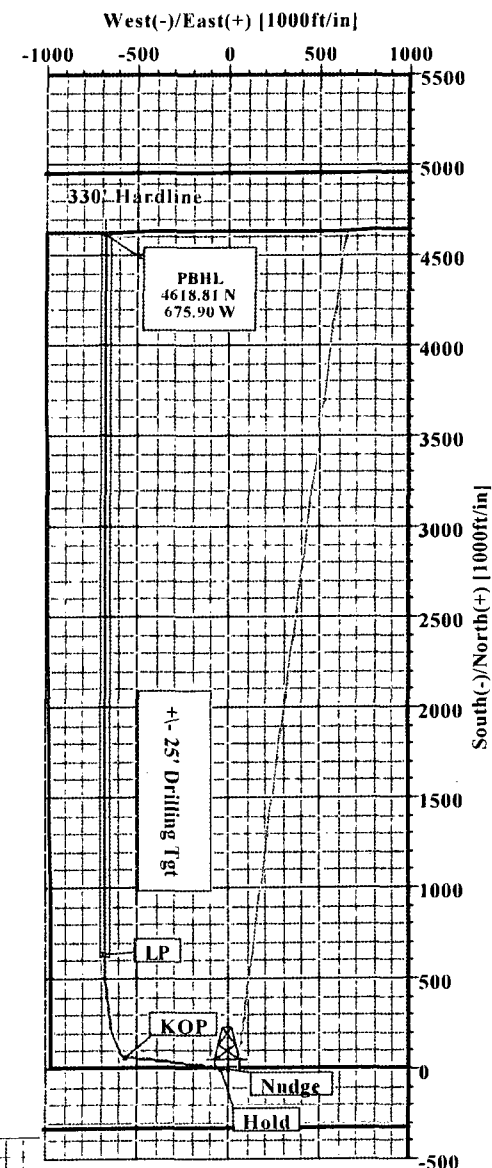
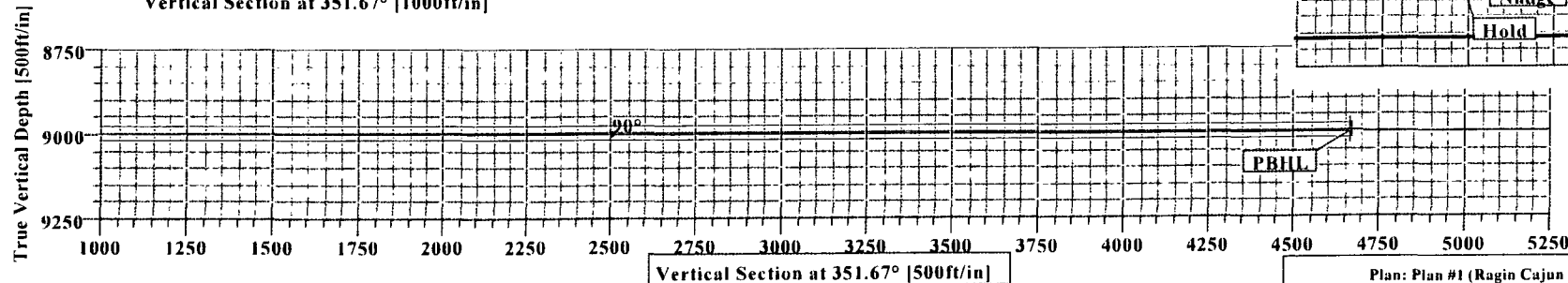
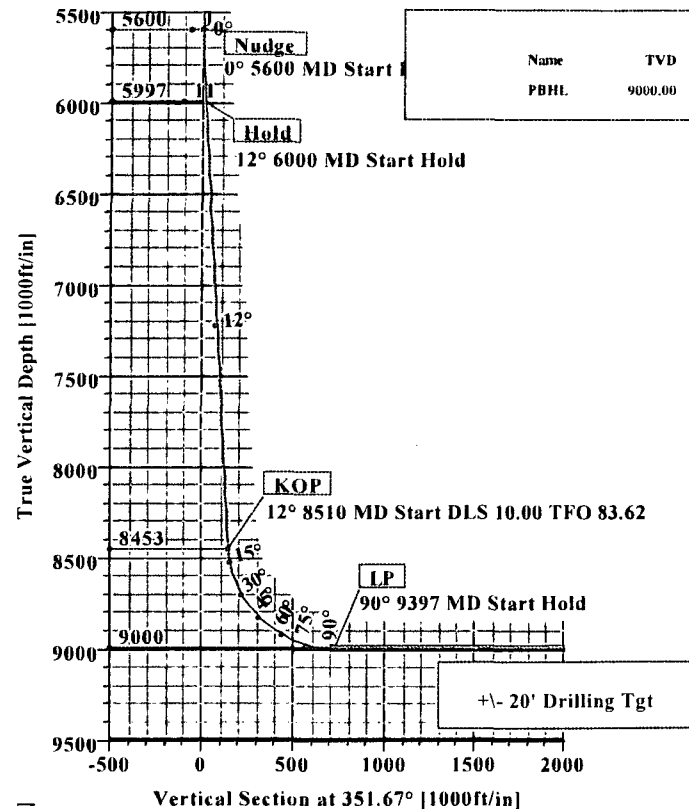
KB ELEV: 3270
GL ELEV: 3245

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	5600.00	0.00	0.00	5600.00	0.00	0.00	0.00	0.00	0.00	
3	6000.17	12.00	276.52	5997.25	4.74	-41.50	3.00	0.00	10.70	
4	8510.48	12.00	276.52	8452.65	64.02	-560.26	0.00	0.00	144.51	
5	9396.95	90.00	0.00	9000.00	636.82	-675.90	10.00	83.62	728.02	
6	13378.95	90.00	0.00	9000.00	4618.82	-675.90	0.00	0.00	4668.01	PBHL

WELL DETAILS						
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Ragin Cajun 13 Federal 2H	0.00	0.00	378386.17	821878.12	32°02'13.305N	103°25'40.752W

TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL	9000.00	4618.82	-675.90	383004.99	821202.22	Rectangle (4000x50)

LEGEND	
	Ragin Cajun 13 Federal 1H (1)
	Plan #1



Plan: Plan #1 (Ragin Cajun 13 Federal 2H/1)

Created By: Russell W. Joyner

Date: 3/20/2013



Weatherford

Wft Plan Report X Y's.

