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Form 3160-3
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

5 Lease Serial No.
NM-97133

6. If Indian, Allotee or Tribe Name

TCS 10/15/2012

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.
BLACK JACK 1 FED 6H <36734>

2. Name of Operator DEVON ENERGY PRODUCTION COMPANY, L.P. <6137>

9. API Well No.
30-015-40792

3a. Address
333 W. SHERIDAN
OKLAHOMA CITY, OK. 73102

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

10. Field and Pool, or Exploratory
SAND DUNES; DELAWARE SOUTH <53848>

4. Location of Well *(Report location clearly and in accordance with any State requirements *)*
At surface 116 FSL & 1780 FEL
At proposed prod. zone 330 FNL & 1980 FEL

11. Sec., T. R. M. or Blk. and Survey or Area
SECTION 1, T. 24 S., R. 30 E.

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

12. County or Parish
EDDY

13. State
NM

15 Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 116'	16. No. of acres in lease 640	17. Spacing Unit dedicated to this well 159.96
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1326'	19. Proposed Depth MD: 12552 TVD: 9100	20 BLM/BIA Bond No. on file NMB-000801 CO-1104
21 Elevations (Show whether DF, KDB, RT, GL, etc.) 3480.5' 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:

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 Barry W. Hunt	Name *(Printed/Typed)* BARRY W. HUNT	Date 7/20/12

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

Approved by *(Signature)* /s/ Jesse J. Juen	Name *(Printed/Typed)*	Date OCT 4 2012
Title STATE DIRECTOR	Office NM STATE 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

ATTACHED FOR CONDITIONS OF APPROVAL

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
DISTRICT II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-015-40792	53818	SAND DUNES; DELAWARE SOUTH

Property Code	Property Name	Well Number
36734	BLACK JACK 1 FED	6H

OGRID No	Operator Name	Elevation
6137	DEVON ENERGY PRODUCTION COMPANY, LP.	3031.5'

Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	1	24 S	30 E		116	SOUTH	1780	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
2	1	24 S	30 E		330	NORTH	1980	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidated Code	Order No
159.96			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

NW COR SEC 1
NMSP-E (NAD 83)
Y = 456540 4' N
X = 692932.3' E
LAT.= N32° 54' 16.50"
LONG.= W104° 36' 34.67"

BLACK JACK 1 FED - 6H
BHL
NMSP-E (NAD 83)
Y = 456235.8' N
X = 696302.5' E
LAT.= N32° 54' 49.84"
LONG.= W104° 36' 38.34"

330'
1980'

NE COR SEC 1
NMSP-E (NAD 83)
Y = 456382 4 N
X = 698281.9' E
LAT.=N32° 55' 09.43"
LONG.= W104° 36' 36.68"

N 02°34'46" W - 5519.0'

SW COR SEC 1
NMSP-E (NAD 83)
Y = 451267.9' N
X = 692950.1' E
LAT.= N32° 54' 16.53"
LONG.= W104° 37' 36.51"

BLACK JACK 1 FED - 6H
SHL
NMSP-E (NAD 83)
Y = 451372.7' N
X = 696521.6' E
LAT.= N32° 54' 51.87"
LONG.= W104° 37' 35 40"

116'
1780'

SE COR SEC 1
NMSP-E (NAD 83)
Y = 451297.4' N
X = 698301.5' E
LAT.= N32° 55' 09.48"
LONG.= W104° 37' 36 34"

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Barry W. Hunt 8/23/12
Signature Date

Barry W. Hunt
Print Name

E-mail Address

SURVEYORS CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief

JUNE 6,2012
Date of Survey

Signature and Seal of Professional Surveyor:

JAMES E. TOMPKINS
NEW MEXICO
14729
REGISTERED PROFESSIONAL LAND SURVEYOR

James E Tompkins

Job No.: WTC48539
JAMES E TOMPKINS 14729
Certificate Number

CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct, and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or Devon Energy Production, L.P. am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U. S. C. 1001 for the filing of false statements. Executed this 20th day of July 2012.

Signed: Barry W. Hunt

Printed Name: Barry Hunt
Position: Agent for Devon Energy Production, LLC.
Address: 1403 Springs Farm Place, Carlsbad, NM 88220
Telephone: (575) 361-4078
E-mail: specialtpermitting@gmail.com
Field Representative: Don Mayberry
Address: P. O. Box 250, Artesia, NM 88211-0250
Telephone: Office: (575) 748-0164, Cell: (575) 748-5235

devon

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

405 235 3611 Phone
www.devonenergy.com

June 5, 2012

To Whom It May Concern:

Mr. Barry Hunt is contracted by Devon Energy, L.P. to sign as their agent for APDs and Right of Ways in the state of New Mexico.

If you have any questions, please contact me at my office at (405) 228-8379.

Sincerely,

Victoria Sanchez

Supervisor, Regulatory Compliance
Mid-Continent Division
Devon Energy, L.P.

DEVON ENERGY PRODUCTION, L. P.
DRILLING PLAN

Black Jack 1 Fed 6H
SHL: 116 FSL & 1780 FEL
BHL: 330 FNL & 1980 FEL
Section 1-24S-30E
Eddy County, NM

The elevation of the unprepared ground is 3480.5' 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: 12552'. TVD: 9100'.

Estimated tops of important geologic markers:

Quaternary – Alluvium	Surface*
Rustler	485'
Salado	848'
Top of Salt	923'
Base Salt	3873'
Delaware	4095'
Bell Canyon Sand	4130'
Cherry Canyon Sand	5026'
Brushy Canyon Sand	6341'
TVD	9100' (145 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 (1801 psi)
Bell Canyon	Oil (1817 psi)
Cherry Canyon	Oil (1817 psi)
Brushy Canyon	Oil (2790 psi)
TVD	Oil BHP (4004 psi)

BLACK JACK 1 FED 6H – APD DRILLING PLAN
SKS 6.27.12

Casing Program (All new casing)

See COA

Hole Size	Hole Interval	OD Csg	Casing Interval	Weight	Collar	Grade
17-1/2"	0 – ~~570~~ 630	13-3/8"	0 – 570	48#	STC	H-40
12-1/4"	~~570~~ – ~~4,000~~ 450	9-5/8"	0 – 4,000	40#	LTC	J-55
8-3/4"	~~4,000~~ – 7,257	5-1/2"	0 – 7,257	17#	LTC	P-110
8-3/4"	7,257 – 12,552	5-1/2"	7,257 – 12,552	17#	BTC	P-110

MAX TVD: 9,100 FT

Design Factors

Casing Size	Collapse Design Factor	Burst Design Factor	Tension Design Factor
13-3/8"	2.9	6.5	19.8
9-5/8" 40# J-55 LTC	1.2	1.9	3.9
5-1/2" 17# P-110 LTC	2.2	3.1	2.1
5-1/2" 17# P-110 BTC	2.0	3.1	2.1

NOTE REGARDING COLLAPSE DESIGN FACTOR FOR INTERMEDIATE CASING: The maximum possible collapse load that the intermediate casing will experience will result from evacuated casing with the pore pressure exerting a collapse load at TD. The pore pressure is estimated to be 9.0 ppg for this calculation. This results in a collapse design factor of 1.2 for the 9-5/8" 40# J-55 LTC casing at a depth of 4,000 ft. While running the intermediate casing, the casing string will never be completely evacuated. There is no potential for the intermediate casing to be used as a production string.

Mud Program

Depth	Mud Wt.	Visc.	Fluid Loss	Type System
0 – ~~570~~ 630	8.4 – 9.0	30 – 34	N/C	FW
~~570~~ – ~~4,000~~ 450	9.8 – 10.0	28 – 32	N/C	Brine
~~4,000~~ – 12,552	8.6 – 9.0	28 – 32	N/C	FW

Pressure Control Equipment

The BOP system used to drill the intermediate hole 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 surface casing shoe.

The BOP system used to drill the production hole 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 intermediate casing shoe.

The pipe rams will be operated and checked as per Onshore Order No 2. 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.

