Y7District 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 Road, 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 and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
Revised July 18, 2013

HOBBS OCD
JUL 22 2014
RECEIVED

HOBBS OCD
JUL 23 2014
RECEIVED

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address	2. OGRID Number
Amtex Energy, Inc. P.O. Box 3418 Midland, TX 79702	000785
	3. API Number 30-025-41987

4. Property Code	5. Property Name	6. Well No.
39892	COOP 6 State	2H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
H	6	22S	33E		1780'	N	20'	E	Lea

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
5	6	22S	33E		1780'	N	330'	W	Lea

9. Pool Information

Pool Name	Pool Code
Legg: Bone Spring	37870

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
N	O		S	3674.5'
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	15650'	2nd Bone Spring Sand		TBD

Depth to Ground water	Distance from nearest fresh water well	Distance to nearest surface water

☐ **We will be using a closed-loop system in lieu of lined pits**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5"	13.375"	54.5	600'	580	Surface
Int 1	12.25"	9.625"	40	5180'	2025	Surface
Prod	8.75"	7"	29	10360'	1160	2500
Prod	8.5"	5.5"	20	15650'	870	

Casing/Cement Program: Additional Comments

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	3000	3000	Cameron

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☐, if applicable.
Signature: William J. Savage
Printed name: William J. Savage
Title: President
E-mail Address: bsavage@amtexenergy.com
Date: 07/22/14 Phone: 432-686-0847

OIL CONSERVATION DIVISION
Approved By:
Title: Petroleum Engineer
Approved Date: 07/24/14 Expiration Date: 07/24/16
Conditions of Approval Attached

JUL 25 2014

PM

Amtex Energy, Inc.

Drilling Program

Standard Well Location

SL: 1780' FNL & 20' FEL

BHL: 1780' FNL & 330' FWL

SEC. 6 – T 22S – R 33E

Lea County, New Mexico

1. WELL NAME: COOP 6 State Well No. 2H

2. GEOLOGIC NAME OF SURFACE FORMATION: Permian

3. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS: GL: 3674.5'

KB:

Formation Tops	Depth
Rustler	1150'
Cowden Anhydrite	3040'
Base/Salt	3100'
Capitan Reef Sequence	3400'
Delaware Mountain	4916'
Bell Canyon Sand	4966'
Cherry Canyon	6066'
Brushy Canyon	7061'
Bone Spring (Top of Avalon)	8670'
Cut Off Sand (UCOS)	8880'
Lower Avalon	9405'
1st Bone Spring Sand	9840'
2nd Bone Spring Carbonate	10130'
2nd Bone Spring Sand	10480'
3rd Bone Spring Carbonate	11325'
3rd Bone Spring Sand	11660'
Wolfcamp	11970'
PTD (Pilot Hole)	"No Pilot Hole"
Projected True Vertical Depth ("TVD")	10930'

4. ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

Upper Permian Sands	**Above 350'**	**Fresh Water**
2nd Bone Spring Sand	**10500' - 10950'**	**Oil**

Fresh water sands will be protected by setting a 13-3/8" csg at 600' and circ the cmt back to surface, 9-5/8" csg will be set at 4900' with cmt circ back to surface.

5. DRILLING PROCEDURE:

1. Plan to drill a 17-1/2" hole to 600' with FW. Run 13-3/8", 54.5#, J-55 csg. and cement to surface.
2. Drill 12-1/4" hole to 5,180' with brine, and run 9-5/8", 40#/47#, J-55/N-80 (with possible DVT/ECP set 200' above reef @ approximately 3,300') and cement to surface.
3. Drill 8-3/4" hole with FW to 10,360'.
4. Run logs and then plug back to 10,360' to kick off and drill lateral to 15,650' MD (10,930' TVD).

*5. If hole conditions are stable, hold off to run the 7" casing until after the curve is drilled with the 8 3/4" bit. Additionally, if after drilling the curve with the 8 3/4" bit, the hole continues to remain stable, reduce the hole size down to either 8.5" bit for 5 1/2" casing. Continue drilling the full lateral and then run a tapered string with the 5 1/2" or 4 1/2" casing through the lateral, then a tool joint crossover at the bottom of the curve shall connect to the 7" casing which will be run back to surface.

