

Form 3160-3
(March 2012)

HOBBS OCD

JUN 27 2013

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs
HOBBS OCD

RECEIVED APPLICATION FOR PERMIT TO DRILL OR REENTER JUN 27 2013

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

5. Lease Serial No.
NM-0359295-A

6. If Indian, Allottee or Tribe Name

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

8. Lease Name and Well No.
VAN DOO DAH 33 FEDERAL 1H

9. API Well No.

10. Field and Pool, or Exploratory
UNDESIGNATED BONE SPRING

11. Sec., T. R. M. or Blk. and Survey or Area
SECTION 33, T. 25 S., R. 32 E.

12. County or Parish
LEA

13. State
NM

1a. Type of work: ☒ DRILL ☐ REENTER

RECEIVED

1b. 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 73102

3b. Phone No. (include area code)
405-552-4524

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

At surface 330 FNL & 1650 FWL

At proposed prod. zone 330 FSL & 1650 FWL

14. Distance in miles and direction from nearest town or post office*
25 MILES SOUTHEAST OF MALAGA, NM

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

330'

16. No. of acres in lease
880

17. Spacing Unit dedicated to this well
160

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
1412' nearest well
1700' nearest on lease

19. Proposed Depth
MD: 13921'
TVD: 9550'

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

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3362.2' GL

22. Approximate date work will start*

23. Estimated duration
30 DAYS

24. Attachments

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

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

25. Signature

Barry W. Hunt

Name (Printed/Typed)
BARRY W. HUNT

Date

7/17/12

Title

PERMIT AGENT FOR DEVON ENERGY PRODUCTION COMPANY, L.P.

Approved by (Signature)

/s/ James Stovall

Name (Printed/Typed)

Date

JUN 24 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

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

JUL 08 2013

dm

DEVON ENERGY PRODUCTION, L. P.
DRILLING PLAN

VAN DOO DAH 33 FEDERAL 1H

SHL: 330 FNL & 1650 FWL

BHL: 330 FSL & 1650 FWL

Section 33-25S-32E

Lea County, NM

The elevation of the unprepared ground is 3362.2' feet above sea level.

The geologic name of the surface formation is Quaternary - Alluvium.

A rotary rig will be utilized to drill the well.

Proposed total depth is: MD: 13921'. TVD: 9800'.

Estimated tops of important geologic markers:

Quaternary – Alluvium	Surface*
Rustler	1043'
Salado	1135'
Top of Salt	1428'
Castile	2761'
Base of Salt	4162'
Delaware	4573'
Bell Canyon Sand	4620'
Cherry Canyon Sand	5513'
Brushy Canyon Sand	6951'
Bone Spring	8573'
TVD	9800' (140 degree F)

*Water anticipated at 200 feet.

Estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered:

Delaware	Oil (1966 psi)
Bell Canyon	Oil (1987 psi)
Cherry Canyon	Oil (2371 psi)
Brushy Canyon	Oil (2989 psi)
Bone Spring	Oil (3686 psi)
TVD	Oil BHP 4214 psi

Van Doo Dah Federal 1H – APD DRILLING PLAN

8.25.2012 ETC

Pressure Control Equipment:

BOP DESIGN: The BOP system used to drill the intermediate and production holes will consist of a 13-5/8" 3M Triple Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a 3M system prior to drilling out the prior casing shoe.

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.

Casing Program (All new casing)

<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' - 1,100'	13.375"	0' - 1,100'	54.5#	BTC	J-55
12-1/4"	1,100' - 4,200'	9.625"	0' - 4,200'	40#	BTC	HCK-55
8-3/4"	4,200' - 7,000'	5.5"	0 - 7,000'	17#	LTC	P-110HC
8-3/4"	7,000' - 13,921'	5.5"	7,000 - 13,921'	17#	BTC	P-110HC

Max TVD: 9,550 ft

A pilot hole will be drilled to 9800' MD/TVD and plugged back to 8900' with the following cement slurry: 385 sks Class H Cement with 0.2% bwoc R-3 + 46.4 % Fresh water. Yield: 1.18 ft³/sk, 15.60 ppg.

<u>Casing Size</u>	<u>Collapse Design Factor</u>	<u>Burst Design Factor</u>	<u>Tension Design Factor</u>
13.375"	2.20	5.30	15.16
9.625"	1.94	1.81	5.51
5.5"	2.04	2.53	1.88
5.5"	1.93	2.39	6.76

Cementing Program (volumes based on at least 25% excess):

13-3/8" Surface

FLUID SPECIFICATIONS

Spacer

20.0 bbls Fresh Water @ 8.34 ppg

<u>FLUID</u>	<u>VOLUME CU-FT</u>	<u>VOLUME FACTOR</u>	<u>AMOUNT AND TYPE OF CEMENT</u>
Lead Slurry	1029	/ 1.73	= 595 sacks Class C Cement + 0.125 lbs/sack Cello Flake + 4% bwoc Bentonite + 1% bwoc Calcium Chloride + 81.1% Fresh Water
Tail Slurry	534	/ 1.34	= 400 sacks Class C Cement + 1% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 56.2% Fresh Water

Displacement

166.5 bbls Mud @ 9 ppg

CEMENT PROPERTIES

	SLURRY NO.1	SLURRY NO.2
Slurry Weight (ppg)	13.50	14.80
Slurry Yield (cf/sack)	1.73	1.34
Amount of Mix Water (gps)	9.14	6.34
Estimated Pumping Time - 70 BC (HH:MM)	3:30	2:30
COMPRESSIVE STRENGTH		
72 hrs @ 80 ° F (psi)		2700
7 hrs @ 93 ° F (psi)		500
12 hrs @ 93 ° F (psi)	350	1000
15 hrs @ 93 ° F (psi)	500	
24 hrs @ 93 ° F (psi)	750	1600

TOC @ surface.