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

13-3/8" Surface

Mix and pump 615 sks
HalCem - C

lbm/gal		Fluid Weight	14.80
2 %	Calcium Chloride - Flake (Accelerator)	Slurry Yield:	1.35 ft^3/sk
0.125 lbm/sk	Poly-E-Flake (Lost Circulation Additive)	Total Mixing Fluid:	6.37 Gal/sk
		Top of Fluid:	0 ft
		Calculated Fill:	570 ft
		Volume:	147.32 bbl
		Calculated Sacks:	614.53 sks
		Proposed Sacks:	615 sks

9-5/8" Intermediate

Lead with 900 sks

EconoCem - HLC

lbm/gal		Fluid Weight	12.90
5 %	Salt (Salt)	Slurry Yield:	1.85 ft^3/sk
0.125 lbm/sk	Poly-E-Flake (Lost Circulation Additive)	Total Mixing Fluid:	9.81 Gal/sk
		Top of Fluid:	0 ft
		Calculated Fill:	3200 ft
		Volume:	294.95 bbl
		Calculated Sacks:	897.10 sks
		Proposed Sacks:	900 sks

Tail-in with 345 sks
HalCem - C

lbm/gal		Fluid Weight	14.80
0.125 lbm/sk	Poly-E-Flake (Lost Circulation Additive)	Slurry Yield:	1.33 ft^3/sk
		Total Mixing Fluid:	6.32 Gal/sk
		Top of Fluid:	3200 ft
		Calculated Fill:	800 ft
		Volume:	81.13 bbl
		Calculated Sacks:	343.77 sks
		Proposed Sacks:	345 sks

5-1/2" Production

Stage 1

Lead with 365 sks
EconoCem - HLH

lbm/gal		Fluid Weight	12.50
0.2 %	HR-601 (Retarder)	Slurry Yield:	1.95 ft^3/sk
		Total Mixing Fluid:	10.81 Gal/sk
		Top of Fluid:	5500 ft
		Calculated Fill:	1857 ft
		Volume:	125.32 bbl
		Calculated Sacks:	360.64 sks
		Proposed Sacks:	365 sks

Tail-in with 1350 sks
VersaCem - H

lbm/gal		Fluid Weight	14.50

0.5 %	Halad®-344 (Low Fluid Loss Control)	Slurry Yield:	1.22 ft^3/sk
0.4 %	CFR-3 (Dispersant)	Total Mixing Fluid:	5.37 Gal/sk
1 lbm/sk	Salt (Salt)	Top of Fluid:	7357 ft
0.1 %	HR-601 (Retarder)	Calculated Fill:	5195 ft
		Volume:	293.08 bbl
		Calculated Sacks:	1349.89 sks
		Proposed Sacks:	1350 sks

DV TOOL at 5,500 ft

Stage 2

Lead with 435 sks

ExtendaCem - C		Fluid Weight	11.40
lbm/gal			
0.125 lbm/sk	Poly-E-Flake (Lost Circulation Additive)	Slurry Yield:	2.87 ft^3/sk
		Total Mixing Fluid:	17.69 Gal/sk
		Top of Fluid:	0 ft
		Calculated Fill:	4500 ft
		Volume:	219.51 bbl
		Calculated Sacks:	430.17 sks
		Proposed Sacks:	435 sks

Tail-in with 290 sks

HalCem - C		Fluid Weight	14.80
lbm/gal			
0.125 lbm/sk	Poly-E-Flake (Lost Circulation Additive)	Slurry Yield:	1.33 ft^3/sk
		Total Mixing Fluid:	6.32 Gal/sk
		Top of Fluid:	4500 ft
		Calculated Fill:	1000 ft
		Volume:	67.48 bbl
		Calculated Sacks:	285.96 sks
		Proposed Sacks:	290 sks

TOC @ Surface

TOC for All Strings:

Surface:	0
Intermediate:	0
Production:	0

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

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 ½" casing is cemented. Breathing equipment will be on location upon drilling the 13 3/8" shoe until total depth is reached.

LOGGING, CORING, AND TESTING PROGRAM: See COA

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 ½" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

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 4004 and estimated BHT 145.**

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

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devon

BLACK JACK 1 FED #6H

EDDY COUNTY, NM

WELL FILE: **PLAN 1**

JUNE 18, 2012

Weatherford International, Ltd.
P.O. Box 61028
Midland, TX 79711 USA
+1.432.561.8892 Main
+1.432.561.8895 Fax
www.weatherford.com

devon

Black Jack 1 Fed #6H
Eddy Co., New Mexico

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	357.42	0.00	0.00	0.00	0.00	0.00	0.00	
2	7357.04	0.00	357.42	7357.04	0.00	0.00	0.00	0.00	0.00	
3	8257.04	90.00	357.42	7930.00	572.38	-25.79	10.00	357.42	572.96	
4	12552.12	90.00	357.42	7930.00	4863.10	-219.10	0.00	0.00	4868.03	PBHL

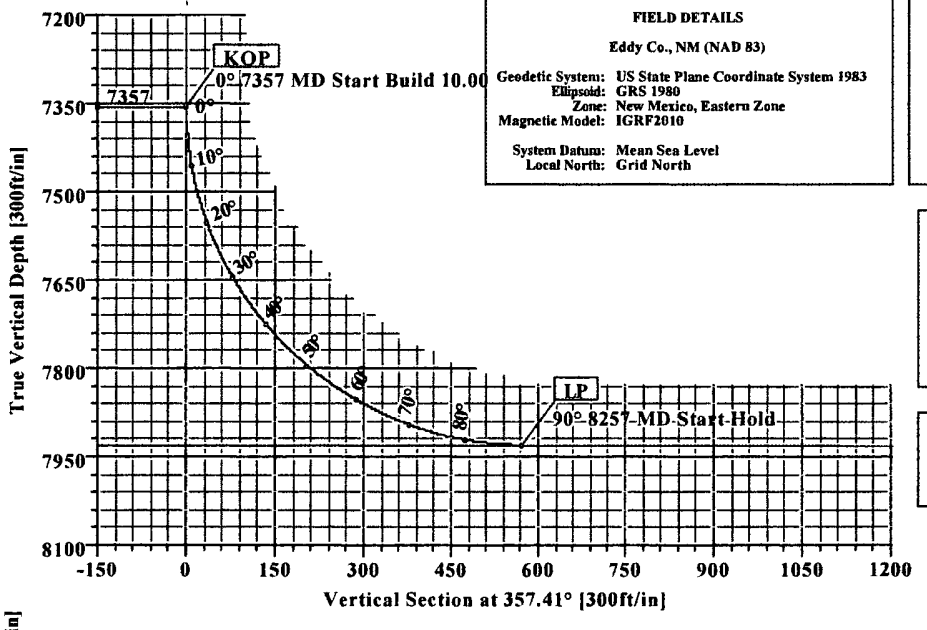
WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
BJ 1 Fed #6H	0.00	0.00	451372.70	696521.60	32°14'23.640N	103°49'53.098W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL	7930.00	4863.10	-219.10	456235.80	696302.50	32°15'11.774N	103°49'55.385W	Point

KB ELEV: 3500
GL ELEV: 3481



FIELD DETAILS

Eddy Co., NM (NAD 83)

Geodetic System: US State Plane Coordinate System 1983
Ellipsoid: GRS 1980
Zone: New Mexico, Eastern Zone
Magnetic Model: IGRF2010

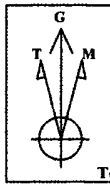
System Datum: Mean Sea Level
Local North: Grid North

SITE DETAILS

Black Jack 1 Fed #6H

Site Centre Northing: 451372.70
Easting: 696521.60

Ground Level: 3481.00
Positional Uncertainty: 0.00
Convergence: 0.27



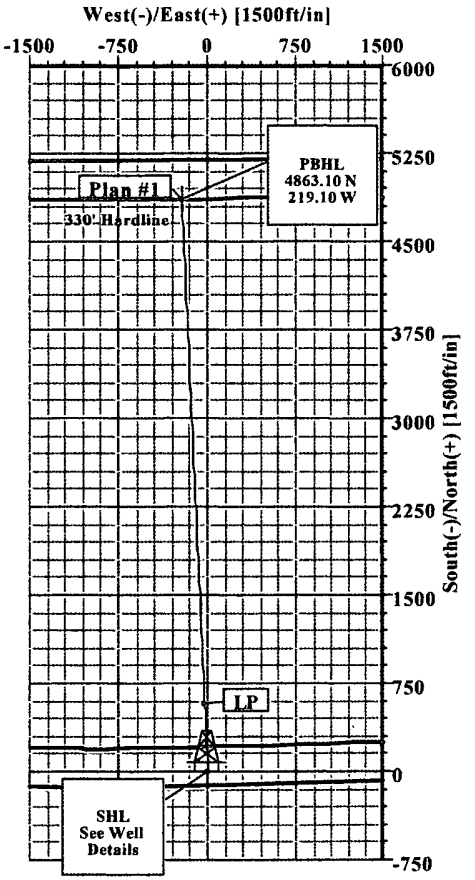
Azimuths to Grid North
True North: -0.27°
Magnetic North: 7.28°