*6. If hole conditions are not stable, skip step #5 and go on to step #7.

7. Run 7" 29#, P-110 csg. and cement to 2,500' in 2 stages.
8. Drill out 7" csg. With 8-1/2" bit (if the 7" has not been run) and target a 10°/100 ft. radius curve to land the TVD at 10,930' and drill horizontal to 15,650'+/-MD.
9. The 5-1/2" casing liner will be fully cemented through the lateral and cemented with top of casing liner at 10,360' +/-, which is also the base of the 7" casing.

* Steps determined by hole conditions.

6. CASING PROGRAM:

Casing	TrueVertical Depth	Hole Size	Casing Size	Casing Weight	Casing Grade	Desired TOC
Surface	600'	17-1/2"	13-3/8"	54.5 lb/ft	J-55	Surface
Intermediate	5180'	12-1/4"	9-5/8"	40/47 lb/ft	J-55 & N-80	Surface
2nd Intermediate	10360'	8-3/4"	7"	29 lb/ft	P-110	2500'
Production Lateral - 5250'	TD @ MD is 15,650'	8-1/2"	5-1/2"	20 lb/ft	P-110	DVT @ 9,300'

7. CEMENT PROGRAM:

True Vertical Depth	Number of Sacks	Wt. lb/gal	Yld Ft^3/ft	Slurry Description
Surface: 600'	240	13.5	1.75	Lead: 240 sks econocem @13.5 ppg, y-1.75, h20- 9.2
	340	14.8	1.33	Tail: 340 sks halcem @ 14.8 ppg, Y-1.33, H20-6.34
Intermediate: 5180'	1300	12.5	1.94	Lead: 1300 sks econocem-HLC cmt @ 12.5 PPG, 1.94
				yield, 10.66 wtr
	725	14.8	1.34	Tail: 725 sks cmt blend@14.8 PPG, 1.34 yield, 6.36 wtr
Production:				
1st Stage	870	15	2.63	Lead: 870 sks solucem-D, 15.0 Y 2.63 WR 11.38 BBLS
				407.5 0.25LBM D-Air, 0.75% hr 601
2nd Stage	1060	12.9	1.9	Lead: 1060 sks econocem-D 12.9 Y 1.9 WR 9.86 BBLS
				358 0.1%
	100	15.8	1.2	Tail: 100 sks Halcem-D 15.8 Y 1.16 WR 5.15 BBLS 20.6
Top of Curve: 10360'				0.2% HR-800
Length of Lateral:				
5290'				
TD @ MD is 15,650'				

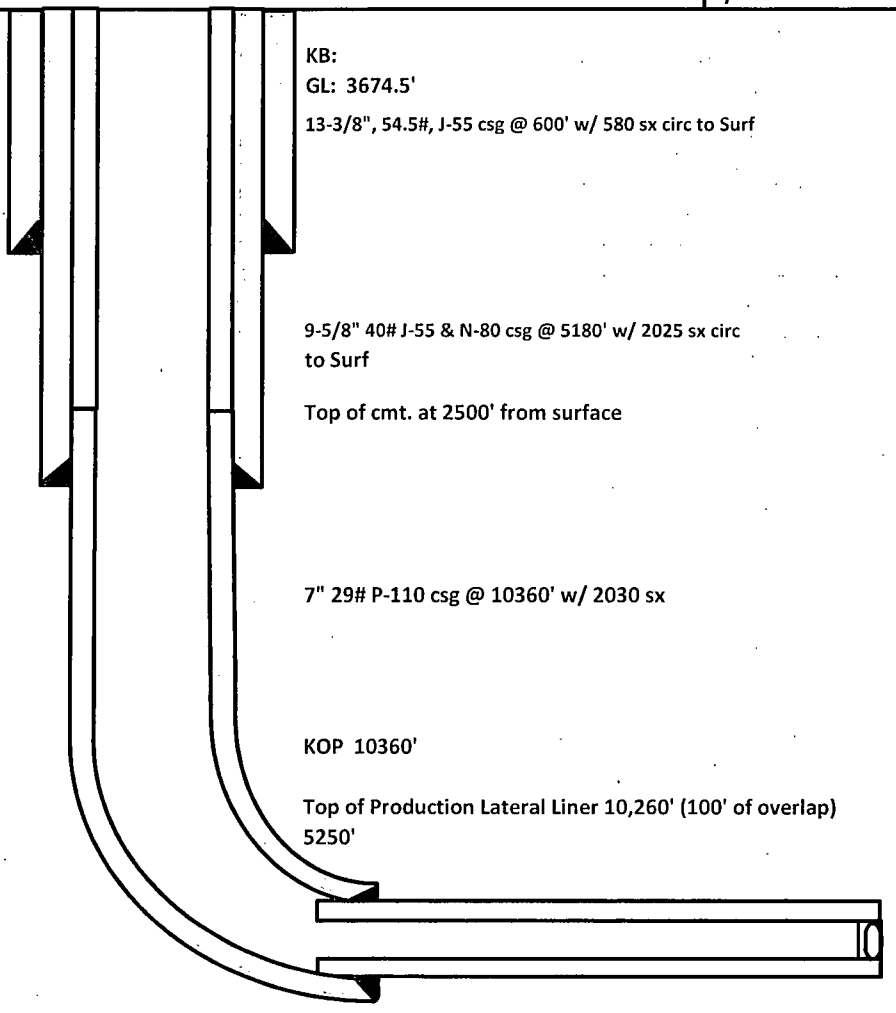
8. MUD PROGRAM:

True Measured Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 - 600'	Fresh Water	8.5 - 9.2	30 - 34	No Control (N/C)*
600' - 5180'	Brine	9.5 - 10.0	28 - 29	N/C*
4900' - 10,360'	Fresh Water	8.4 - 8.8	28 - 32	9150' < 15*
Lateral 10,250' - 15,650'	Mud up with: Optixan/Starpac II / HDS Surfactant	9.0 - 9.3	46 - 50	< 10*

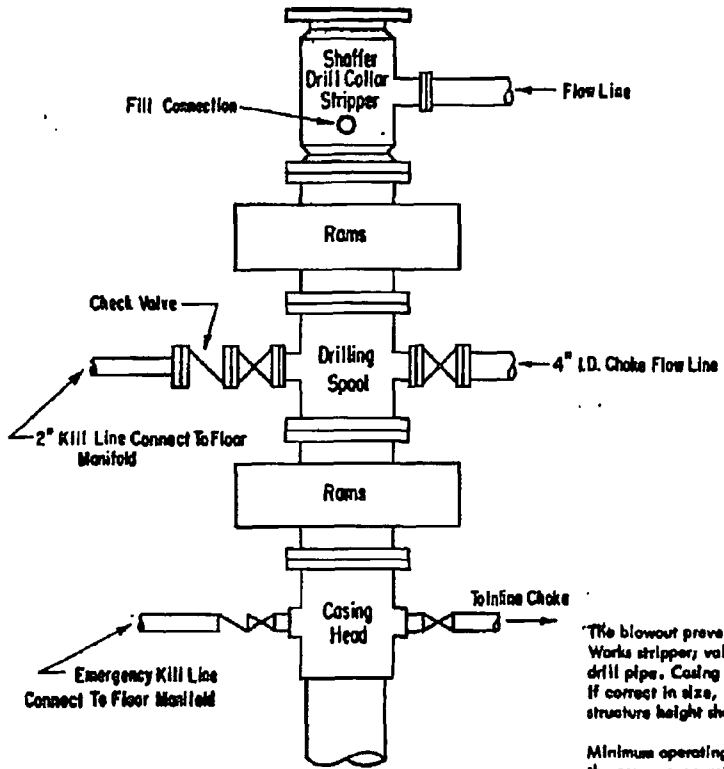
***NOTE*: Follow specific instructions according to Mud Company's Program.**