**Weatherford**

Company: Devon Energy	Date: 3/20/2013	Time: 07:44:39	Page: 1
Field: Lea County, New Mexico (NAD 83)	Co-ordinate(NE) Reference: Well: Ragin Cajun 13 Federal 2H		
Site: Ragin Cajun 13 Federal 2H	Vertical (TVD) Reference: SITE 3270.0		
Well: Ragin Cajun 13 Federal 2H	Section (VS) Reference: Well (0.00N,0.00E,351.67Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature Db: Sybase		

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

Site: Ragin Cajun 13 Federal 2H		
Site Position:	Northing: 378386.17 ft	Latitude: 32 2 13.305 N
From: Map	Easting: 821878.12 ft	Longitude: 103 25 40.752 W
Position Uncertainty: 0.00 ft	North Reference: Grid	
Ground Level: 3245.00 ft	Grid Convergence: 0.48 deg	

Well: Ragin Cajun 13 Federal 2H	Slot Name:	
Well Position: +N/-S 0.00 ft	Northing: 378386.17 ft	Latitude: 32 2 13.305 N
+E/-W 0.00 ft	Easting: 821878.12 ft	Longitude: 103 25 40.752 W
Position Uncertainty: 0.00 ft		

Wellpath: 1	Drilled From: Surface		
Current Datum: SITE	Tie-on Depth: 0.00 ft		
Magnetic Data: 12/30/2013	Above System Datum: Mean Sea Level		
Field Strength: 48290 nT	Declination: 7.19 deg		
Vertical Section: Depth From (TVD)	Mag Dip Angle: 59.97 deg		
ft	+N/-S	+E/-W	Direction
	ft	ft	deg
0.00	0.00	0.00	351.67

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5600.00	0.00	0.00	5600.00	0.00	0.00	0.00	0.00	0.00	0.00	
6000.17	12.00	276.52	5997.25	4.74	-41.50	3.00	3.00	0.00	0.00	
8510.48	12.00	276.52	8452.65	64.02	-560.26	0.00	0.00	0.00	0.00	
9396.95	90.00	0.00	9000.00	636.82	-675.90	10.00	8.80	9.42	83.62	
13378.95	90.00	0.00	9000.00	4618.82	-675.90	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
5600.00	0.00	0.00	5600.00	0.00	0.00	0.00	0.00	378386.17	821878.12	Nudge
5700.00	3.00	276.52	5699.95	0.30	-2.60	0.67	3.00	378386.47	821875.52	
5800.00	6.00	276.52	5799.63	1.19	-10.39	2.68	3.00	378387.36	821867.73	
5900.00	9.00	276.52	5898.77	2.67	-23.36	6.03	3.00	378388.84	821854.76	
6000.00	12.00	276.52	5997.08	4.74	-41.47	10.70	3.00	378390.91	821836.65	
6000.17	12.00	276.52	5997.25	4.74	-41.50	10.70	2.94	378390.91	821836.62	Hold
6100.00	12.00	276.52	6094.90	7.10	-62.13	16.03	0.00	378393.27	821815.99	
6200.00	12.00	276.52	6192.71	9.46	-82.80	21.36	0.00	378395.63	821795.32	
6300.00	12.00	276.52	6290.52	11.82	-103.46	26.69	0.00	378397.99	821774.66	
6400.00	12.00	276.52	6388.33	14.18	-124.13	32.02	0.00	378400.35	821753.99	
6500.00	12.00	276.52	6486.15	16.55	-144.79	37.35	0.00	378402.72	821733.33	
6600.00	12.00	276.52	6583.96	18.91	-165.46	42.68	0.00	378405.08	821712.66	
6700.00	12.00	276.52	6681.77	21.27	-186.12	48.01	0.00	378407.44	821692.00	
6800.00	12.00	276.52	6779.59	23.63	-206.79	53.34	0.00	378409.80	821671.33	
6900.00	12.00	276.52	6877.40	25.99	-227.45	58.67	0.00	378412.16	821650.67	
7000.00	12.00	276.52	6975.21	28.35	-248.12	64.00	0.00	378414.52	821630.00	
7100.00	12.00	276.52	7073.02	30.71	-268.78	69.33	0.00	378416.88	821609.34	
7200.00	12.00	276.52	7170.84	33.08	-289.45	74.66	0.00	378419.25	821588.67	
7300.00	12.00	276.52	7268.65	35.44	-310.11	79.99	0.00	378421.61	821568.01	
7400.00	12.00	276.52	7366.46	37.80	-330.78	85.32	0.00	378423.97	821547.34	
7500.00	12.00	276.52	7464.28	40.16	-351.44	90.65	0.00	378426.33	821526.68	



Weatherford

Wft Plan Report X Y's.

**Weatherford**

Company: Devon Energy
Field: Lea County, New Mexico (NAD 83)
Site: Ragin Cajun 13 Federal 2H
Well: Ragin Cajun 13 Federal 2H
Wellpath: 1