9-5/8" Intermediate

FLUID SPECIFICATIONS

Spacer

20.0 bbls Fresh Water @ 8.34 ppg

FLUID	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
Lead Slurry	2154	/ 1.73	= 1240 sacks (60:40) Poz (Fly Ash):Class C Cement + 0.25% bwoc FL-52 + 0.3% bwoc R-3 + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 3 lbs/sack LCM-1 + 1% bwoc Sodium Metasilicate + 89.6% Fresh Water
Tail Slurry	413	/ 1.38	= 300 sacks (60:40) Poz (Fly Ash):Class C Cement + 0.5% bwoc BA-10A + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.1% bwoc Sodium Metasilicate + 4% bwoc MPA-5 + 65.2% Fresh Water

Displacement

315.4 bbls Mud @ 10 ppg

CEMENT PROPERTIES

	SLURRY NO.1	SLURRY NO.2
Slurry Weight (ppg)	12.60	13.80
Slurry Yield (cf/sack)	1.73	1.38
Amount of Mix Water (gps)	8.81	6.41
Estimated Pumping Time - 70 BC (HH:MM)	4:30	2:30
Free Water (mls) @ 110 ° F @ 90 ° Angle	2.0	0.5
Fluid Loss (cc/30min) at 1000 psi and 110 ° F	300.0	200.0
COMPRESSIVE STRENGTH		
17 hrs @ 100 ° F (psi)	500	
24 hrs @ 100 ° F (psi)	875	
72 hrs @ 100 ° F (psi)	1600	
8 hrs @ 112 ° F (psi)		500
12 hrs @ 112 ° F (psi)		1400
24 hrs @ 112 ° F (psi)		2400

TOC @ surface

5-1/2" Production

Stage One

FLUID SPECIFICATIONS

STAGE NO. 1

Spacer

50.0 bbls Fresh Water @ 8.34 ppg

<u>FLUID</u>	<u>VOLUME CU-FT</u>	<u>VOLUME FACTOR</u>	<u>AMOUNT AND TYPE OF CEMENT</u>
Lead Slurry	1263	/ 2.01	= 630 sacks (35:65) Poz (Fly Ash):Class H Cement + 3% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 6% bwoc Bentonite + 0.7% bwoc FL-52 + 0.3% bwoc ASA-301 + 0.2% bwoc R-3 + 105.5% Fresh Water
Tail Slurry	1621	/ 1.28	= 1270 sacks (50:50) Poz (Fly Ash):Class H Cement + 5% bwow Sodium Chloride + 0.3% bwoc CD-32 + 0.5% bwoc FL-25 + 0.5% bwoc FL-52 + 0.25% bwoc Sodium Metasilicate + 57.2% Fresh Water
Displacement			322.7 bbls Displacement Fluid

CEMENT PROPERTIES

	<u>SLURRY NO.1</u>	<u>SLURRY NO.2</u>
Slurry Weight (ppg)	12.50	14.20
Slurry Yield (cf/sack)	2.01	1.28
Amount of Mix Water (gps)	11.01	5.76
Estimated Pumping Time - 70 BC (HH:MM)	5:00	4:00
Free Water (mls) @ 156 ° F @ 90 ° Angle	2.5	0.0
Fluid Loss (cc/30min) at 1000 psi and 156 ° F	300.0	50.0

COMPRESSIVE STRENGTH

12 hrs @ 150 ° F (psi)	300	
24 hrs @ 150 ° F (psi)	650	
72 hrs @ 150 ° F (psi)	1100	
12 hrs @ 156 ° F (psi)		600
24 hrs @ 156 ° F (psi)		1700
72 hrs @ 156 ° F (psi)		2000

Stage 2: DV tool at 6500'

FLUID SPECIFICATIONS (Continued)

STAGE NO. 2

Spacer				20.0 bbls Fresh Water @ 8.34 ppg
Lead Slurry	1099	/	2.88	= 385 sacks Class C Cement + 1.25% bwoc R-3 + 0.125 lbs/sack Cello Flake + 3% bwoc Sodium Metasilicate + 0.3% bwoc FL-52 + 157% Fresh Water
Tail Slurry	206	/	1.37	= 150 sacks (60:40) Poz (Fly Ash):Class C Cement + 0.5% bwoc BA-10A + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 4% bwoc MPA-5 + 65.1% Fresh Water