Magnetic Field
Strength: 48489nT
Dip Angle: 60.12°
Date: 10/15/2012
Model: IGRF2010

Total Correction to Grid North: 7.28°

LEGEND

1
Plan #1



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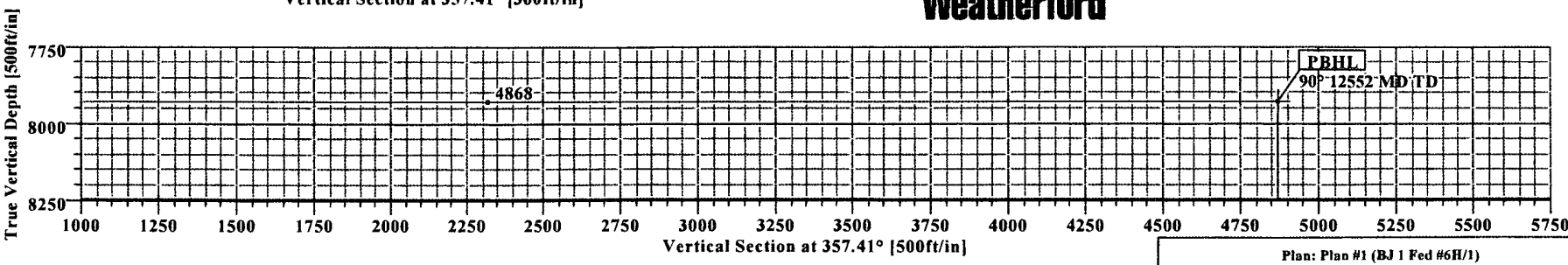


Plan: Plan #1 (BJ 1 Fed #6H/1)

Created By: Russell W. Joyner Date: 6/21/2012

Weatherford
WFT Plan Report - X & Y's

Company:	Devon Energy	**Date:** 6/21/2012 **Time:** 08:09:46	**Page:** 1
Field:	Eddy Co., NM (NAD 83)	**Co-ordinate(NE) Reference:**	Well: BJ 1 Fed #6H, Grid North
Site:	Black Jack 1 Fed #6H	**Vertical (TVD) Reference:**	SITE 3500.0
Well:	BJ 1 Fed #6H	**Section (VS) Reference:**	Well (0.00N,0.00E,357.41Azi)
Wellpath:	1	**Survey Calculation Method:**	Minimum Curvature **Db:** Sybase

Plan:	Plan #1	**Date Composed:**	6/16/2012
		Version:	1
Principal:	Yes	**Tied-to:**	From Surface

Field:	Eddy Co., NM (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:	Black Jack 1 Fed #6H				
Site Position:		**Northing:**	451372.70 ft	**Latitude:**	32 14 23.640 N
From:	Map	**Easting:**	696521.60 ft	**Longitude:**	103 49 53.098 W
Position Uncertainty:	0.00 ft			**North Reference:**	Grid
Ground Level:	3481.00 ft			**Grid Convergence:**	0.27 deg

Well:	BJ 1 Fed #6H				**Slot Name:**	
Well Position:	+N/-S	0.00 ft	**Northing:**	451372.70 ft	**Latitude:**	32 14 23.640 N
	+E/-W	0.00 ft	**Easting :**	696521.60 ft	**Longitude:**	103 49 53.098 W
Position Uncertainty:		0.00 ft				

Wellpath:	1			**Drilled From:**	Surface
				Tie-on Depth:	0.00 ft
Current Datum:	SITE	**Height**	3500.00 ft	**Above System Datum:**	Mean Sea Level
Magnetic Data:	10/15/2012			**Declination:**	7.54 deg
Field Strength:	48489 nT			**Mag Dip Angle:**	60.12 deg

Vertical Section: Depth From (TVD) ft	+N/-S ft	+E/-W ft	Direction deg
0.00	0.00	0.00	357.41

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	357.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7357.04	0.00	357.42	7357.04	0.00	0.00	0.00	0.00	0.00	0.00	
8257.04	90.00	357.42	7930.00	572.38	-25.79	10.00	10.00	0.00	357.42	
12552.12	90.00	357.42	7930.00	4863.10	-219.10	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
7300.00	0.00	357.42	7300.00	0.00	0.00	0.00	0.00	451372.70	696521.60	
7357.04	0.00	357.42	7357.04	0.00	0.00	0.00	0.00	451372.70	696521.60	KOP
7400.00	4.30	357.42	7399.96	1.61	-0.07	1.61	10.00	451374.31	696521.53	
7450.00	9.30	357.42	7449.59	7.52	-0.34	7.52	10.00	451380.22	696521.26	
7500.00	14.30	357.42	7498.52	17.72	-0.80	17.74	10.00	451390.42	696520.80	
7550.00	19.30	357.42	7546.37	32.15	-1.45	32.19	10.00	451404.85	696520.15	
7600.00	24.30	357.42	7592.78	50.69	-2.28	50.75	10.00	451423.39	696519.32	
7650.00	29.30	357.42	7637.40	73.21	-3.30	73.28	10.00	451445.91	696518.30	
7700.00	34.30	357.42	7679.88	99.51	-4.48	99.62	10.00	451472.21	696517.12	
7750.00	39.30	357.42	7719.91	129.42	-5.83	129.55	10.00	451502.12	696515.77	
7800.00	44.30	357.42	7757.17	162.70	-7.33	162.87	10.00	451535.40	696514.27	
7850.00	49.30	357.42	7791.39	199.10	-8.97	199.30	10.00	451571.80	696512.63	
7900.00	54.30	357.42	7822.31	238.34	-10.74	238.58	10.00	451611.04	696510.86	
7950.00	59.30	357.42	7849.68	280.12	-12.62	280.40	10.00	451652.82	696508.98	
8000.00	64.30	357.42	7873.30	324.12	-14.60	324.45	10.00	451696.82	696507.00	
8050.00	69.30	357.42	7893.00	370.02	-16.67	370.39	10.00	451742.72	696504.93	
8100.00	74.30	357.42	7908.61	417.45	-18.81	417.88	10.00	451790.15	696502.79	