8. Proposed Wellbore Schematic

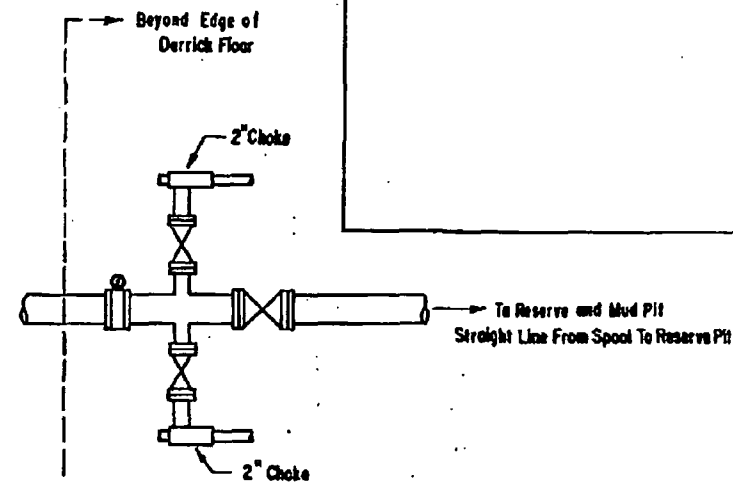
Operator: Amtex Energy, Inc.	**Name of Lease:** COOP 6 State	**Date:** 06/20/2014
API: 30-025-	**Well Name:** COOP 6 State #2H	
Surface Location: Unit H, 1780' FNL & 20' FEL, Sec. 6 - T 22S - R 33E, Lea County, New Mexico		
KB: **GL:** 3674.5'		**By: CD**



True Vertical Depth: 10930'
TD @ MD is 15,650'