<u>FLUID</u>	<u>VOLUME CU-FT</u>	<u>VOLUME FACTOR</u>	<u>AMOUNT AND TYPE OF CEMENT</u>	
Displacement			151.1 bbls Displacement Fluid	
CEMENT PROPERTIES			SLURRY NO.1	SLURRY NO.2
Slurry Weight (ppg)			11.40	13.80
Slurry Yield (cf/sack)			2.88	1.37
Amount of Mix Water (gps)			17.69	6.40
Estimated Pumping Time - 70 BC (HH:MM)			3:45	2:30
Free Water (mls) @ 114 ° F @ 90 ° Angle			2.5	0.5
Fluid Loss (cc/30min) at 1000 psi and 114 ° F			300.0	200.0
COMPRESSIVE STRENGTH				
12 hrs @ 112 ° F (psi)			130	
24 hrs @ 112 ° F (psi)			300	
12 hrs @ 125 ° F (psi)				900
24 hrs @ 125 ° F (psi)				1800
72 hrs @ 125 ° F (psi)				2500

TOC for All Strings:

Surface: 0 ft
Intermediate 1: 0 ft
Production: ~~3,850 ft~~ See Corr

ACTUAL CEMENT VOLUMES WILL BE ADJUSTED BASED ON FLUID CALIPER AND CALIPER LOG DATA.

Mud Program:

See
COA

<u>Depth</u> /200	<u>Mud Wt.</u>	<u>Visc.</u>	<u>Fluid Loss</u>	<u>Type System</u>
0' - 1,100' 457'	9.8 - 10.0	28 - 32	N/C	Brine
1,100' - 4,200'	8.4 - 9.0	28 - 30	N/C	FW
4,200' - 13,921'	8.6 - 9.0	28 - 32	N/C-12	FW

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:
 1. Total depth to intermediate casing Dual Laterolog-Micro Laterolog with SP and Gamma Ray. Compensated Neutron - Z Density log with Gamma Ray and Caliper.
 2. Total Depth to Surface Compensated Neutron with Gamma Ray.
 3. No coring program is planned.
 4. 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.

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.

See
COA

POTENTIAL HAZARDS:

- a. No abnormal pressures or temperatures are expected. There is no known presence of H2S in this area; therefore, no H2S is anticipated. 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 4214 and estimated BHT 140.**

See
COA

ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

- a. Road and location construction will begin after BLM has approved the APD. Anticipated spud date will be soon after BLM approval and as soon as a rig is 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 flowlines in order to place well on production.



Weatherford[®]

Drilling Services

Proposal



devon

VAN DOO DAH 33 FEDERAL 1H

EDDY COUNTY, NM

WELL FILE: PLAN 2

JUNE 21, 2012

Weatherford International, Ltd.

P.O. Box 61028

Midland, TX 79711 USA

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+1.432.561.8895 Fax

www.weatherford.com

devon

Van Doo Dah 33 Fed 1H
Lea County, New Mexico

KB ELEV: 3387
GL ELEV: 3362

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	179.83	0.00	0.00	0.00	0.00	0.00	0.00	
2	8977.08	0.00	179.83	8977.08	0.00	0.00	0.00	0.00	0.00	
3	9884.18	90.71	179.83	9550.00	-580.05	1.73	10.00	179.83	580.05	
4	13921.15	90.71	179.83	9500.00	-4616.70	13.80	0.00	0.00	4616.72	PBHL

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
Van Doo Dah 33 Fed 1H	0.00	0.00	398262.60	742637.80	32°05'35.640N	103°40'59.897W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	9500.00	-4616.70	13.80	393645.90	742651.60	32°04'49.954N	103°41'00.060W	Point

SITE DETAILS

Van Doo Dah 33 Fed 1H
Site Centre Northing: 398262.60
Easting: 742637.80
Ground Level: 3362.00
Positional Uncertainty: 0.00
Convergence: 0.35



Azimuths to Grid North
True North: -0.35°
Magnetic North: 7.08°
Magnetic Field
Strength: 48383nT
Dip Angle: 60.00°
Date: 2/15/2013
Model: IGRF2010