Date: 3/20/2013 Time: 07:44:39 Page: 2
Co-ordinate(NE) Reference: Well: Ragin Cajun 13 Federal 2H
Vertical (TVD) Reference: SITE 3270.0
Section (VS) Reference: Well (0.00N,0.00E,351.67Azi)
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	Comments
7600.00	12.00	276.52	7562.09	42.52	-372.11	95.98	0.00	378428.69	821506.01	
7700.00	12.00	276.52	7659.90	44.88	-392.77	101.31	0.00	378431.05	821485.35	
7800.00	12.00	276.52	7757.72	47.24	-413.44	106.64	0.00	378433.41	821464.68	
7900.00	12.00	276.52	7855.53	49.61	-434.10	111.97	0.00	378435.78	821444.02	
8000.00	12.00	276.52	7953.34	51.97	-454.77	117.30	0.00	378438.14	821423.35	
8100.00	12.00	276.52	8051.15	54.33	-475.43	122.63	0.00	378440.50	821402.69	
8200.00	12.00	276.52	8148.97	56.69	-496.10	127.96	0.00	378442.86	821382.02	
8300.00	12.00	276.52	8246.78	59.05	-516.77	133.29	0.00	378445.22	821361.35	
8400.00	12.00	276.52	8344.59	61.41	-537.43	138.63	0.00	378447.58	821340.69	
8500.00	12.00	276.52	8442.41	63.77	-558.10	143.96	0.00	378449.94	821320.02	
8510.48	12.00	276.52	8452.65	64.02	-560.26	144.51	0.00	378450.19	821317.86	KOP
8600.00	15.72	311.34	8539.70	73.11	-578.65	156.17	10.00	378459.28	821299.47	
8700.00	23.42	330.81	8633.95	99.47	-598.56	185.13	10.00	378485.64	821279.56	
8800.00	32.36	340.52	8722.29	142.16	-617.23	230.08	10.00	378528.33	821260.89	
8900.00	41.74	346.30	8802.04	199.88	-634.08	289.63	10.00	378586.05	821244.04	
9000.00	51.33	350.26	8870.76	270.87	-648.60	361.98	10.00	378657.04	821229.52	
9100.00	61.01	353.28	8926.38	352.99	-660.35	444.93	10.00	378739.16	821217.77	
9200.00	70.75	355.77	8967.21	443.73	-668.97	535.96	10.00	378829.90	821209.15	
9300.00	80.52	357.98	8991.99	540.34	-674.21	632.31	10.00	378926.51	821203.91	
9396.95	90.00	0.00	9000.00	636.82	-675.90	728.02	10.00	379022.99	821202.22	LP
9400.00	90.00	0.00	9000.00	639.87	-675.90	731.04	0.00	379026.04	821202.22	
9500.00	90.00	0.00	9000.00	739.87	-675.90	829.99	0.00	379126.04	821202.22	
9600.00	90.00	0.00	9000.00	839.87	-675.90	928.93	0.00	379226.04	821202.22	
9700.00	90.00	0.00	9000.00	939.87	-675.90	1027.88	0.00	379326.04	821202.22	
9800.00	90.00	0.00	9000.00	1039.87	-675.90	1126.82	0.00	379426.04	821202.22	
9900.00	90.00	0.00	9000.00	1139.87	-675.90	1225.77	0.00	379526.04	821202.22	
10000.00	90.00	0.00	9000.00	1239.87	-675.90	1324.71	0.00	379626.04	821202.22	
10100.00	90.00	0.00	9000.00	1339.87	-675.90	1423.66	0.00	379726.04	821202.22	
10200.00	90.00	0.00	9000.00	1439.87	-675.90	1522.60	0.00	379826.04	821202.22	
10300.00	90.00	0.00	9000.00	1539.87	-675.90	1621.55	0.00	379926.04	821202.22	
10400.00	90.00	0.00	9000.00	1639.87	-675.90	1720.49	0.00	380026.04	821202.22	
10500.00	90.00	0.00	9000.00	1739.87	-675.90	1819.44	0.00	380126.04	821202.22	
10600.00	90.00	0.00	9000.00	1839.87	-675.90	1918.38	0.00	380226.04	821202.22	
10700.00	90.00	0.00	9000.00	1939.87	-675.90	2017.33	0.00	380326.04	821202.22	
10800.00	90.00	0.00	9000.00	2039.87	-675.90	2116.27	0.00	380426.04	821202.22	
10900.00	90.00	0.00	9000.00	2139.87	-675.90	2215.22	0.00	380526.04	821202.22	
11000.00	90.00	0.00	9000.00	2239.87	-675.90	2314.16	0.00	380626.04	821202.22	
11100.00	90.00	0.00	9000.00	2339.87	-675.90	2413.11	0.00	380726.04	821202.22	
11200.00	90.00	0.00	9000.00	2439.87	-675.90	2512.05	0.00	380826.04	821202.22	
11300.00	90.00	0.00	9000.00	2539.87	-675.90	2611.00	0.00	380926.04	821202.22	
11400.00	90.00	0.00	9000.00	2639.87	-675.90	2709.94	0.00	381026.04	821202.22	
11500.00	90.00	0.00	9000.00	2739.87	-675.90	2808.89	0.00	381126.04	821202.22	
11600.00	90.00	0.00	9000.00	2839.87	-675.90	2907.83	0.00	381226.04	821202.22	
11700.00	90.00	0.00	9000.00	2939.87	-675.90	3006.78	0.00	381326.04	821202.22	
11800.00	90.00	0.00	9000.00	3039.87	-675.90	3105.72	0.00	381426.04	821202.22	
11900.00	90.00	0.00	9000.00	3139.87	-675.90	3204.67	0.00	381526.04	821202.22	
12000.00	90.00	0.00	9000.00	3239.87	-675.90	3303.61	0.00	381626.04	821202.22	
12100.00	90.00	0.00	9000.00	3339.87	-675.90	3402.56	0.00	381726.04	821202.22	
12200.00	90.00	0.00	9000.00	3439.87	-675.90	3501.50	0.00	381826.04	821202.22	
12300.00	90.00	0.00	9000.00	3539.87	-675.90	3600.45	0.00	381926.04	821202.22	
12400.00	90.00	0.00	9000.00	3639.87	-675.90	3699.39	0.00	382026.04	821202.22	
12500.00	90.00	0.00	9000.00	3739.87	-675.90	3798.34	0.00	382126.04	821202.22	
12600.00	90.00	0.00	9000.00	3839.87	-675.90	3897.28	0.00	382226.04	821202.22	



Weatherford

Wft Plan Report X Y's.

**Weatherford**

Company: Devon Energy
Field: Lea County, New Mexico (NAD 83)
Site: Ragin Cajun 13 Federal 2H
Well: Ragin Cajun 13 Federal 2H
Wellpath: 1

Date: 3/20/2013 Time: 07:44:39 Page: 3
Co-ordinate(NE) Reference: Well: Ragin Cajun 13 Federal 2H
Vertical (TVD) Reference: SITE 3270.0
Section (VS) Reference: Well (0.00N,0.00E,351.67Azi)
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
12700.00	90.00	0.00	9000.00	3939.87	-675.90	3996.23	0.00	382326.04	821202.22	
12800.00	90.00	0.00	9000.00	4039.87	-675.90	4095.17	0.00	382426.04	821202.22	
12900.00	90.00	0.00	9000.00	4139.87	-675.90	4194.12	0.00	382526.04	821202.22	
13000.00	90.00	0.00	9000.00	4239.87	-675.90	4293.06	0.00	382626.04	821202.22	
13100.00	90.00	0.00	9000.00	4339.87	-675.90	4392.01	0.00	382726.04	821202.22	
13200.00	90.00	0.00	9000.00	4439.87	-675.90	4490.95	0.00	382826.04	821202.22	
13300.00	90.00	0.00	9000.00	4539.87	-675.90	4589.90	0.00	382926.04	821202.22	
13378.95	90.00	0.00	9000.00	4618.82	-675.90	4668.01	0.00	383004.99	821202.22	PBHL

Targets

Name	Description Dip. Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<--- Latitude --->			<--- Longitude --->		
							Deg	Min	Sec	Deg	Min	Sec
PBHL		9000.00	4618.82	-675.90	383004.99	821202.22	32	2	59.065 N	103	25	48.155 W
-Rectangle (4000x50)												

Casing Points

MD	TVD	Diameter	Hole Size	Name

Annotation

MD ft	TVD ft	
5600.00	5600.00	Nudge
6000.17	5997.25	Hold
8510.48	8452.66	KOP
9396.95	9000.00	LP
13378.94	9000.00	PBHL



Weatherford Anticollision Report

**Weatherford**

Company: Devon Energy Date: 3/20/2013 Time: 06:38:48 Page: 1
Field: Lea County, New Mexico (NAD 83)
Reference Site: Ragin Cajun 13 Federal 2H Co-ordinate(NE) Reference: Well: Ragin Cajun 13 Federal 2H
Reference Well: Ragin Cajun 13 Federal 2H Vertical (TVD) Reference: SITE 3270.0
Reference Wellpath: Db: Sybase

NO GLOBAL SCAN: Using user defined selection & scan criteria
Interpolation Method MD + Stations Interval: 100.00 ft
Depth Range: 100.00 to 13428.72 ft
Maximum Radius 40000.00 ft

Reference: Plan: Plan #1
Error Model: ISCWSA Ellipse
Scan Method: Closest Approach 3D
Error Surface: Ellipse

Plan: Plan #1

Date Composed: 3/18/2013

Principal: Yes

Version: 1
Tied-to: From Surface

Summary

<----- Offset Wellpath ----->		Reference	Offset	Ctr-Ctr Edge		Separation	Warning
Site	Well	Wellpath	MD ft	MD ft	Distance ft	Distance ft	
Ragin Cajun 13 Feder	Ragin Cajun 13 Feder	1 V0 Plan: Plan #1 V1	5600.00	5600.00	50.00	25.11	2.01