Weatherford
WFT Plan Report - X & Y's

Company:	Devon Energy	**Date:** 6/21/2012 **Time:** 08:09:46	**Page:** 2
Field:	Eddy Co., NM (NAD 83)	**Co-ordinate(NE) Reference:**	Well: BJ 1 Fed #6H, Grid North
Site:	Black Jack 1 Fed #6H	**Vertical (TVD) Reference:**	SITE 3500.0
Well:	BJ 1 Fed #6H	**Section (VS) Reference:**	Well (0.00N,0.00E,357.41Azi)
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
8150.00	79.30	357.42	7920.03	466.07	-21.00	466.54	10.00	451838.77	696500.60	
8200.00	84.30	357.42	7927.16	515.49	-23.22	516.01	10.00	451888.19	696498.38	
8250.00	89.30	357.42	7929.95	565.34	-25.47	565.92	10.00	451938.04	696496.13	
8257.04	90.00	357.42	7930.00	572.38	-25.79	572.96	10 00	451945.08	696495.81	LP
8300.00	90.00	357.42	7930.00	615.29	-27.72	615.92	0.00	451987.99	696493.88	
8400.00	90.00	357.42	7930.00	715.19	-32.22	715.92	0.00	452087.89	696489.38	
8500.00	90.00	357.42	7930.00	815.09	-36.72	815.92	0.00	452187.79	696484.88	
8600.00	90.00	357.42	7930.00	914.99	-41.22	915.92	0.00	452287.69	696480.38	
8700.00	90.00	357.42	7930.00	1014.89	-45.72	1015.92	0.00	452387.59	696475.88	
8800.00	90.00	357.42	7930.00	1114.79	-50.23	1115.92	0.00	452487.49	696471.37	
8900.00	90.00	357.42	7930.00	1214.69	-54.73	1215.92	0.00	452587.39	696466.87	
9000.00	90.00	357.42	7930.00	1314.58	-59.23	1315.92	0.00	452687.28	696462.37	
9100.00	90.00	357.42	7930.00	1414.48	-63.73	1415.92	0.00	452787.18	696457.87	
9200.00	90.00	357.42	7930.00	1514.38	-68.23	1515.92	0.00	452887.08	696453.37	
9300.00	90.00	357.42	7930.00	1614.28	-72.73	1615.92	0.00	452986.98	696448.87	
9400.00	90.00	357.42	7930.00	1714.18	-77.23	1715.92	0.00	453086.88	696444.37	
9500.00	90.00	357.42	7930.00	1814.08	-81.73	1815.92	0.00	453186.78	696439.87	
9600.00	90.00	357.42	7930.00	1913.98	-86.23	1915.92	0.00	453286.68	696435.37	
9700.00	90.00	357.42	7930.00	2013.87	-90.73	2015.92	0.00	453386.57	696430.87	
9800.00	90.00	357.42	7930.00	2113.77	-95.23	2115.92	0.00	453486.47	696426.37	
9900.00	90.00	357.42	7930.00	2213.67	-99.73	2215.92	0.00	453586.37	696421.87	
10000.00	90.00	357.42	7930.00	2313.57	-104.23	2315.92	0.00	453686.27	696417.37	
10100.00	90.00	357.42	7930.00	2413.47	-108.74	2415.92	0.00	453786.17	696412.86	
10200.00	90.00	357.42	7930.00	2513.37	-113.24	2515.92	0.00	453886.07	696408.36	
10300.00	90.00	357.42	7930.00	2613.27	-117.74	2615.92	0.00	453985.97	696403.86	
10400.00	90.00	357.42	7930.00	2713.17	-122.24	2715.92	0.00	454085.87	696399.36	
10500.00	90.00	357.42	7930.00	2813.06	-126.74	2815.92	0.00	454185.76	696394.86	
10600.00	90.00	357.42	7930.00	2912.96	-131.24	2915.92	0.00	454285.66	696390.36	
10700.00	90.00	357.42	7930.00	3012.86	-135.74	3015.92	0.00	454385.56	696385.86	
10800.00	90.00	357.42	7930.00	3112.76	-140.24	3115.92	0.00	454485.46	696381.36	
10900.00	90.00	357.42	7930.00	3212.66	-144.74	3215.92	0.00	454585.36	696376.86	
11000.00	90.00	357.42	7930.00	3312.56	-149.24	3315.92	0.00	454685.26	696372.36	
11100.00	90.00	357.42	7930.00	3412.46	-153.74	3415.92	0.00	454785.16	696367.86	
11200.00	90.00	357.42	7930.00	3512.35	-158.24	3515.92	0.00	454885.05	696363.36	
11300.00	90.00	357.42	7930.00	3612.25	-162.74	3615.92	0.00	454984.95	696358.86	
11400.00	90.00	357.42	7930.00	3712.15	-167.25	3715.92	0.00	455084.85	696354.35	
11500.00	90.00	357.42	7930.00	3812.05	-171.75	3815.92	0.00	455184.75	696349.85	
11600.00	90.00	357.42	7930.00	3911.95	-176.25	3915.92	0.00	455284.65	696345.35	
11700.00	90.00	357.42	7930.00	4011.85	-180.75	4015.92	0.00	455384.55	696340.85	
11800.00	90.00	357.42	7930.00	4111.75	-185.25	4115.92	0.00	455484.45	696336.35	
11900.00	90.00	357.42	7930.00	4211.65	-189.75	4215.92	0.00	455584.35	696331.85	
12000.00	90.00	357.42	7930.00	4311.54	-194.25	4315.92	0.00	455684.24	696327.35	
12100.00	90.00	357.42	7930.00	4411.44	-198.75	4415.92	0.00	455784.14	696322.85	
12200.00	90.00	357.42	7930.00	4511.34	-203.25	4515.92	0.00	455884.04	696318.35	
12300.00	90.00	357.42	7930.00	4611.24	-207.75	4615.92	0.00	455983.94	696313.85	
12400.00	90.00	357.42	7930.00	4711.14	-212.25	4715.92	0.00	456083.84	696309.35	
12500.00	90.00	357.42	7930.00	4811.04	-216.75	4815.92	0.00	456183.74	696304.85	
12552 12	90.00	357.42	7930.00	4863.10	-219.10	4868.03	0.00	456235.80	696302 50	PBHL

devon

Weatherford
WFT Plan Report - X & Y's

Weatherford

Company:	Devon Energy	**Date:** 6/21/2012 **Time:** 08:09:46	**Page:** 3
Field:	Eddy Co., NM (NAD 83)	**Co-ordinate(NE) Reference:**	Well: BJ 1 Fed #6H, Grid North
Site:	Black Jack 1 Fed #6H	**Vertical (TVD) Reference:**	SITE 3500.0
Well:	BJ 1 Fed #6H	**Section (VS) Reference:**	Well (0.00N,0.00E,357.41Azi)
Wellpath:	1	**Survey Calculation Method:**	Minimum Curvature **Db:** Sybase

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			7930.00	4863.10	-219.10	456235.80	696302.50	32	15	11.774 N	103	49	55.385 W

Casing Points

MD	TVD	Diameter	Hole Size	Name

Annotation

MD ft	TVD ft	
7357.04	7357.04	KOP
8257.04	7930.00	LP
12552.11	7930.00	PBHL

Formations

MD	TVD	Formations	Lithology	Dip Angle	Dip Direction

Weatherford

Weatherford Drilling Services

GeoDec v5.03

Report Date:	June 21, 2012
Job Number:	
Customer:	Devon Energy
Well Name:	Black Jack 1 Fed #6H
API Number:	
Rig Name:	
Location:	Eddy Co., NM (NAD 83)
Block:	
Engineer:	RWJ

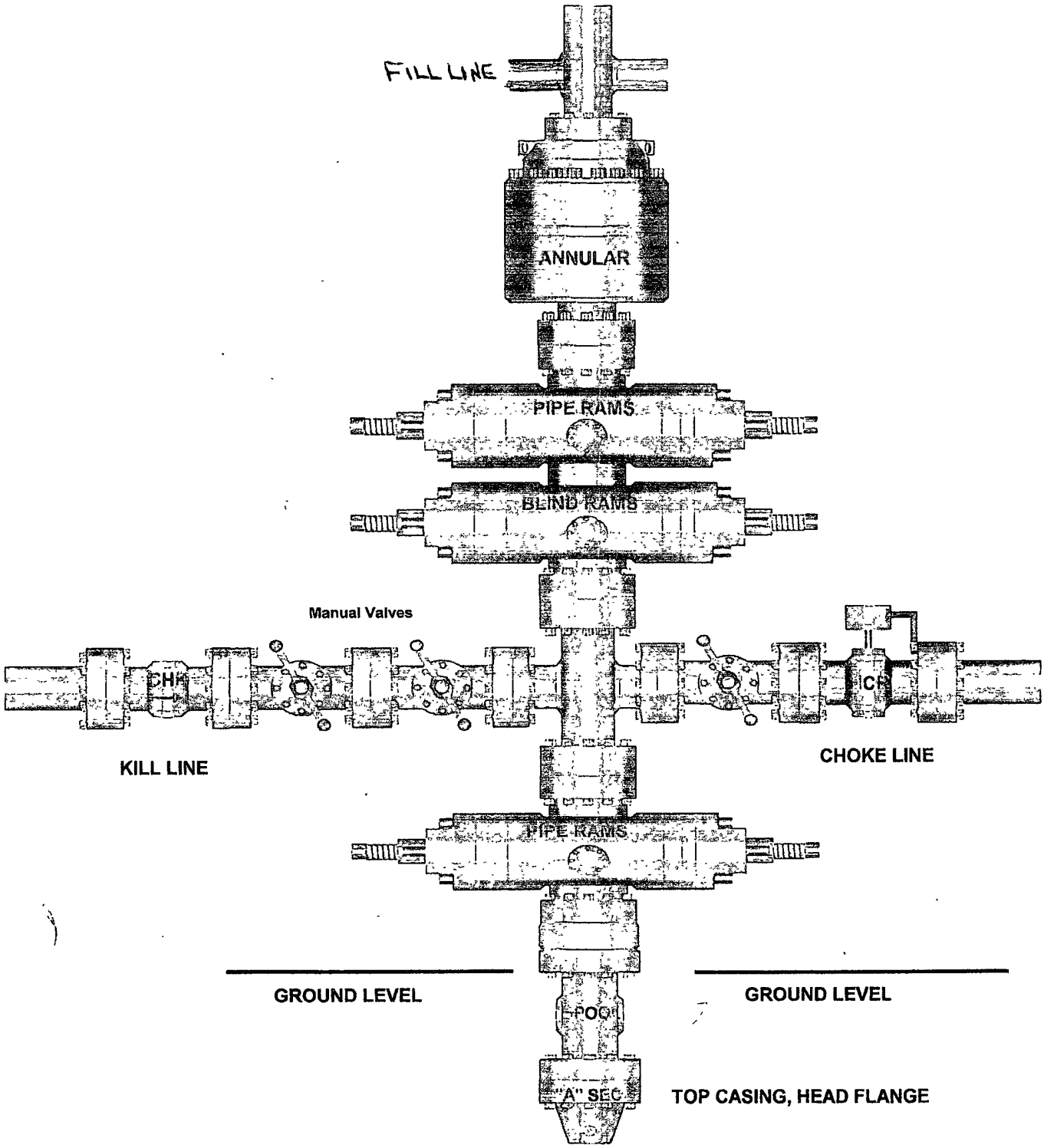
US State Plane 1983	Geodetic Latitude / Longitude
System: New Mexico Eastern Zone	System: Latitude / Longitude
Projection: Transverse Mercator/Gauss Kruger	Projection: Geodetic Latitude and Longitude
Datum: North American Datum 1983	Datum: North American Datum 1983
Ellipsoid: GRS 1980	Ellipsoid: GRS 1980
North/South 451372.700 USFT	Latitude 32.2399026 DEG
East/West 696521.600 USFT	Longitude -103.8314117 DEG
Grid Convergence: .27°	
Total Correction: +7.27°	