Total Correction to Grid North: 7.08°

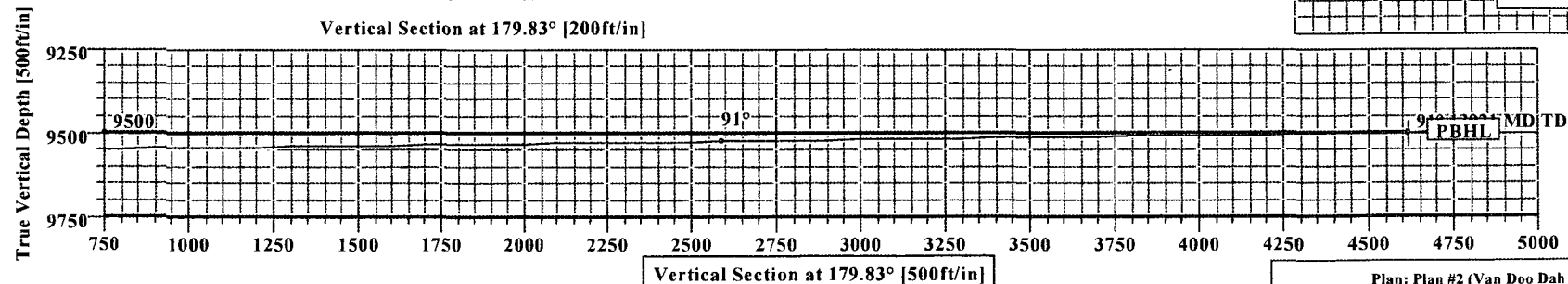
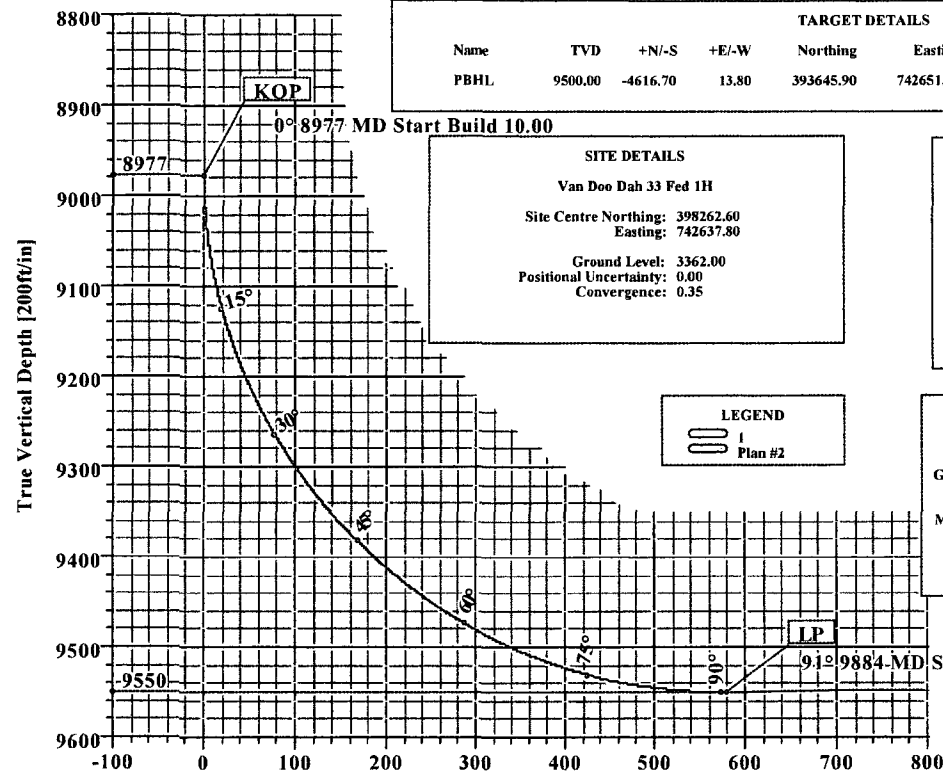
FIELD DETAILS

Lea County, New Mexico (NAD 83)
Geodetic System: US State Plane Coordinate System 1983
Ellipsoid: GRS 1980
Zone: New Mexico, Eastern Zone
Magnetic Model: IGRF2010
System Datum: Mean Sea Level
Local North: Grid North

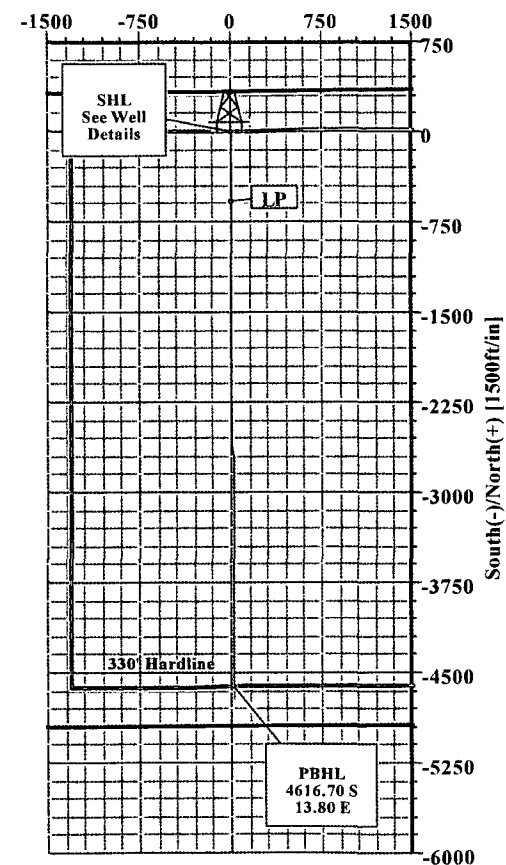
LEGEND



Plan #2



West(-)/East(+) [1500ft/in]



Plan: Plan #2 (Van Doo Dah 33 Fed 1H/1)

Created By: Keith Noack

Date: 6/21/2012

Weatherford



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WFT Plan Report - X & Y's



Weatherford

Company: Devon Energy	Date: 6/21/2012	Time: 08:11:51	Page: 1
Field: Lea County, New Mexico (NAD 83)	Co-ordinate(NE) Reference: Well: Van Doo Dah 33 Fed 1H, Grid North		
Site: Van Doo Dah 33 Fed 1H	Vertical (TVD) Reference: SITE 3387.0		
Well: Van Doo Dah 33 Fed 1H	Section (VS) Reference: Well (0.00N,0.00E,179.83Azi)		
Wellpath: 1	Survey Calculation Method: Minimum Curvature	Db: Sybase	