Site: Ragin Cajun 13 Federal 1H

Well: Ragin Cajun 13 Federal 1H

Wellpath: 1 V0 Plan: Plan #1 V1

Inter-Site Error: 0.00 ft

Reference		Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Edge		Separation	Warning
MD ft	TVD ft	MD ft	TVD ft	Ref ft	Offset ft	TFO-HS deg	North ft	East ft	Distance ft	Distance ft	Factor	
100.00	100.00	100.00	100.00	0.08	0.08	89.68	0.28	50.00	50.00	49.83	296.61	
200.00	200.00	200.00	200.00	0.31	0.31	89.68	0.28	50.00	50.00	49.38	80.89	
300.00	300.00	300.00	300.00	0.53	0.53	89.68	0.28	50.00	50.00	48.93	46.83	
400.00	400.00	400.00	400.00	0.76	0.76	89.68	0.28	50.00	50.00	48.48	32.96	
500.00	500.00	500.00	500.00	0.98	0.98	89.68	0.28	50.00	50.00	48.03	25.42	
600.00	600.00	600.00	600.00	1.21	1.21	89.68	0.28	50.00	50.00	47.58	20.69	
700.00	700.00	700.00	700.00	1.43	1.43	89.68	0.28	50.00	50.00	47.14	17.45	
800.00	800.00	800.00	800.00	1.66	1.66	89.68	0.28	50.00	50.00	46.69	15.08	
900.00	900.00	900.00	900.00	1.88	1.88	89.68	0.28	50.00	50.00	46.24	13.28	
1000.00	1000.00	1000.00	1000.00	2.11	2.11	89.68	0.28	50.00	50.00	45.79	11.86	
1100.00	1100.00	1100.00	1100.00	2.33	2.33	89.68	0.28	50.00	50.00	45.34	10.72	
1200.00	1200.00	1200.00	1200.00	2.56	2.56	89.68	0.28	50.00	50.00	44.89	9.78	
1300.00	1300.00	1300.00	1300.00	2.78	2.78	89.68	0.28	50.00	50.00	44.44	8.99	
1400.00	1400.00	1400.00	1400.00	3.01	3.01	89.68	0.28	50.00	50.00	43.99	8.32	
1500.00	1500.00	1500.00	1500.00	3.23	3.23	89.68	0.28	50.00	50.00	43.54	7.74	
1600.00	1600.00	1600.00	1600.00	3.46	3.46	89.68	0.28	50.00	50.00	43.09	7.23	
1700.00	1700.00	1700.00	1700.00	3.68	3.68	89.68	0.28	50.00	50.00	42.64	6.79	
1800.00	1800.00	1800.00	1800.00	3.91	3.91	89.68	0.28	50.00	50.00	42.19	6.40	
1900.00	1900.00	1900.00	1900.00	4.13	4.13	89.68	0.28	50.00	50.00	41.74	6.05	
2000.00	2000.00	2000.00	2000.00	4.35	4.35	89.68	0.28	50.00	50.00	41.29	5.74	
2100.00	2100.00	2100.00	2100.00	4.58	4.58	89.68	0.28	50.00	50.00	40.84	5.46	
2200.00	2200.00	2200.00	2200.00	4.80	4.80	89.68	0.28	50.00	50.00	40.39	5.20	
2300.00	2300.00	2300.00	2300.00	5.03	5.03	89.68	0.28	50.00	50.00	39.94	4.97	
2400.00	2400.00	2400.00	2400.00	5.25	5.25	89.68	0.28	50.00	50.00	39.49	4.76	
2500.00	2500.00	2500.00	2500.00	5.48	5.48	89.68	0.28	50.00	50.00	39.04	4.56	
2600.00	2600.00	2600.00	2600.00	5.70	5.70	89.68	0.28	50.00	50.00	38.59	4.38	
2700.00	2700.00	2700.00	2700.00	5.93	5.93	89.68	0.28	50.00	50.00	38.14	4.22	
2800.00	2800.00	2800.00	2800.00	6.15	6.15	89.68	0.28	50.00	50.00	37.69	4.06	
2900.00	2900.00	2900.00	2900.00	6.38	6.38	89.68	0.28	50.00	50.00	37.25	3.92	
3000.00	3000.00	3000.00	3000.00	6.60	6.60	89.68	0.28	50.00	50.00	36.80	3.79	
3100.00	3100.00	3100.00	3100.00	6.83	6.83	89.68	0.28	50.00	50.00	36.35	3.66	
3200.00	3200.00	3200.00	3200.00	7.05	7.05	89.68	0.28	50.00	50.00	35.90	3.55	
3300.00	3300.00	3300.00	3300.00	7.28	7.28	89.68	0.28	50.00	50.00	35.45	3.44	
3400.00	3400.00	3400.00	3400.00	7.50	7.50	89.68	0.28	50.00	50.00	35.00	3.33	
3500.00	3500.00	3500.00	3500.00	7.73	7.73	89.68	0.28	50.00	50.00	34.55	3.24	
3600.00	3600.00	3600.00	3600.00	7.95	7.95	89.68	0.28	50.00	50.00	34.10	3.14	



Weatherford

Anticollision Report

**Weatherford**

Company: Devon Energy
Field: Lea County, New Mexico (NAD 83)
Reference Site: Ragin Cajun 13 Federal 2H
Reference Well: Ragin Cajun 13 Federal 2H
Reference Wellpath:

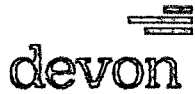
Date: 3/20/2013 Time: 06:38:48 Page: 2
Co-ordinate(NE) Reference: Well: Ragin Cajun 13 Federal 2H
Vertical (TVD) Reference: SITE 3270.0

Db: Sybase

Site: Ragin Cajun 13 Federal 1H
Well: Ragin Cajun 13 Federal 1H
Wellpath: 1 V0 Plan: Plan #1 V1