Geodetic Location WGS84	Elevation = 0.0 Meters	
Latitude =	32.23990° N	32° 14 min 23.649 sec
Longitude =	103.83141° W	103° 49 min 53.082 sec

Magnetic Declination =	7.54°	[True North Offset]	
Local Gravity =	.9988 g	CheckSum =	6557
Local Field Strength =	48485 nT	Magnetic Vector X =	23943 nT
Magnetic Dip =	60.12°	Magnetic Vector Y =	3171 nT
Magnetic Model =	IGRF-2010g11	Magnetic Vector Z =	42042 nT
Spud Date =	Oct 15, 2012	Magnetic Vector H =	24152 nT

Signed:_____ Date:_____

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



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

Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTERS
Devon Energy Production Company, LP
Black Jack 1 Fed 6H
Surface Location: 116' FSL & 1780' FEL, Unit O, Sec 1 T24S R30E, Eddy, NM
Bottom Hole Location: 330' FNL & 1980' FEL, Unit B, Sec 1 T24S R30E, Eddy, NM

1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.

2. Wear ring will be properly installed in head.

3. Blowout preventer and all associated fittings will be in operable condition to withstand a minimum 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.

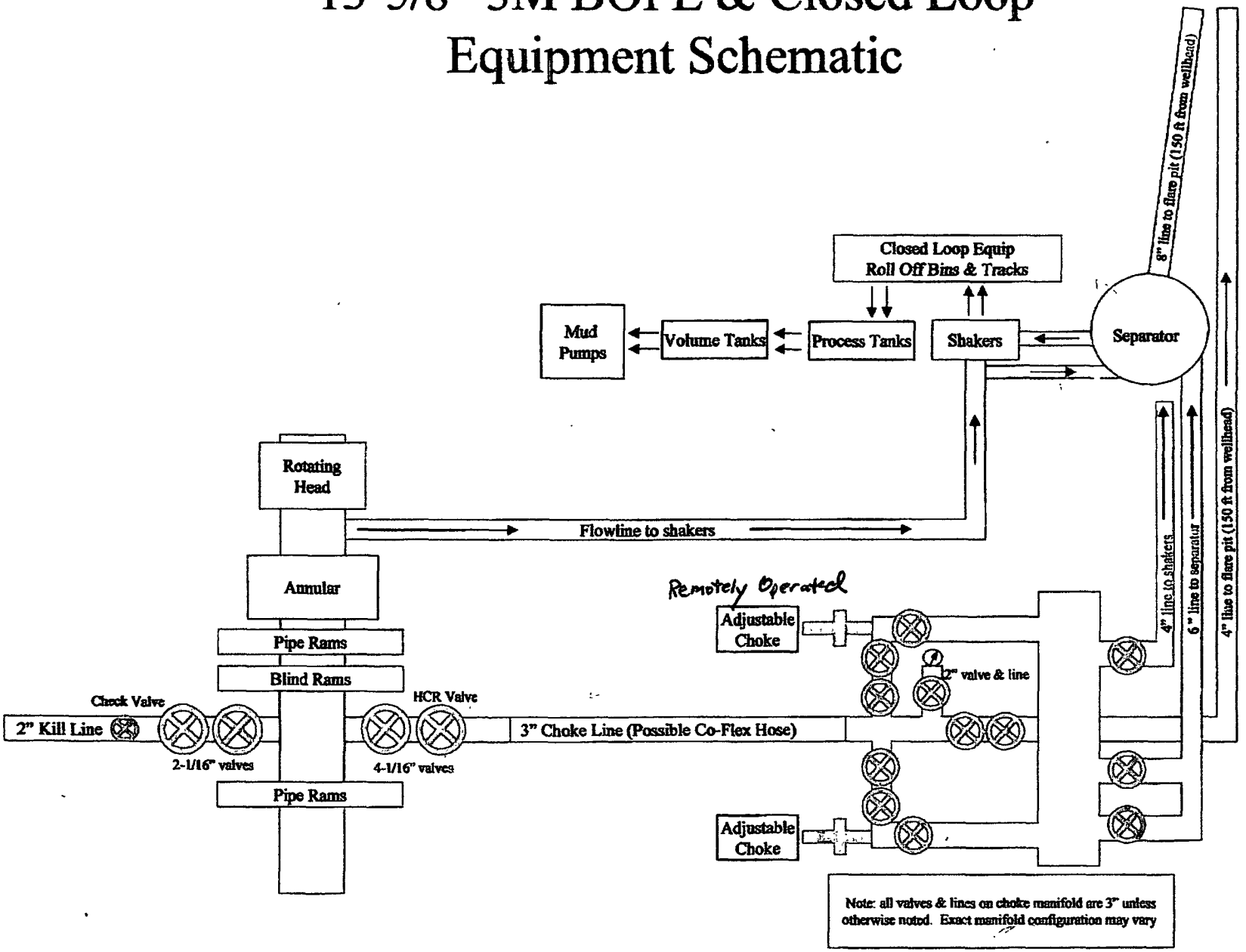
8. Will maintain a kelly cock attached to the kelly.

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.