3000 PSI WORKING PRESSURE
BLOWOUT PREVENTER HOOK-UP



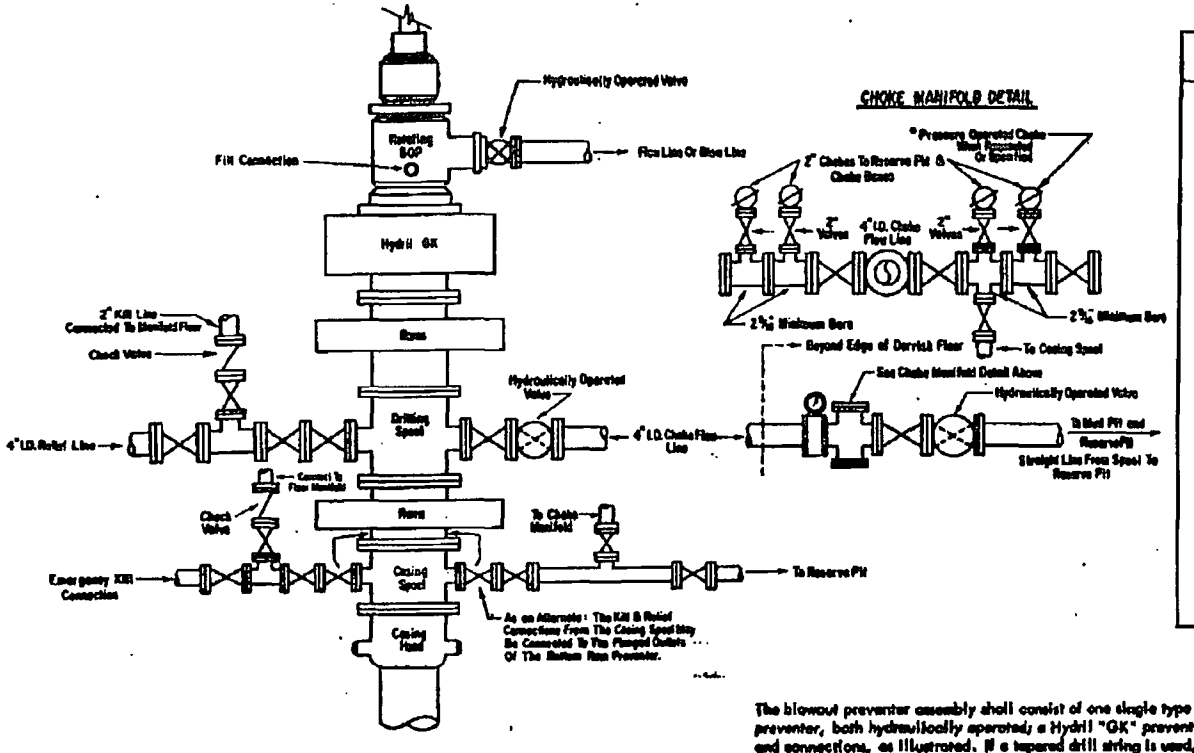
ADDITIONS – DELETIONS – CHANGES
SPECIFY

The blowout preventer assembly shall consist of one blind ram preventer and one pipe ram preventer, both hydraulically operated; a Shaffer Tool Works stripper; valves; chokes and connections, as illustrated. If a tapered drill string is used, a ram preventer must be provided for each size of drill pipe. Casing and tubing rams to fit the preventers are to be available as needed. The ram preventers may be two singles or a double type. If correct in size, the flanged outlets of the ram preventer may be used for connecting to the 4-inch I.D. choke flow line and kill line. The substructure height shall be sufficient to install a rotating blowout preventer.

Minimum operating equipment for the preventers shall be as follows: (1) Pump (s), driven by a continuous source of power, capable of closing all the pressure-operated devices simultaneously within____seconds. The pump (s) is to be connected to a closed type hydraulic operating system. (2) When requested, accumulators with a precharge of nitrogen of not less than 750 PSI and connected so as to receive a fluid charge from the above pump (s). With the charging pump (s) shut down, the pressurized fluid volume stored in the accumulators must be sufficient to close all the pressure-operated devices simultaneously within____ seconds; after closure, the remaining accumulator pressure shall be not less than 1000 PSI with the remaining accumulator fluid volume at least____percent of the original. (3) When requested, an additional source of power, remote and equivalent, is to be available to operate the above pump (s); or there shall be an additional pump (s) operated by separate power and equal in performance capabilities.

The closing manifold shall have a separate control for each pressure-operated device. Controls are to be labeled, with control handles indicating open and closed positions. A pressure reducer and regulator must be provided if a Hydril preventer is used. Gulf Legion No. 38 hydraulic oil, an equivalent or better, is to be used as the fluid to operate the hydraulic equipment.

The choke manifold, choke flow line, and choke lines are to be supported by metal stands and adequately anchored. The choke flow line and choke lines shall be constructed as straight as possible and without sharp bends. Easy and safe access is to be maintained to the choke manifold. All valves are to be selected for operation in the presence of oil, gas, and drilling fluids. The choke flow line valve connected to the drilling spool and all ram type preventers must be equipped with stem extensions, universal joints if needed, and hand wheels which are to extend beyond the edge of the derrick substructure. All other valves are to be equipped with handles.



5000# PSI WORKING PRESSURE
BLOWOUT PREVENTER HOOK-UP

CHOKE MANIFOLD DETAIL

ADDITIONS - DELETIONS - CHANGES
SPECIFY

The blowout preventer assembly shall consist of one single type blind ram preventer and one single type pipe ram preventer, both hydraulically operated; a Hydril "GK" preventer; a rotating blowout preventer; valves; chokes and connections, as illustrated. If a tapered drill string is used, a ram preventer must be provided for each size of drill pipe. Casing and tubing rams to fit the preventers are to be available as needed. If correct in size, the flanged outlets of the ram preventer may be used for connecting to the 4-inch I.D. choke flow line and 4-inch I.D. relief line, except when air or gas drilling. All preventer connections are to be open-face flanged.

Minimum operating equipment for the preventers and hydraulically operated valves shall be as follows: (1) Multiple pumps, driven by a continuous source of power, capable of fluid charging the total accumulator volume from the nitrogen precharge pressure to its rated pressure within_____minutes. Also, the pumps are to be connected to the hydraulic operating system which is to be a closed system. (2) Accumulators with a precharge of nitrogen of not less than 750 PSI and connected so as to receive the aforementioned fluid charge. With the charging pumps shut down, the pressurized fluid volume stored in the accumulators must be sufficient to close all the pressure-operated devices simultaneously within_____seconds; after closure, the remaining accumulator pressure shall be not less than 1000 PSI with the remaining accumulator fluid volume at least_____percent of the original. (3) When requested, an additional source of power, remote and equivalent, is to be available to operate the above pumps; or there shall be additional pumps operated by separate power and equal in performance capabilities.