Inter-Site Error: 0.00 ft

Reference		Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Edge		Separation	Warning
MD	TVD	MD	TVD	Ref	Offset	TFO-HS	North	East	Distance	Distance	Factor	
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
3700.00	3700.00	3700.00	3700.00	8.18	8.18	89.68	0.28	50.00	50.00	33.65	3.06	
3800.00	3800.00	3800.00	3800.00	8.40	8.40	89.68	0.28	50.00	50.00	33.20	2.98	
3900.00	3900.00	3900.00	3900.00	8.63	8.63	89.68	0.28	50.00	50.00	32.75	2.90	
4000.00	4000.00	4000.00	4000.00	8.85	8.85	89.68	0.28	50.00	50.00	32.30	2.82	
4100.00	4100.00	4100.00	4100.00	9.07	9.07	89.68	0.28	50.00	50.00	31.85	2.75	
4200.00	4200.00	4200.00	4200.00	9.30	9.30	89.68	0.28	50.00	50.00	31.40	2.69	
4300.00	4300.00	4300.00	4300.00	9.52	9.52	89.68	0.28	50.00	50.00	30.95	2.62	
4400.00	4400.00	4400.00	4400.00	9.75	9.75	89.68	0.28	50.00	50.00	30.50	2.56	
4500.00	4500.00	4500.00	4500.00	9.97	9.97	89.68	0.28	50.00	50.00	30.05	2.51	
4600.00	4600.00	4600.00	4600.00	10.20	10.20	89.68	0.28	50.00	50.00	29.60	2.45	
4700.00	4700.00	4700.00	4700.00	10.42	10.42	89.68	0.28	50.00	50.00	29.15	2.40	
4800.00	4800.00	4800.00	4800.00	10.65	10.65	89.68	0.28	50.00	50.00	28.70	2.35	
4900.00	4900.00	4900.00	4900.00	10.87	10.87	89.68	0.28	50.00	50.00	28.25	2.30	
5000.00	5000.00	5000.00	5000.00	11.10	11.10	89.68	0.28	50.00	50.00	27.81	2.25	
5100.00	5100.00	5100.00	5100.00	11.32	11.32	89.68	0.28	50.00	50.00	27.36	2.21	
5200.00	5200.00	5200.00	5200.00	11.55	11.55	89.68	0.28	50.00	50.00	26.91	2.17	
5300.00	5300.00	5300.00	5300.00	11.77	11.77	89.68	0.28	50.00	50.00	26.46	2.12	
5400.00	5400.00	5400.00	5400.00	12.00	12.00	89.68	0.28	50.00	50.00	26.01	2.08	
5500.00	5500.00	5500.00	5500.00	12.22	12.22	89.68	0.28	50.00	50.00	25.56	2.05	
5600.00	5600.00	5600.00	5600.00	12.45	12.45	89.68	0.28	50.00	50.00	25.11	2.01	
5700.00	5699.95	5699.95	5699.95	12.66	12.67	173.49	0.28	50.00	52.60	27.29	2.08	
5800.00	5799.63	5799.63	5799.63	12.86	12.90	174.31	0.28	50.00	60.40	34.71	2.35	
5900.00	5898.77	5898.77	5898.77	13.07	13.12	175.29	0.28	50.00	73.40	47.35	2.82	
6000.00	5997.08	5997.08	5997.08	13.29	13.34	176.19	0.28	50.00	91.57	65.21	3.47	
6000.17	5997.25	5997.25	5997.25	13.30	13.34	176.19	0.28	50.00	91.61	65.24	3.47	
6100.00	6094.90	6094.90	6094.90	13.53	13.56	176.89	0.28	50.00	112.34	85.55	4.19	
6200.00	6192.71	6192.71	6192.71	13.77	13.78	177.38	0.28	50.00	133.11	105.90	4.89	
6300.00	6290.52	6290.52	6290.52	14.03	14.00	177.73	0.28	50.00	153.89	126.26	5.57	
6400.00	6388.33	6388.33	6388.33	14.29	14.22	178.00	0.28	50.00	174.68	146.62	6.22	
6500.00	6486.15	6486.15	6486.15	14.56	14.44	178.22	0.28	50.00	195.47	166.98	6.86	
6600.00	6583.96	6583.96	6583.96	14.84	14.66	178.39	0.28	50.00	216.26	187.34	7.48	
6700.00	6681.77	6681.77	6681.77	15.13	14.88	178.53	0.28	50.00	237.05	207.69	8.07	
6800.00	6779.59	6779.59	6779.59	15.43	15.10	178.65	0.28	50.00	257.85	228.05	8.65	
6900.00	6877.40	6877.40	6877.40	15.73	15.32	178.75	0.28	50.00	278.64	248.41	9.22	
7000.00	6975.21	6975.21	6975.21	16.04	15.54	178.84	0.28	50.00	299.44	268.77	9.76	
7100.00	7073.02	7073.02	7073.02	16.36	15.76	178.91	0.28	50.00	320.23	289.12	10.29	
7200.00	7170.84	7170.84	7170.84	16.68	15.98	178.98	0.28	50.00	341.03	309.48	10.81	
7300.00	7268.65	7268.65	7268.65	17.01	16.20	179.04	0.28	50.00	361.83	329.83	11.31	
7400.00	7366.46	7366.46	7366.46	17.34	16.42	179.09	0.28	50.00	382.62	350.18	11.79	
7500.00	7464.28	7464.28	7464.28	17.68	16.64	179.14	0.28	50.00	403.42	370.53	12.27	
7600.00	7562.09	7562.09	7562.09	18.02	16.86	179.18	0.28	50.00	424.22	390.88	12.73	
7700.00	7659.90	7659.90	7659.90	18.37	17.08	179.22	0.28	50.00	445.01	411.23	13.17	
7800.00	7757.72	7757.72	7757.72	18.72	17.30	179.25	0.28	50.00	465.81	431.58	13.61	
7900.00	7855.53	7855.53	7855.53	19.08	17.52	179.28	0.28	50.00	486.61	451.93	14.03	
8000.00	7953.34	7953.34	7953.34	19.44	17.74	179.31	0.28	50.00	507.41	472.27	14.44	
8100.00	8051.15	8051.15	8051.15	19.80	17.96	179.34	0.28	50.00	528.21	492.62	14.84	
8200.00	8148.97	8148.97	8148.97	20.17	18.18	179.36	0.28	50.00	549.01	512.96	15.23	
8300.00	8246.78	8246.78	8246.78	20.53	18.40	179.39	0.28	50.00	569.80	533.31	15.61	
8400.00	8344.59	8344.59	8344.59	20.91	18.62	179.41	0.28	50.00	590.60	553.65	15.98	
8500.00	8442.41	8442.03	8442.02	21.28	18.83	179.41	0.47	50.02	611.41	574.00	16.34	
8510.48	8452.65	8452.01	8452.00	21.32	18.86	179.38	0.82	50.07	613.59	576.14	16.38	



Weatherford Anticollision Report

**Weatherford**

Company: Devon Energy
Field: Lea County, New Mexico (NAD 83)
Reference Site: Ragin Cajun 13 Federal 2H
Reference Well: Ragin Cajun 13 Federal 2H
Reference Wellpath:

Date: 3/20/2013 Time: 06:38:48 Page: 3
Co-ordinate(NE) Reference: Well: Ragin Cajun 13 Federal 2H
Vertical (TVD) Reference: SITE 3270.0

Db: Sybase

Site: Ragin Cajun 13 Federal 1H
Well: Ragin Cajun 13 Federal 1H
Wellpath: 1 V0 Plan: Plan #1 V1