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



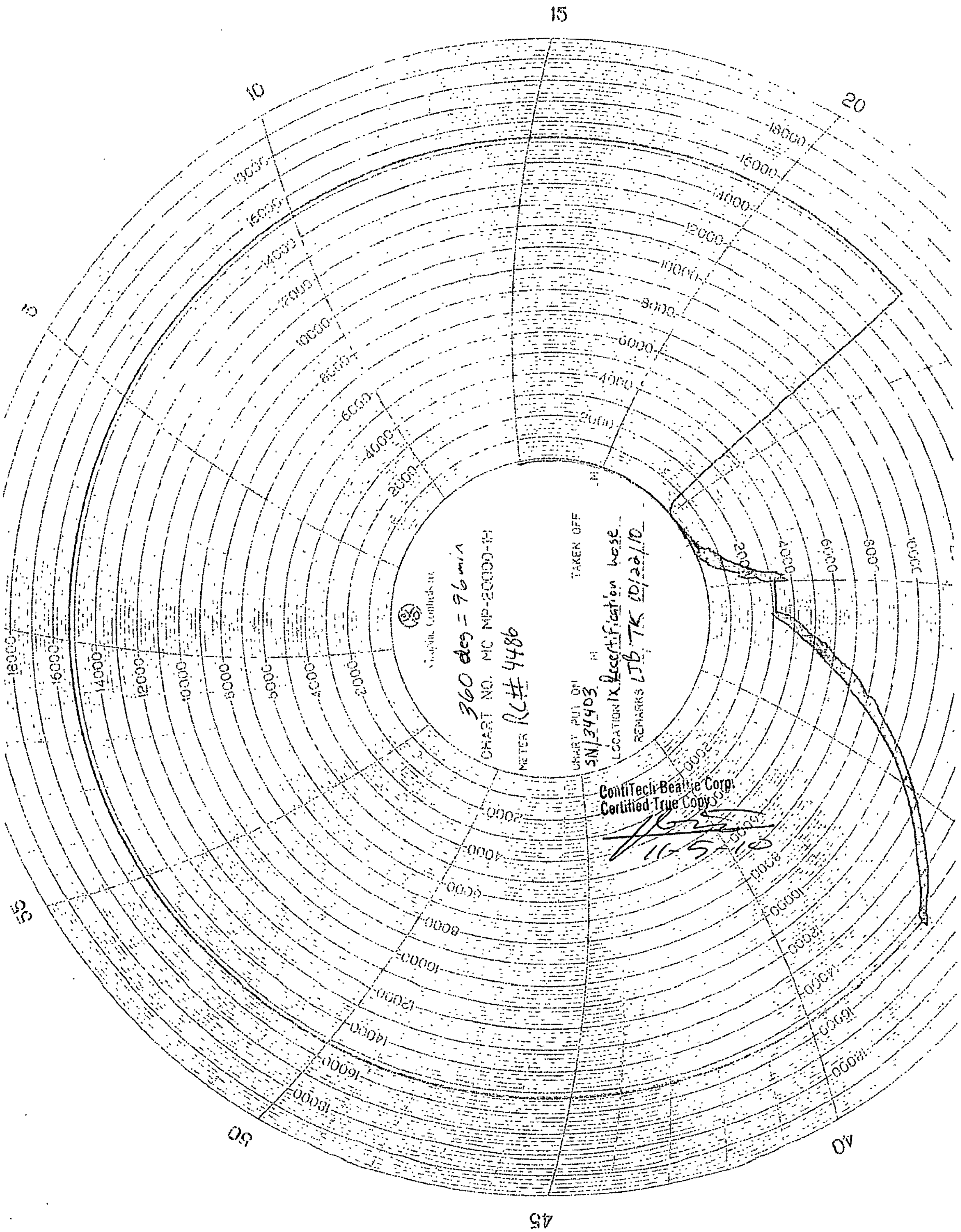
Hydrostatic Test Certificate

Certificate Number: 4520	**PBC No:** 10321	**Customer Name & Address**
		HELMERICH & PAYNE INT'L DRILLING CO
Customer Purchase Order No:	RIG 300	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	Qnty	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



15
10
20
5
55
50
45
40
360 deg = 96 min
CHART NO. MC MP-20000-1H
METER RCL# 4486
CHART PUT ON SN/34403
TAKEN OFF
LOCATION TX Recertification hose
REMARKS LTB TK 10/28/10
ConfiTech Beattie Corp.
Certified True Copy
11-5-10

devon

Devon Energy Corporation
333 West Sheridan
Oklahoma City, Oklahoma 73102-5010

Hydrogen Sulfide (H_2S) Contingency Plan

For

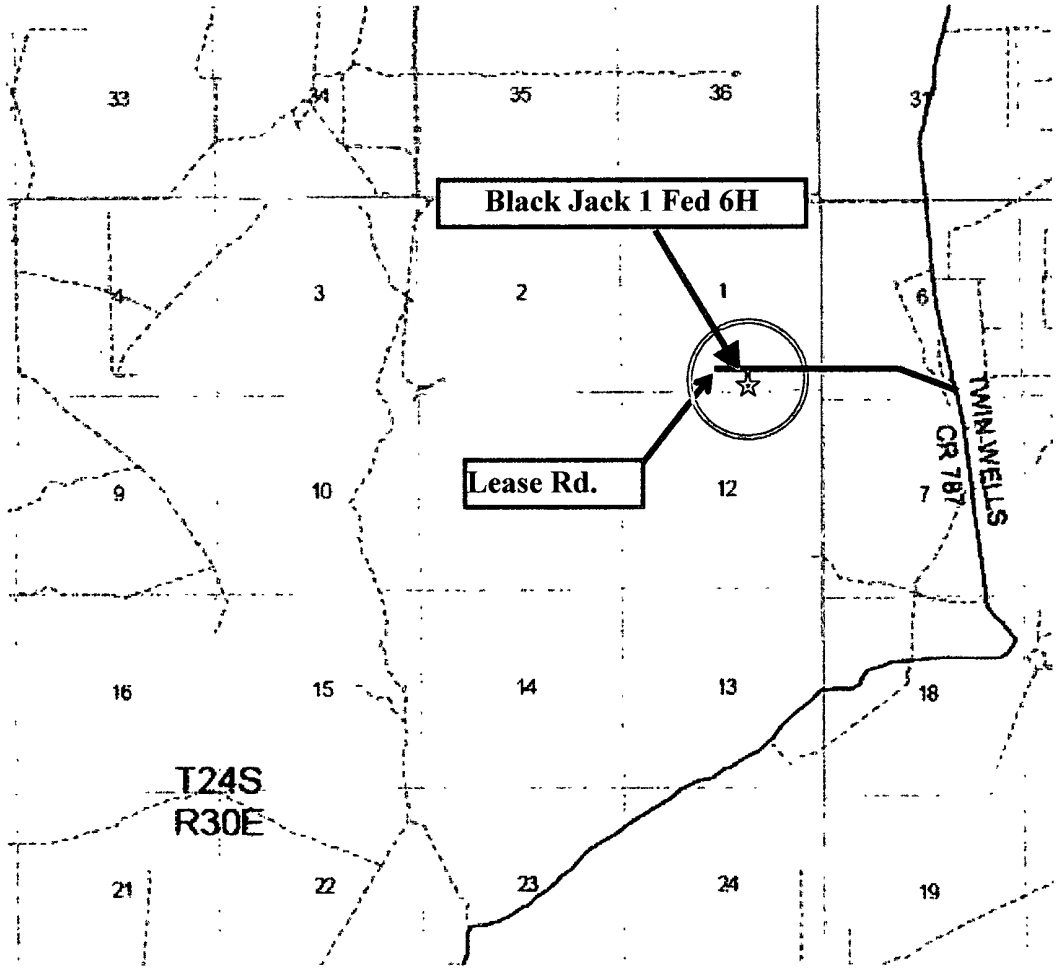
Black Jack 1 Fed 6H

Sec-1, T-24S R-30E
116' FSL & 1780' FEL,
LAT. = 32.390747'N (NAD83)
LONG = 103.385564'W

Eddy County NM

Black Jack 1 Fed 6H

This is an open drilling site. H_2S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H_2S, including warning signs, wind indicators and H_2S monitor.



Assumed 100 ppm ROE = 3000' (radius)
100 ppm H_2S concentration shall trigger activation of this plan.

Escape

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated from the location entrance road, North then East on lease road. Crews should then block the road so as not to allow anyone traversing into a hazardous area. The blockade should be at a safe distance outside of the ROE. There are no homes or buildings in or near the ROE. .

Assumed 100 ppm ROE = 3000'

100 ppm H_2S concentration shall trigger activation of this plan.

Emergency Procedures

In the event of a release of gas containing H_2S, the first responder(s) must

- **Isolate the area and prevent entry by other persons into the 100 ppm ROE.**
- **Evacuate any public places encompassed by the 100 ppm ROE.**
- **Be equipped with H_2S monitors and air packs in order to control the release.**
- **Use the "buddy system" to ensure no injuries occur during the response**
- **Take precautions to avoid personal injury during this operation.**
- **Contact operator and/or local officials to aid in operation. See list of phone numbers attached.**
- **Have received training in the**
  - **Detection of H_2S, and**
  - **Measures for protection against the gas,**
  - **Equipment used for protection and emergency response.**

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO_2). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

Characteristics of H_2S and SO_2

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H_2S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO_2	2.21 Air = 1	2 ppm	N/A	1000 ppm

Contacting Authorities

Devon Energy Corp. personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. Devon Energy Corp. Company response must be in coordination with the State of New Mexico's 'Hazardous Materials Emergency Response Plan' (HMER)

Hydrogen Sulfide Drilling Operation Plan

I. HYDROGEN SULFIDE (H_2S) TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H_2S)

2. The proper use and maintenance of personal protective equipment and life support systems.

3. The proper use of H_2S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.

4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H_2S metal components. If high tensile tubular are to be used, personnel will be trained in their special maintenance requirements.