The closing manifold and remote closing manifold shall have a separate control for each pressure-operated device. Controls are to be labeled, with control handles indicating open and closed positions. A pressure reducer and regulator must be provided for operating the Hydril preventer. When requested, a second pressure reducer shall be available to limit operating fluid pressures to ram preventers. Gulf Legion No. 38 hydraulic oil, an equivalent or better, is to be used as the fluid to operate the hydraulic equipment.

The choke manifold, choke flow line, relief line, and choke lines are to be supported by metal stands and adequately anchored. The choke flow line, relief line, and choke lines shall be constructed as straight as possible and without sharp bends. Easy and safe access is to be maintained to the choke manifold. If deemed necessary, walkways and stairways shall be erected in and around the choke manifold. All valves are to be selected for operation in the presence of oil, gas, and drilling fluids. The choke flow line valves and relief line valves connected to the drilling spool and all ram type preventers must be equipped with stem extensions, universal joints if needed, and hand wheels which are to extend beyond the edge of the derrick substructure. All other valves are to be equipped with handles.

* To include derrick floor mounted controls.

Amtex Energy, Inc

Lea County, New Mexico
Sec 6, T-22-S, R-33-E NMPM
COOP 6 State #2H

Wellbore #1

Plan: Design #1

DDC Well Planning Report

10 July, 2014

The DIRECTIONAL DRILLING COMPANY

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well COOP 6 State #2H
Company:	Amtex Energy, Inc	**TVD Reference:**	Well @ 3674.5usft
Project:	Lea County, New Mexico	**MD Reference:**	Well @ 3674.5usft
Site:	Sec 6, T-22-S, R-33-E NMPM	**North Reference:**	Grid
Well:	COOP 6 State #2H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project Lea County, New Mexico

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site Sec 6, T-22-S, R-33-E NMPM

Site Position:		**Northing:**	517,172.20 usft	**Latitude:**	32° 25' 10.928 N
From:	Map	**Easting:**	725,413.50 usft	**Longitude:**	103° 36' 10.231 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.39 °

Well COOP 6 State #2H

Well Position	**+N/-S**	1,240.0 usft	**Northing:**	518,412.20 usft	**Latitude:**	32° 25' 23.195 N
	+E/-W	41.9 usft	**Easting:**	725,455.40 usft	**Longitude:**	103° 36' 9.644 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	0.0 usft	**Ground Level:**	3,674.5 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/10/2014	7.24	60.29	48,424

Design Design #1

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0
Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**	
	0.0	0.0	0.0	269.70	

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
10,357.0	0.00	0.00	10,357.0	0.0	0.0	0.00	0.00	0.00	0.00	
11,257.0	90.00	269.70	10,930.0	-3.0	-572.9	10.00	10.00	0.00	269.70	
15,495.8	90.00	269.70	10,930.0	-25.4	-4,811.6	0.00	0.00	0.00	0.00	PBHL COOP 6 State