Inter-Site Error: 0.00 ft

Reference		Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Edge		Separation	Warning
MD	TVD	MD	TVD	Ref	Offset	TFO-HS	North	East	Distance	Distance	Factor	
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
8550.00	8491.25	8489.56	8489.43	21.44	18.94	161.12	3.66	50.43	622.02	584.39	16.53	
8600.00	8539.70	8536.83	8536.16	21.48	19.04	143.23	10.68	51.33	633.08	595.24	16.73	
8650.00	8587.39	8583.90	8581.95	21.42	19.14	130.88	21.44	52.71	644.53	606.45	16.93	
8700.00	8633.95	8630.80	8626.53	21.28	19.24	122.26	35.84	54.56	656.26	617.93	17.12	
8750.00	8679.03	8677.57	8669.67	21.08	19.34	115.96	53.75	56.86	668.19	629.59	17.31	
8800.00	8722.29	8724.28	8711.13	20.89	19.45	111.14	75.05	59.59	680.23	641.32	17.48	
8850.00	8763.40	8770.97	8750.68	20.75	19.56	107.30	99.63	62.74	692.28	653.04	17.64	
8900.00	8802.04	8817.68	8788.11	20.70	19.68	104.14	127.33	66.30	704.26	664.66	17.78	
8950.00	8837.92	8864.48	8823.21	20.74	19.82	101.48	158.02	70.23	716.07	676.07	17.90	
9000.00	8870.76	8911.41	8855.74	20.86	19.97	99.22	191.54	74.53	727.62	687.19	18.00	
9050.00	8900.33	8958.51	8885.51	21.02	20.14	97.28	227.73	79.18	738.84	697.94	18.07	
9100.00	8926.38	9005.83	8912.29	21.23	20.34	95.61	266.41	84.14	749.64	708.23	18.11	
9150.00	8948.73	9053.41	8935.89	21.47	20.56	94.17	307.37	89.39	759.93	717.99	18.12	
9200.00	8967.21	9101.27	8956.09	21.74	20.81	92.94	350.40	94.91	769.64	727.13	18.10	
9250.00	8981.66	9149.47	8972.70	22.04	21.08	91.91	395.25	100.67	778.71	735.59	18.06	
9300.00	8991.99	9198.00	8985.53	22.37	21.39	91.06	441.67	106.62	787.06	743.30	17.98	
9350.00	8998.12	9246.89	8994.40	22.73	21.73	90.39	489.34	112.74	794.64	750.20	17.88	
9396.95	9000.00	9293.13	8999.00	23.09	22.07	89.93	534.96	118.59	800.99	755.89	17.76	
9400.00	9000.00	9296.15	8999.17	23.12	22.09	89.94	537.95	118.97	801.38	756.23	17.75	
9500.00	9000.00	9395.31	9000.00	24.07	22.90	90.00	636.29	131.59	814.10	767.20	17.36	
9600.00	9000.00	9494.49	9000.00	25.11	23.81	90.00	734.67	144.21	826.83	777.96	16.92	
9700.00	9000.00	9593.68	9000.00	26.24	24.82	90.00	833.05	156.83	839.55	788.55	16.46	
9800.00	9000.00	9692.87	9000.00	27.44	25.92	90.00	931.43	169.45	852.27	798.98	15.99	
9900.00	9000.00	9792.06	9000.00	28.71	27.08	90.00	1029.82	182.07	865.00	809.27	15.52	
10000.00	9000.00	9891.24	9000.00	30.04	28.32	90.00	1128.20	194.69	877.72	819.43	15.06	
10100.00	9000.00	9990.43	9000.00	31.41	29.61	90.00	1226.58	207.31	890.44	829.49	14.61	
10200.00	9000.00	10089.62	9000.00	32.83	30.95	90.00	1324.96	219.93	903.17	839.45	14.18	
10300.00	9000.00	10188.80	9000.00	34.28	32.33	90.00	1423.34	232.55	915.89	849.34	13.76	
10400.00	9000.00	10287.99	9000.00	35.77	33.75	90.00	1521.72	245.17	928.61	859.15	13.37	
10500.00	9000.00	10387.18	9000.00	37.29	35.21	90.00	1620.10	257.79	941.34	868.89	12.99	
10600.00	9000.00	10486.37	9000.00	38.84	36.69	90.00	1718.48	270.41	954.06	878.58	12.64	
10700.00	9000.00	10585.55	9000.00	40.41	38.21	90.00	1816.86	283.03	966.79	888.23	12.31	
10800.00	9000.00	10684.74	9000.00	42.00	39.74	90.00	1915.25	295.65	979.51	897.82	11.99	
10900.00	9000.00	10783.93	9000.00	43.60	41.30	90.00	2013.63	308.27	992.23	907.38	11.69	
11000.00	9000.00	10883.12	9000.00	45.23	42.87	90.00	2112.01	320.89	1004.96	916.91	11.41	
11100.00	9000.00	10982.30	9000.00	46.86	44.46	90.00	2210.39	333.51	1017.68	926.40	11.15	
11200.00	9000.00	11081.49	9000.00	48.52	46.07	90.00	2308.77	346.13	1030.40	935.87	10.90	
11300.00	9000.00	11180.68	9000.00	50.18	47.69	90.00	2407.15	358.75	1043.13	945.31	10.66	
11400.00	9000.00	11279.86	9000.00	51.85	49.32	90.00	2505.53	371.37	1055.85	954.72	10.44	
11500.00	9000.00	11379.05	9000.00	53.54	50.96	90.00	2603.91	383.99	1068.57	964.12	10.23	
11600.00	9000.00	11478.24	9000.00	55.23	52.61	90.00	2702.29	396.61	1081.30	973.50	10.03	
11700.00	9000.00	11577.43	9000.00	56.93	54.27	90.00	2800.68	409.23	1094.02	982.86	9.84	
11800.00	9000.00	11676.61	9000.00	58.64	55.94	90.00	2899.06	421.85	1106.74	992.21	9.66	
11900.00	9000.00	11775.80	9000.00	60.35	57.61	90.00	2997.44	434.47	1119.47	1001.54	9.49	
12000.00	9000.00	11874.99	9000.00	62.07	59.30	90.00	3095.82	447.09	1132.19	1010.86	9.33	
12100.00	9000.00	11974.18	9000.00	63.80	60.98	90.00	3194.20	459.71	1144.91	1020.17	9.18	
12200.00	9000.00	12073.36	9000.00	65.53	62.68	90.00	3292.58	472.33	1157.64	1029.46	9.03	
12300.00	9000.00	12172.55	9000.00	67.27	64.38	90.00	3390.96	484.95	1170.36	1038.75	8.89	
12400.00	9000.00	12271.74	9000.00	69.01	66.08	90.00	3489.34	497.57	1183.09	1048.03	8.76	
12500.00	9000.00	12370.92	9000.00	70.75	67.79	90.00	3587.72	510.19	1195.81	1057.29	8.63	
12600.00	9000.00	12470.11	9000.00	72.50	69.51	90.00	3686.11	522.81	1208.53	1066.56	8.51	



Weatherford Anticollision Report

**Weatherford**

Company: Devon Energy Date: 3/20/2013 Time: 06:38:48 Page: 4
Field: Lea County, New Mexico (NAD 83)
Reference Site: Ragin Cajun 13 Federal 2H Co-ordinate(NE) Reference: Well: Ragin Cajun 13 Federal 2H
Reference Well: Ragin Cajun 13 Federal 2H Vertical (TVD) Reference: SITE 3270.0
Reference Wellpath: Db: Sybase