2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.

3. The contents and requirements of the H_2S Drilling Operations Plan and Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H_2S zone (within 3 days or 500 feet) and weekly H_2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H_2S Drilling Operations Plan and the Public Protection Plan.

II. HYDROGEN SULFIDE TRAINING

Note: All H_2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonable expected to contain H_2S.

1. **Well Control Equipment**

   A. Flare line

   B. Choke manifold

   C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit

   D. Auxiliary equipment may include if applicable: annular preventer and rotating head.

2. **Protective equipment for essential personnel:**

   A. 30-minute SCBA units located in the doghouse and at briefing areas, as indicated on well site diagram. As it may be difficult to communicate audibly while wearing these units, hand signals shall be utilized.

3. **H_2S detection and monitoring equipment:**

   A. Portable H_2S monitors positioned on location for best coverage and response. These unites have warning lights and audible sirens when H_2S levels of 20 PPM are reached. These units are usually capable of detecting SO_2, which is a byproduct of burning H_2S.

4. **Visual warning systems:**

   A. Wind direction indicators as shown on well site diagram

   B. Caution/ Danger signs shall be posted on roads providing direct access to locations. Signs will be painted a high visibility yellow with black lettering of sufficient size to be reasonable distance from the immediate location. Bilingual signs will be used when appropriate..

5. **Mud program:**

   A. The mud program has been designed to minimize the volume of H_2S circulated to surface. Proper mud weight, safe drilling practices and the use of H_2S scavengers will minimize hazards when penetrating H_2S bearing zones.

6. **Metallurgy:**

   A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold lines, and valves shall be H_2S trim.

   B. All elastomers used for packing and seals shall be H_2S trim.

7. **Communication:**

   A. Radio communications in company vehicles including cellular telephones and 2-way radio

   B. Land line (telephone) communications at Office

8. **Well testing:**

   A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safety and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill-stem-testing operations conducted in an H_2S environment will use the closed chamber method of testing.

   B. There will be no drill stem testing.

Devon Energy Corp. Company Call List

Artesia (575)	Cellular	Office	Home
Foreman – Robert Bell	748-7448	748-0178	746-2991
Asst. Foreman –Tommy Polly	748-5290	748-0165	748-2846
Don Mayberry	748-5235	748-0164	746-4945
Montral Walker	390-5182	748-0193	936-414-6246
Engineer – Marcos Ortiz	(405) 317-0666	(405) 552-8152	(405) 381-4350

Agency Call List

Lea County (575)

Hobbs

State Police	392-5588
City Police	397-9265
Sheriff's Office	393-2515
Ambulance	911
Fire Department	397-9308
LEPC (Local Emergency Planning Committee)	393-2870
NMOCD	393-6161
US Bureau of Land Management	393-3612

Eddy County (575)

Carlsbad

State Police	885-3137
City Police	885-2111
Sheriff's Office	887-7551
Ambulance	911
Fire Department	885-2111
LEPC (Local Emergency Planning Committee)	887-3798
US Bureau of Land Management	887-6544
New Mexico Emergency Response Commission (Santa Fe)	(505)476-9600
24 HR	(505) 827-9126
National Emergency Response Center (Washington, DC)	(800) 424-8802

Emergency Services

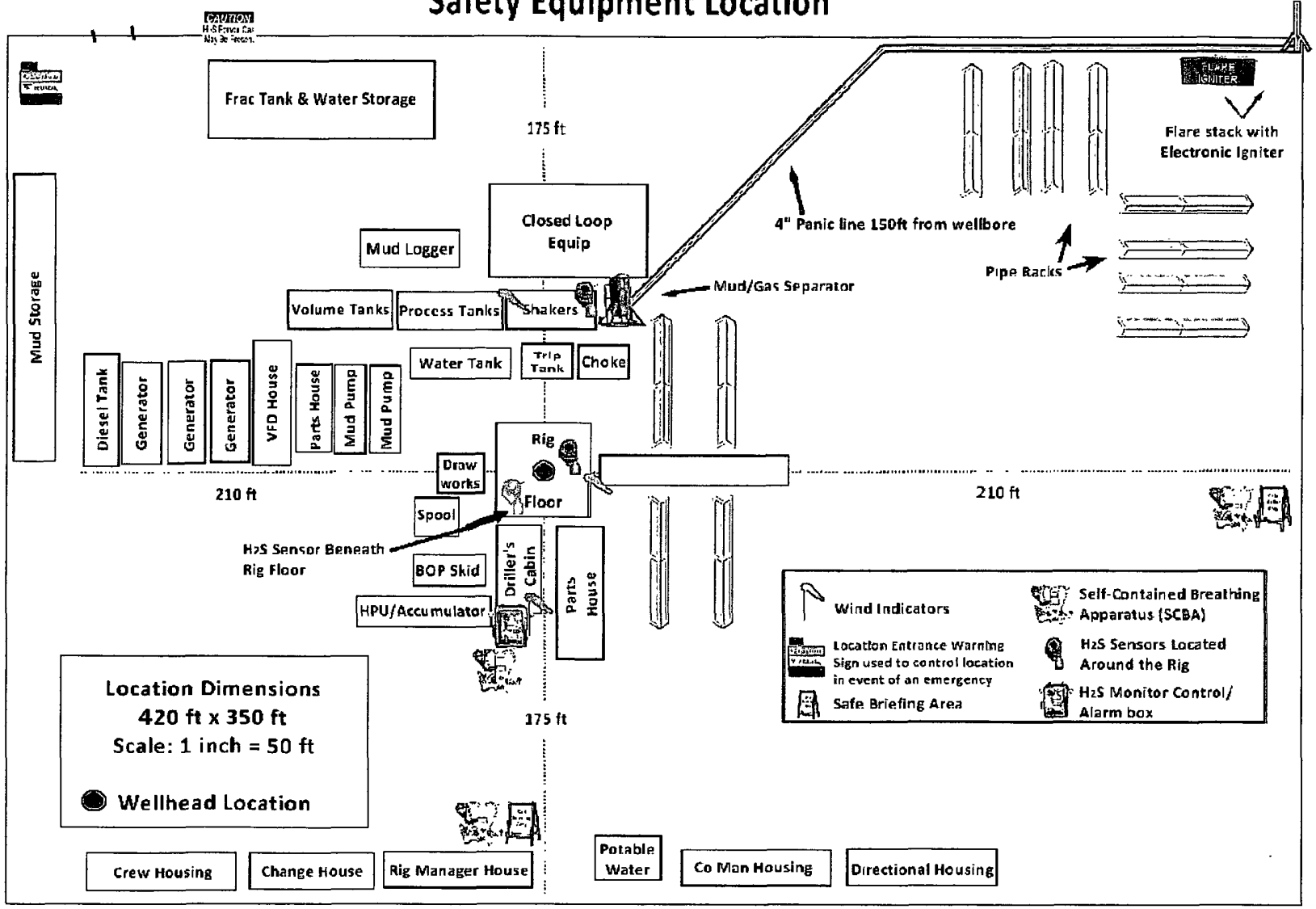
Boots & Coots IWC	1-800-256-9688 or (281) 931-8884
Cudd Pressure Control	(915) 699-0139 or (915) 563-3356
Halliburton	(575) 746-2757
B. J. Services	(575) 746-3569

Give GPS position:

Flight For Life - Lubbock, TX	(806) 743-9911
Aerocare - Lubbock, TX	(806) 747-8923
Med Flight Air Amb - Albuquerque, NM	(575) 842-4433
Lifeguard Air Med Svc. Albuquerque, NM	(575) 272-3115