Plan: Plan #2	Date Composed: 6/20/2012
Principal: Yes	Version: 1
	Tied-to: From Surface

Field: Lea County, New Mexico (NAD 83)	
Map System: US State Plane Coordinate System 1983	Map Zone: New Mexico, Eastern Zone
Geo Datum: GRS 1980	Coordinate System: Well Centre
Sys Datum: Mean Sea Level	Geomagnetic Model: IGRF2010

Site: Van Doo Dah 33 Fed 1H		
Site Position:	Northing: 398262.60 ft	Latitude: 32 5 35.640 N
From: Map	Easting: 742637.80 ft	Longitude: 103 40 59.897 W
Position Uncertainty: 0.00 ft		North Reference: Grid
Ground Level: 3362.00 ft		Grid Convergence: 0.35 deg

Well: Van Doo Dah 33 Fed 1H	Slot Name:	
Well Position: +N-S 0.00 ft	Northing: 398262.60 ft	Latitude: 32 5 35.640 N
+E-W 0.00 ft	Easting: 742637.80 ft	Longitude: 103 40 59.897 W
Position Uncertainty: 0.00 ft		

Wellpath: 1	Drilled From: Surface		
Current Datum: SITE	Tie-on Depth: 0.00 ft		
Magnetic Data: 2/15/2013	Above System Datum: Mean Sea Level		
Field Strength: 48383 nT	Declination: 7.42 deg		
Vertical Section: Depth From (TVD)	Mag Dip Angle: 60.00 deg		
ft	+N-S	+E-W	Direction
	ft	ft	deg
0.00	0.00	0.00	179.83

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	179.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
8977.08	0.00	179.83	8977.08	0.00	0.00	0.00	0.00	0.00	0.00	
9884.18	90.71	179.83	9550.00	-580.05	1.73	10.00	10.00	0.00	179.83	
13921.15	90.71	179.83	9500.00	-4616.70	13.80	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
8900.00	0.00	179.83	8900.00	0.00	0.00	0.00	0.00	398262.60	742637.80	KOP
8977.08	0.00	179.83	8977.08	0.00	0.00	0.00	0.00	398262.60	742637.80	
9000.00	2.29	179.83	8999.99	-0.46	0.00	0.46	10.00	398262.14	742637.80	
9100.00	12.29	179.83	9099.06	-13.13	0.04	13.13	10.00	398249.47	742637.84	
9200.00	22.29	179.83	9194.42	-42.82	0.13	42.82	10.00	398219.78	742637.93	
9300.00	32.29	179.83	9283.17	-88.61	0.26	88.61	10.00	398173.99	742638.06	LP
9400.00	42.29	179.83	9362.63	-149.12	0.45	149.13	10.00	398113.48	742638.25	
9500.00	52.29	179.83	9430.37	-222.51	0.67	222.51	10.00	398040.09	742638.47	
9600.00	62.29	179.83	9484.34	-306.55	0.92	306.55	10.00	397956.05	742638.72	
9700.00	72.29	179.83	9522.89	-398.68	1.19	398.68	10.00	397863.92	742638.99	
9800.00	82.29	179.83	9544.86	-496.11	1.48	496.11	10.00	397766.49	742639.28	
9884.18	90.71	179.83	9550.00	-580.05	1.73	580.05	10.00	397682.55	742639.53	
9900.00	90.71	179.83	9549.80	-595.87	1.78	595.87	0.00	397666.73	742639.58	
10000.00	90.71	179.83	9548.56	-695.86	2.08	695.87	0.00	397566.74	742639.88	
10100.00	90.71	179.83	9547.32	-795.86	2.38	795.86	0.00	397466.74	742640.18	
10200.00	90.71	179.83	9546.08	-895.85	2.68	895.85	0.00	397366.75	742640.48	
10300.00	90.71	179.83	9544.85	-995.84	2.98	995.84	0.00	397266.76	742640.78	



Weatherford International Ltd.