Site: Ragin Cajun 13 Federal 1H
Well: Ragin Cajun 13 Federal 1H
Wellpath: 1 V0 Plan: Plan #1 V1

Inter-Site Error: 0.00 ft

Reference		Offset		Semi-Major Axis			Offset Location		Ctr-Ctr Edge		Separation	Warning
MD	TVD	MD	TVD	Ref	Offset	TFO-HS	North	East	Distance	Distance	Factor	
ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft		
12700.00	9000.00	12569.30	9000.00	74.26	71.22	90.00	3784.49	535.43	1221.26	1075.81	8.40	
12800.00	9000.00	12668.49	9000.00	76.01	72.94	90.00	3882.87	548.05	1233.98	1085.05	8.29	
12900.00	9000.00	12767.67	9000.00	77.77	74.67	90.00	3981.25	560.67	1246.70	1094.29	8.18	
13000.00	9000.00	12866.86	9000.00	79.53	76.39	90.00	4079.63	573.29	1259.43	1103.53	8.08	
13100.00	9000.00	12966.05	9000.00	81.30	78.12	90.00	4178.01	585.91	1272.15	1112.76	7.98	
13200.00	9000.00	13065.24	9000.00	83.06	79.86	90.00	4276.39	598.53	1284.87	1121.98	7.89	
13300.00	9000.00	13164.42	9000.00	84.83	81.59	90.00	4374.77	611.15	1297.60	1131.20	7.80	
13378.95	9000.00	13242.73	9000.00	86.23	82.96	90.00	4452.44	621.11	1307.64	1138.47	7.73	

**Weatherford®****Weatherford Drilling Services**

GeoDec v5.03

Report Date: March 18, 2013
Job Number: _____
Customer: Devon Energy
Well Name: Ragin Cajun 13 Federal 2H
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 378386.170 USFT	Latitude 32.0370312 DEG
East/West 821878.120 USFT	Longitude -103.4279813 DEG
Grid Convergence: .48°	
Total Correction: +6.82°	

Geodetic Location WGS84	Elevation =	0.0 Meters
Latitude =	32.03703° N	32° 2 min 13.312 sec
Longitude =	103.42798° W	103° 25 min 40.733 sec

Magnetic Declination =	7.30°	[True North Offset]
Local Gravity =	.9988 g	Checksum = 6767
Local Field Strength =	48247 nT	Magnetic Vector X = 23983 nT
Magnetic Dip =	59.92°	Magnetic Vector Y = 3073 nT
Magnetic Model =	bggm2012	Magnetic Vector Z = 41751 nT
Spud Date =	Dec 30, 2013	Magnetic Vector H = 24180 nT