Prepared in conjunction with
Wade Rohloff

Devon Energy - Well Pad
Rig Location Layout
Safety Equipment Location



H&P Flex Rig Location Layout

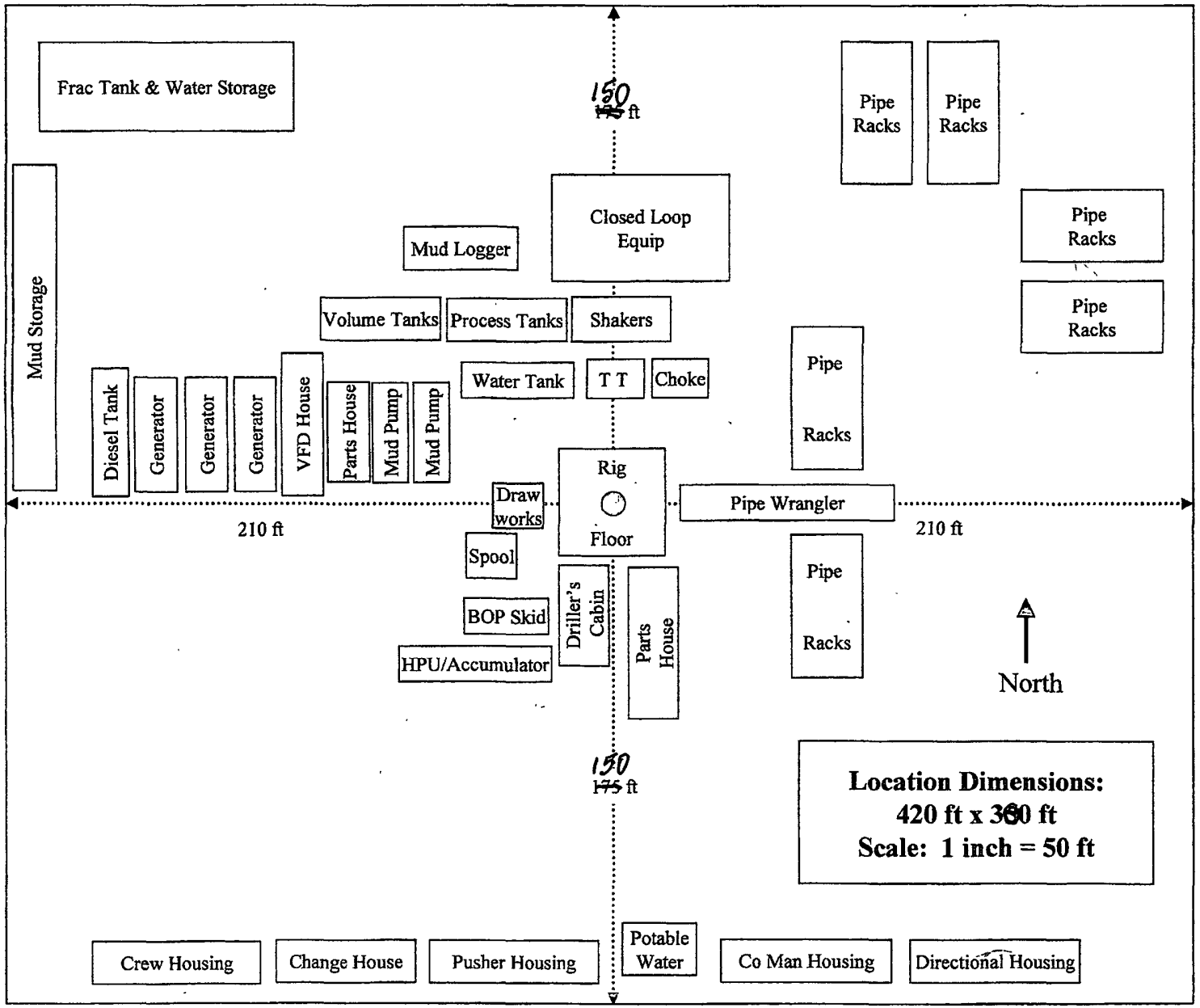
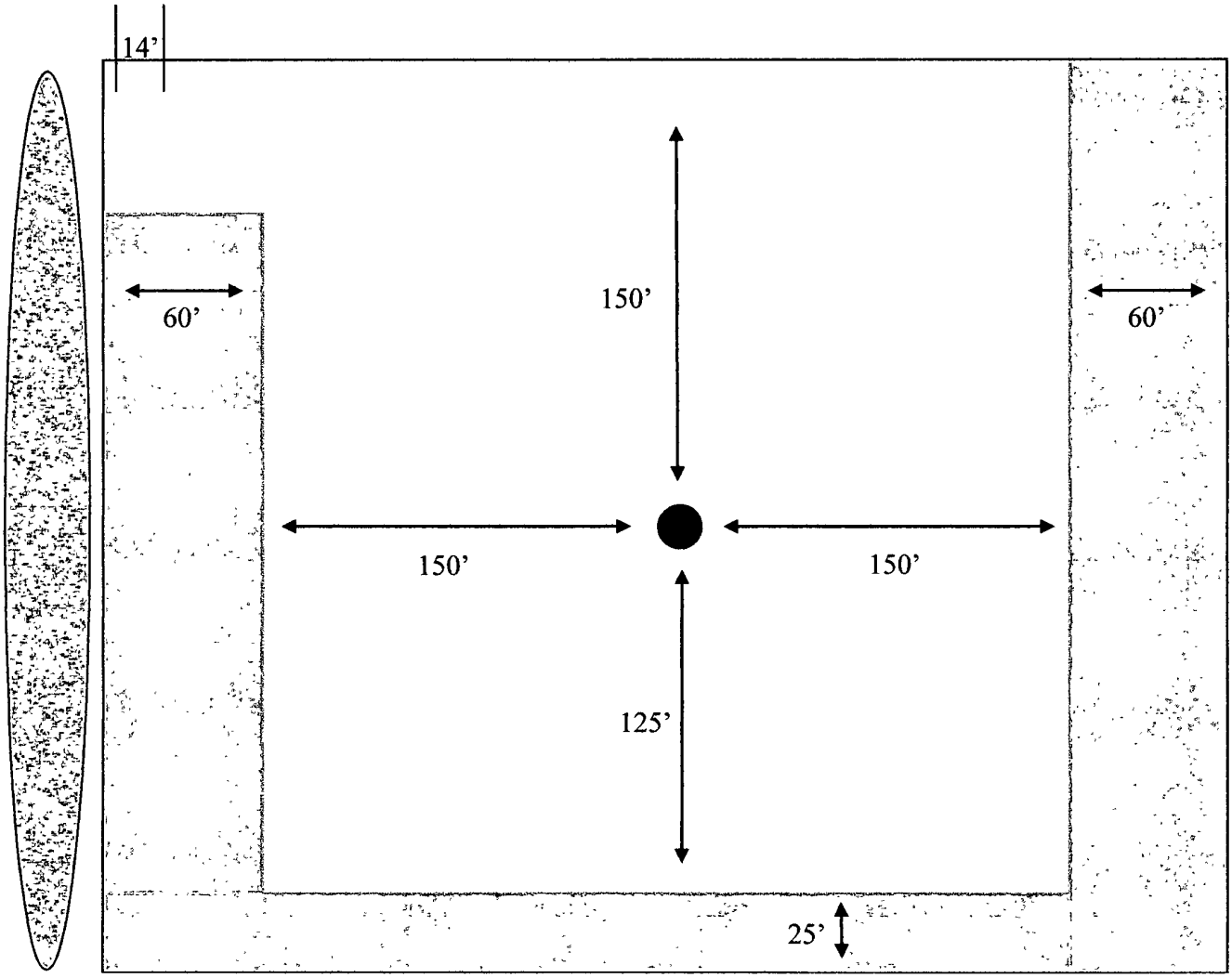


EXHIBIT C

Interim Reclamation & Production Facilities
BLACK JACK 1 FED #6H
V-DOOR EAST



LEGEND

- Well Bore
- Topsoil
- Interim Reclamation
- Production Facilities
- NORTH

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	DEVON ENERGY
LEASE NO.:	NM97133
WELL NAME & NO.:	6H-BLACK JACK 1 FED
SURFACE HOLE FOOTAGE:	116'/S. & 1780'/E.
BOTTOM HOLE FOOTAGE	330'/N. & 1980'/E.
LOCATION:	Section 1, T. 24 S., R. 30 E., NMPM
COUNTY:	Lea County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.