WFT Plan Report - X & Y's

**Weatherford**

Company: Devon Energy Date: 6/21/2012 Time: 08:11:51 Page: 2
Field: Lea County, New Mexico (NAD 83) Co-ordinate(NE) Reference: Well: Van Doo Dah 33 Fed 1H, Grid North
Site: Van Doo Dah 33 Fed 1H Vertical (TVD) Reference: SITE 3387.0
Well: Van Doo Dah 33 Fed 1H Section (VS) Reference: Well (0.00N,0.00E,179.83Azi)
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
10400.00	90.71	179.83	9543.61	-1095.83	3.28	1095.84	0.00	397166.77	742641.08	
10500.00	90.71	179.83	9542.37	-1195.82	3.57	1195.83	0.00	397066.78	742641.37	
10600.00	90.71	179.83	9541.13	-1295.81	3.87	1295.82	0.00	396966.79	742641.67	
10700.00	90.71	179.83	9539.89	-1395.81	4.17	1395.81	0.00	396866.79	742641.97	
10800.00	90.71	179.83	9538.65	-1495.80	4.47	1495.81	0.00	396766.80	742642.27	
10900.00	90.71	179.83	9537.42	-1595.79	4.77	1595.80	0.00	396666.81	742642.57	
11000.00	90.71	179.83	9536.18	-1695.78	5.07	1695.79	0.00	396566.82	742642.87	
11100.00	90.71	179.83	9534.94	-1795.77	5.37	1795.78	0.00	396466.83	742643.17	
11200.00	90.71	179.83	9533.70	-1895.77	5.67	1895.77	0.00	396366.83	742643.47	
11300.00	90.71	179.83	9532.46	-1995.76	5.97	1995.77	0.00	396266.84	742643.77	
11400.00	90.71	179.83	9531.22	-2095.75	6.26	2095.76	0.00	396166.85	742644.06	
11500.00	90.71	179.83	9529.98	-2195.74	6.56	2195.75	0.00	396066.86	742644.36	
11600.00	90.71	179.83	9528.75	-2295.73	6.86	2295.74	0.00	395966.87	742644.66	
11700.00	90.71	179.83	9527.51	-2395.73	7.16	2395.74	0.00	395866.87	742644.96	
11800.00	90.71	179.83	9526.27	-2495.72	7.46	2495.73	0.00	395766.88	742645.26	
11900.00	90.71	179.83	9525.03	-2595.71	7.76	2595.72	0.00	395666.89	742645.56	
12000.00	90.71	179.83	9523.79	-2695.70	8.06	2695.71	0.00	395566.90	742645.86	
12100.00	90.71	179.83	9522.55	-2795.69	8.36	2795.71	0.00	395466.91	742646.16	
12200.00	90.71	179.83	9521.32	-2895.68	8.66	2895.70	0.00	395366.92	742646.46	
12300.00	90.71	179.83	9520.08	-2995.68	8.95	2995.69	0.00	395266.92	742646.75	
12400.00	90.71	179.83	9518.84	-3095.67	9.25	3095.68	0.00	395166.93	742647.05	
12500.00	90.71	179.83	9517.60	-3195.66	9.55	3195.67	0.00	395066.94	742647.35	
12600.00	90.71	179.83	9516.36	-3295.65	9.85	3295.67	0.00	394966.95	742647.65	
12700.00	90.71	179.83	9515.12	-3395.64	10.15	3395.66	0.00	394866.96	742647.95	
12800.00	90.71	179.83	9513.88	-3495.64	10.45	3495.65	0.00	394766.96	742648.25	
12900.00	90.71	179.83	9512.65	-3595.63	10.75	3595.64	0.00	394666.97	742648.55	
13000.00	90.71	179.83	9511.41	-3695.62	11.05	3695.64	0.00	394566.98	742648.85	
13100.00	90.71	179.83	9510.17	-3795.61	11.35	3795.63	0.00	394466.99	742649.15	
13200.00	90.71	179.83	9508.93	-3895.60	11.64	3895.62	0.00	394367.00	742649.44	
13300.00	90.71	179.83	9507.69	-3995.60	11.94	3995.61	0.00	394267.00	742649.74	
13400.00	90.71	179.83	9506.45	-4095.59	12.24	4095.61	0.00	394167.01	742650.04	
13500.00	90.71	179.83	9505.22	-4195.58	12.54	4195.60	0.00	394067.02	742650.34	
13600.00	90.71	179.83	9503.98	-4295.57	12.84	4295.59	0.00	393967.03	742650.64	
13700.00	90.71	179.83	9502.74	-4395.56	13.14	4395.58	0.00	393867.04	742650.94	
13800.00	90.71	179.83	9501.50	-4495.56	13.44	4495.58	0.00	393767.04	742651.24	
13900.00	90.71	179.83	9500.26	-4595.55	13.74	4595.57	0.00	393667.05	742651.54	
13921.15	90.71	179.83	9500.00	-4616.70	13.80	4616.72	0.00	393645.90	742651.60	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			9500.00	-4616.70	13.80	393645.90	742651.60	32 4 49.954 N	103 41 0.060 W

Casing Points

MD	TVD	Diameter	Hole Size	Name



Weatherford International Ltd.

WFT Plan Report - X & Y's



Weatherford

Company:	Devon Energy	Date:	6/21/2012	Time:	08:11:51	Page:	3
Field:	Lea County, New Mexico (NAD 83)	Co-ordinate(NE) Reference:	Well: Van Doo Dah 33 Fed 1H, Grid North				
Site:	Van Doo Dah 33 Fed 1H	Vertical (TVD) Reference:	SITE 3387.0				
Well:	Van Doo Dah 33 Fed 1H	Section (VS) Reference:	Well (0.00N,0.00E,179.83Azi)				
Wellpath:	1	Survey Calculation Method:	Minimum Curvature	Db:	Sybase		

Annotation

MD ft	TVD ft	
8977.08	8977.08	KOP
9884.18	9550.00	LP
13921.15	9500.00	PBHL

Formations

MD	TVD	Formations	Lithology	Dip Angle	Dip Direction

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

GeoDec v5.03

Report Date: June 20, 2012
Job Number: _____
Customer: Devon Energy
Well Name: Van Doo Dah 33 Fed 1H
API Number: _____
Rig Name: _____
Location: Lea County, NM
Block: _____
Engineer: KRN