Signed: _____

Date: _____

NOTES REGARDING BLOWOUT PREVENTERS

Devon Energy Production Company, LP

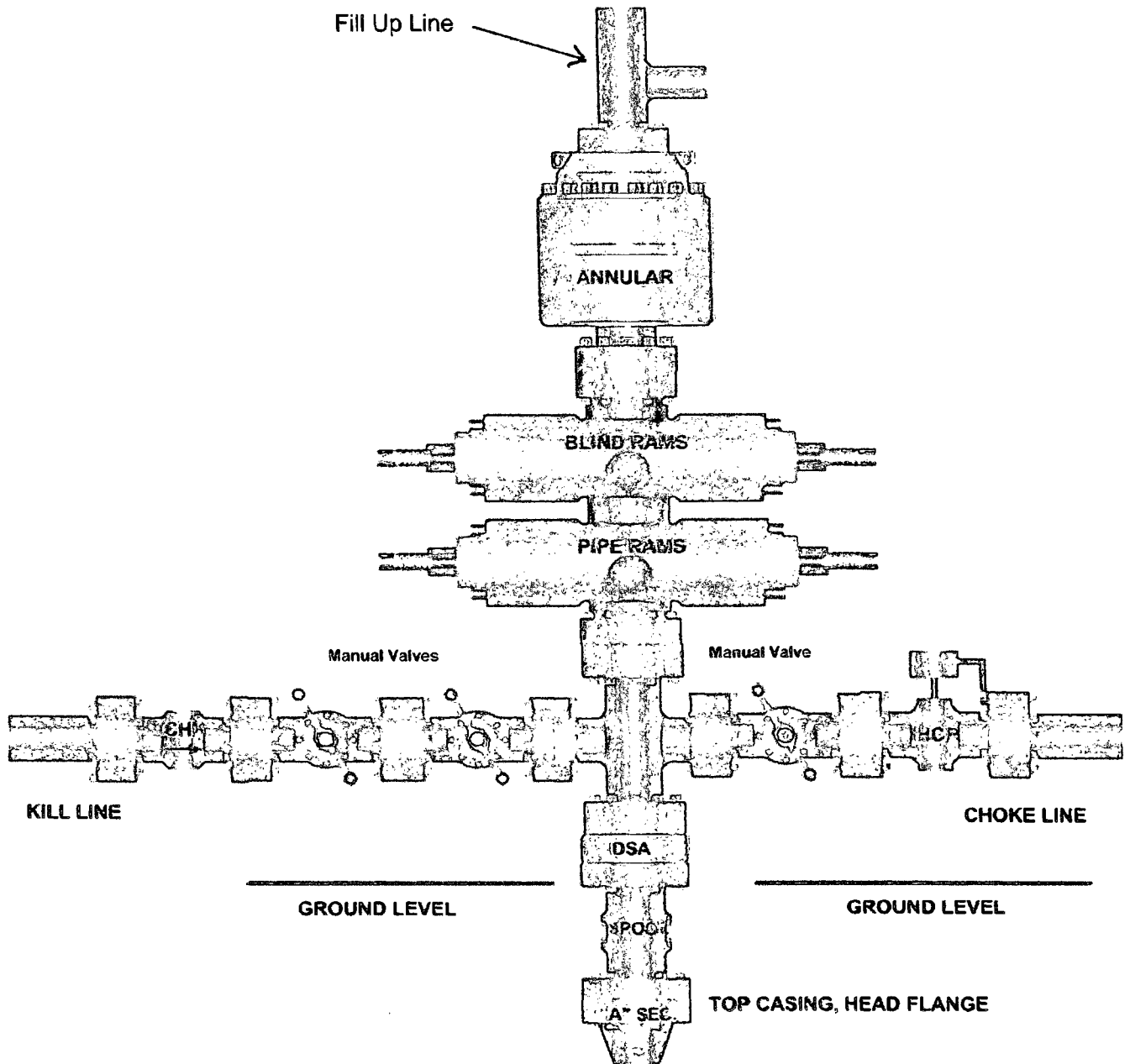
Ragin Cajun 13 Federal 2H

Surface Location: 330' FSL & 1295' FWL, Unit M, Sec 13 T26S R34E, Lea, NM

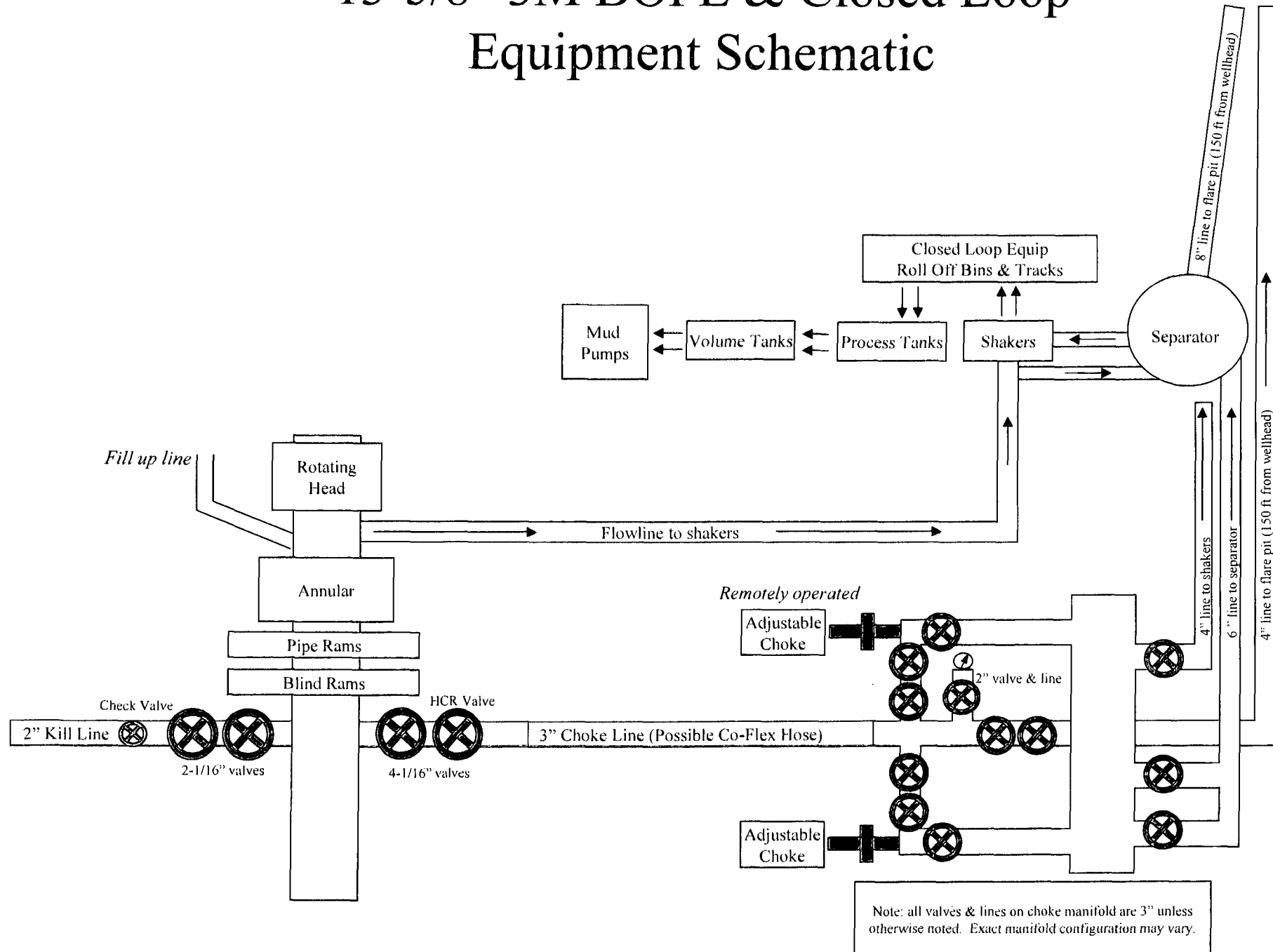
Bottom Hole Location: 330' FNL & 660' FWL, Unit D, Sec 13 T26S R34E, Lea, NM

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



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





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.

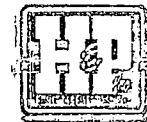
Should you have any questions or require any additional information/clarifications then please do not hesitate to contact us.

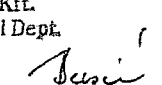
ContiTech Beattie is part of the Continental AG Corporation and can offer the full support resources associated with a global organization.

Best regards,

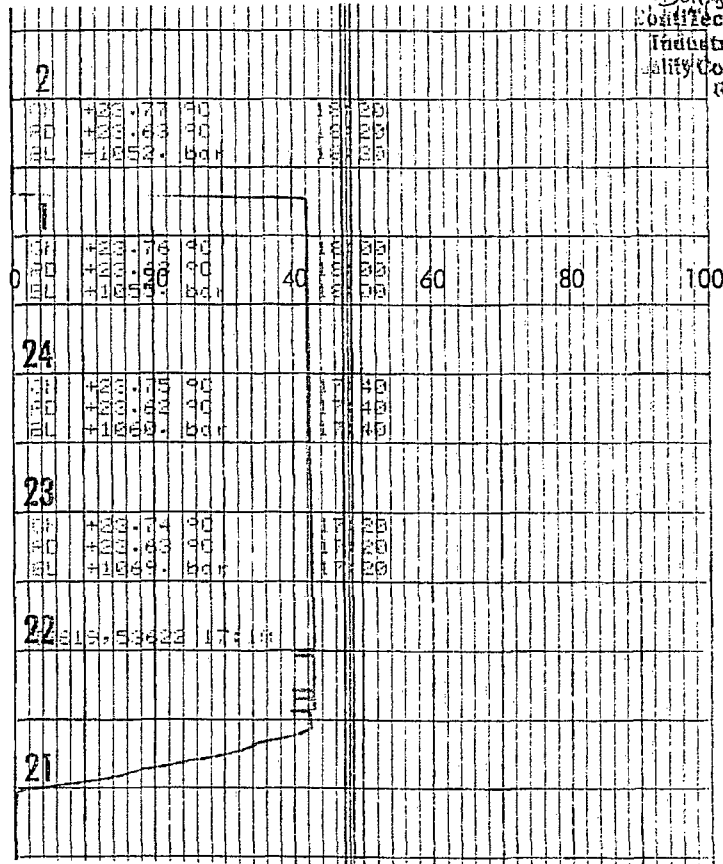
Robin Hodgson
Sales Manager
ContiTech Beattie Corp

ContiTech Beattie Corp,
11535 Brittmoore Park Drive,
Houston, TX 77041
Phone: +1 (832) 327-0141
Fax: +1 (832) 327-0148
www.contitechbeattie.com



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	
3" coupling with 4 1/16" Flange end		5503 2029		AISI 4130 AISI 4130	
				Heat N° N1590P 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: 25. August. 2008		Inspector		Quality Control ContiTech Rubber Industrial Kft. Quality Control Dept.  	

HARTMANN &



S. G. 33
1991
KosulTech Rubber
Industrial Kft.
Quality Control Dept.
(2)