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well COOP 6 State #2H
Company:	Amtex Energy, Inc	**TVD Reference:**	Well @ 3674.5usft
Project:	Lea County, New Mexico	**MD Reference:**	Well @ 3674.5usft
Site:	Sec 6, T-22-S, R-33-E NMPM	**North Reference:**	Grid
Well:	COOP 6 State #2H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
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1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
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2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
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2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well COOP 6 State #2H
Company:	Amtex Energy, Inc	**TVD Reference:**	Well @ 3674.5usft
Project:	Lea County, New Mexico	**MD Reference:**	Well @ 3674.5usft
Site:	Sec 6, T-22-S, R-33-E NMPM	**North Reference:**	Grid
Well:	COOP 6 State #2H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	0.00
8,200.0	0.00	0.00	8,200.0	0.0	0.0	0.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,500.0	0.0	0.0	0.0	0.00	0.00	0.00
8,600.0	0.00	0.00	8,600.0	0.0	0.0	0.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,700.0	0.0	0.0	0.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,800.0	0.0	0.0	0.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,900.0	0.0	0.0	0.0	0.00	0.00	0.00
9,000.0	0.00	0.00	9,000.0	0.0	0.0	0.0	0.00	0.00	0.00
9,100.0	0.00	0.00	9,100.0	0.0	0.0	0.0	0.00	0.00	0.00
9,200.0	0.00	0.00	9,200.0	0.0	0.0	0.0	0.00	0.00	0.00
9,300.0	0.00	0.00	9,300.0	0.0	0.0	0.0	0.00	0.00	0.00
9,400.0	0.00	0.00	9,400.0	0.0	0.0	0.0	0.00	0.00	0.00
9,500.0	0.00	0.00	9,500.0	0.0	0.0	0.0	0.00	0.00	0.00
9,600.0	0.00	0.00	9,600.0	0.0	0.0	0.0	0.00	0.00	0.00
9,700.0	0.00	0.00	9,700.0	0.0	0.0	0.0	0.00	0.00	0.00
9,800.0	0.00	0.00	9,800.0	0.0	0.0	0.0	0.00	0.00	0.00
9,900.0	0.00	0.00	9,900.0	0.0	0.0	0.0	0.00	0.00	0.00
10,000.0	0.00	0.00	10,000.0	0.0	0.0	0.0	0.00	0.00	0.00
10,100.0	0.00	0.00	10,100.0	0.0	0.0	0.0	0.00	0.00	0.00
10,200.0	0.00	0.00	10,200.0	0.0	0.0	0.0	0.00	0.00	0.00
10,300.0	0.00	0.00	10,300.0	0.0	0.0	0.0	0.00	0.00	0.00
Curve KOP / Build @ 10°/100'									
10,357.0	0.00	0.00	10,357.0	0.0	0.0	0.0	0.00	0.00	0.00
10,400.0	4.30	269.70	10,400.0	0.0	-1.6	1.6	10.00	10.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well COOP 6 State #2H
Company:	Amtex Energy, Inc	**TVD Reference:**	Well @ 3674.5usft
Project:	Lea County, New Mexico	**MD Reference:**	Well @ 3674.5usft
Site:	Sec 6, T-22-S, R-33-E NMPM	**North Reference:**	Grid
Well:	COOP 6 State #2H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,450.0	9.30	269.70	10,449.6	0.0	-7.5	7.5	10.00	10.00	0.00
10,500.0	14.30	269.70	10,498.5	-0.1	-17.7	17.7	10.00	10.00	0.00
10,550.0	19.30	269.70	10,546.4	-0.2	-32.2	32.2	10.00	10.00	0.00
10,600.0	24.30	269.70	10,592.8	-0.3	-50.7	50.7	10.00	10.00	0.00
10,650.0	29.30	269.70	10,637.4	-0.4	-73.3	73.3	10.00	10.00	0.00
10,700.0	34.30	269.70	10,679.9	-0.5	-99.6	99.6	10.00	10.00	0.00
10,750.0	39.30	269.70	10,719.9	-0.7	-129.6	129.6	10.00	10.00	0.00