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 398262.600 USFT	Latitude 32.0932355 DEG
East/West 742637.800 USFT	Longitude -103.6833000 DEG
Grid Convergence: .35°	
Total Correction: +7.07°	

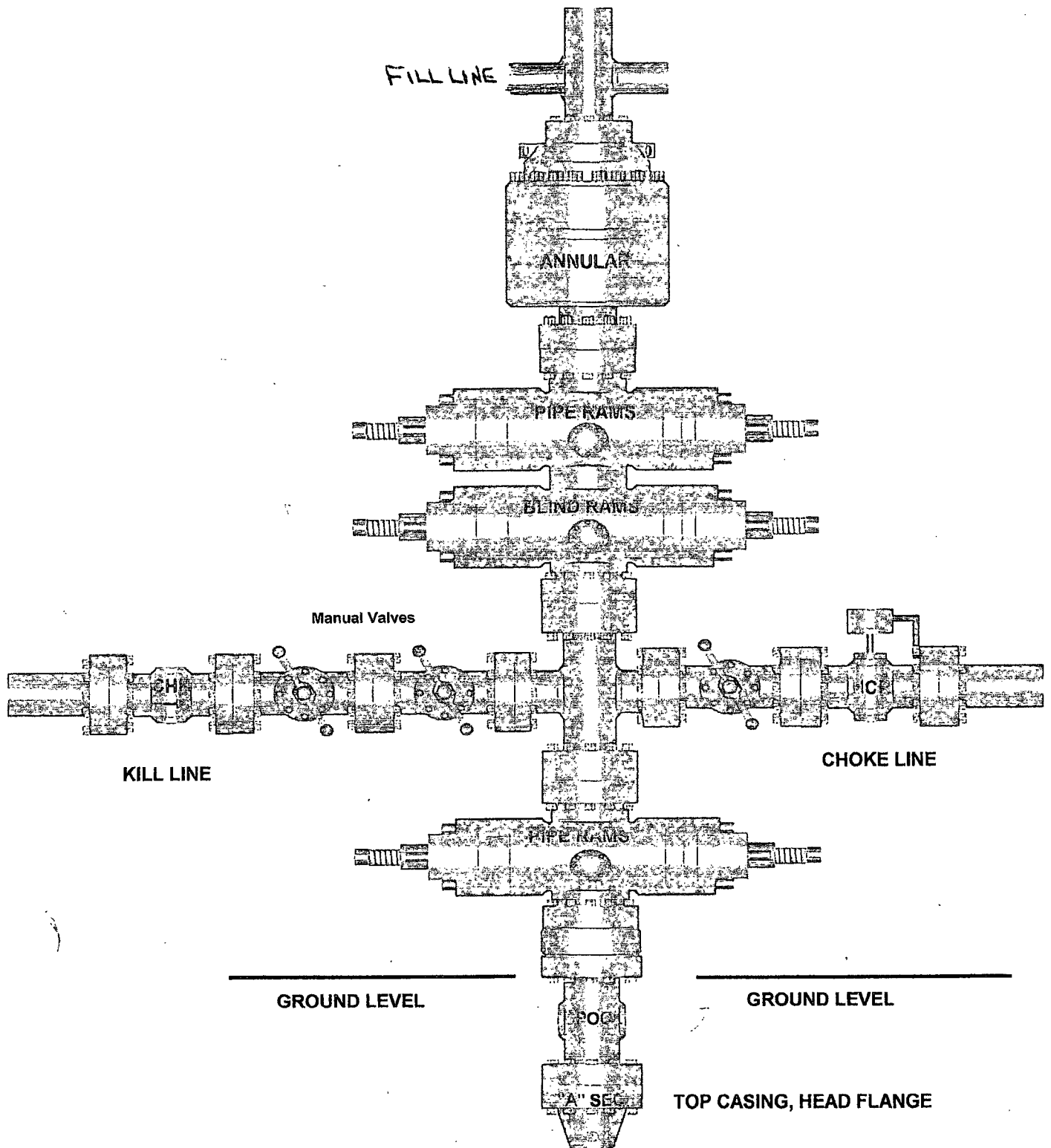
Geodetic Location WGS84	Elevation =	0.0 Meters
Latitude =	32.09324° N	32° 5 min 35.648 sec
Longitude =	103.68330° W	103° 40 min 59.880 sec

Magnetic Declination =	7.42°	[True North Offset]	
Local Gravity =	.9988 g	Checksum =	6464
Local Field Strength =	48380 nT	Magnetic Vector X =	23983 nT
Magnetic Dip =	60.00°	Magnetic Vector Y =	3125 nT
Magnetic Model =	IGRF-2010g11	Magnetic Vector Z =	41900 nT
Spud Date =	Feb 15, 2013	Magnetic Vector H =	24186 nT

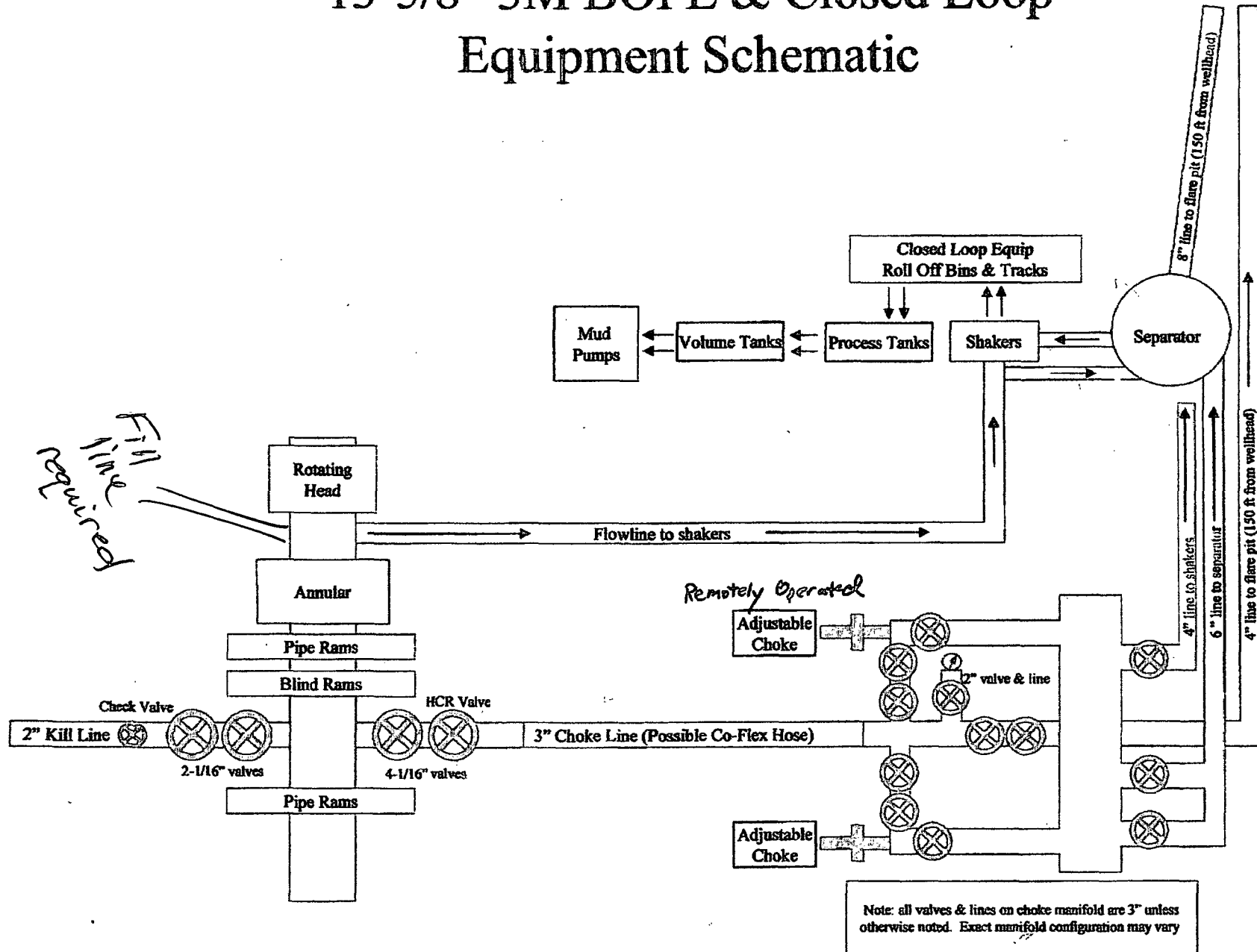
Signed: _____

Date: _____

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



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



Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTERS
Devon Energy Production Company, LP
Van Doo Dah 33 Federal 1H

Surface Location: 330' FNL and 1650' FWL, Unit C, Section 33-T25S-R32E, Lea, NM
Bottom Hole Location: 330' FSL and 1650' FWL, Unit N, Section 33-T25S-R32E, 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 5000 psi working pressure.
4. All fittings will be flanged.
5. A full bore safety valve tested to a minimum 5000 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.



Hydrostatic Test Certificate

Certificate Number: 4520	PBC No: 10321	Customer Name & Address
Customer Purchase Order No: RIG 300		HELMERICH & PAYNE INT'L DRILLING CO 1437 SOUTH BOULDER TULSA, OK 74119
Project:		
Test Centre Address	Accepted by ContiTech Beattie Inspection	Accepted by Client Inspection
ContiTech Beattie Corp. 11535 Brittmoore Park Drive Houston, TX 77041 USA	Signed: Josh Sims Date: 10/27/10	

We certify that the goods detailed hereon have been inspected by our Quality Management System, and to the best of our knowledge are found to conform to relevant industrial standards within the requirements of the purchase order as issued to ContiTech Beattie Corporation.

These goods were made in the United States of America.

Item	Part No.	Description	Qty	Serial Number	As-Built Length (m)	Work Press.	Test Press.	Test Time (minutes)
1		3" ID 10K Choke & Kill Hose x 35ft OAL End A: 4.1/16" 10Kpsi API Spec 6A Type 6BX Flange End B: 4.1/16" 10Kpsi API Spec 6A Type 6BX Flange Working Pressure: 10,000psi Test Pressure: 15,000psi Serial#: 49106	1	49106		10 kpsi	15 kpsi	60