10,800.0	44.30	269.70	10,757.2	-0.9	-162.9	162.9	10.00	10.00	0.00
10,850.0	49.30	269.70	10,791.4	-1.1	-199.3	199.3	10.00	10.00	0.00
10,900.0	54.30	269.70	10,822.3	-1.3	-238.6	238.6	10.00	10.00	0.00
10,950.0	59.30	269.70	10,849.7	-1.5	-280.4	280.4	10.00	10.00	0.00
11,000.0	64.30	269.70	10,873.3	-1.7	-324.4	324.5	10.00	10.00	0.00
11,050.0	69.30	269.70	10,893.0	-2.0	-370.4	370.4	10.00	10.00	0.00
11,100.0	74.30	269.70	10,908.6	-2.2	-417.9	417.9	10.00	10.00	0.00
11,150.0	79.30	269.70	10,920.0	-2.5	-466.5	466.5	10.00	10.00	0.00
11,200.0	84.30	269.70	10,927.2	-2.7	-516.0	516.0	10.00	10.00	0.00
11,250.0	89.30	269.70	10,930.0	-3.0	-565.9	565.9	10.00	10.00	0.00
End of Build @ 11257' MD / 90° Inc. / 10930' TVD									
11,257.0	90.00	269.70	10,930.0	-3.0	-572.9	573.0	10.00	10.00	0.00
11,300.0	90.00	269.70	10,930.0	-3.3	-615.9	615.9	0.00	0.00	0.00
11,400.0	90.00	269.70	10,930.0	-3.8	-715.9	715.9	0.00	0.00	0.00
11,500.0	90.00	269.70	10,930.0	-4.3	-815.9	815.9	0.00	0.00	0.00
11,600.0	90.00	269.70	10,930.0	-4.8	-915.9	915.9	0.00	0.00	0.00
11,700.0	90.00	269.70	10,930.0	-5.4	-1,015.9	1,015.9	0.00	0.00	0.00
11,800.0	90.00	269.70	10,930.0	-5.9	-1,115.9	1,115.9	0.00	0.00	0.00
11,900.0	90.00	269.70	10,930.0	-6.4	-1,215.9	1,215.9	0.00	0.00	0.00
12,000.0	90.00	269.70	10,930.0	-6.9	-1,315.9	1,315.9	0.00	0.00	0.00
12,100.0	90.00	269.70	10,930.0	-7.5	-1,415.9	1,415.9	0.00	0.00	0.00
12,200.0	90.00	269.70	10,930.0	-8.0	-1,515.9	1,515.9	0.00	0.00	0.00
12,300.0	90.00	269.70	10,930.0	-8.5	-1,615.9	1,615.9	0.00	0.00	0.00
12,400.0	90.00	269.70	10,930.0	-9.1	-1,715.9	1,715.9	0.00	0.00	0.00
12,500.0	90.00	269.70	10,930.0	-9.6	-1,815.9	1,815.9	0.00	0.00	0.00
12,600.0	90.00	269.70	10,930.0	-10.1	-1,915.9	1,915.9	0.00	0.00	0.00
12,700.0	90.00	269.70	10,930.0	-10.6	-2,015.9	2,015.9	0.00	0.00	0.00
12,800.0	90.00	269.70	10,930.0	-11.2	-2,115.9	2,115.9	0.00	0.00	0.00
12,900.0	90.00	269.70	10,930.0	-11.7	-2,215.9	2,215.9	0.00	0.00	0.00
13,000.0	90.00	269.70	10,930.0	-12.2	-2,315.9	2,315.9	0.00	0.00	0.00
13,100.0	90.00	269.70	10,930.0	-12.8	-2,415.9	2,415.9	0.00	0.00	0.00
13,200.0	90.00	269.70	10,930.0	-13.3	-2,515.9	2,515.9	0.00	0.00	0.00
13,300.0	90.00	269.70	10,930.0	-13.8	-2,615.9	2,615.9	0.00	0.00	0.00
13,400.0	90.00	269.70	10,930.0	-14.3	-2,715.9	2,715.9	0.00	0.00	0.00
13,500.0	90.00	269.70	10,930.0	-14.9	-2,815.9	2,815.9	0.00	0.00	0.00
13,600.0	90.00	269.70	10,930.0	-15.4	-2,915.9	2,915.9	0.00	0.00	0.00
13,700.0	90.00	269.70	10,930.0	-15.9	-3,015.9	3,015.9	0.00	0.00	0.00
13,800.0	90.00	269.70	10,930.0	-16.4	-3,115.9	3,115.9	0.00	0.00	0.00
13,900.0	90.00	269.70	10,930.0	-17.0	-3,215.9	3,215.9	0.00	0.00	0.00
14,000.0	90.00	269.70	10,930.0	-17.5	-3,315.9	3,315.9	0.00	0.00	0.00
14,100.0	90.00	269.70	10,930.0	-18.0	-3,415.9	3,415.9	0.00	0.00	0.00
14,200.0	90.00	269.70	10,930.0	-18.6	-3,515.9	3,515.9	0.00	0.00	0.00
14,300.0	90.00	269.70	10,930.0	-19.1	-3,615.9	3,615.9	0.00	0.00	0.00
14,400.0	90.00	269.70	10,930.0	-19.6	-3,715.9	3,715.9	0.00	0.00	0.00
14,500.0	90.00	269.70	10,930.0	-20.1	-3,815.9	3,815.9	0.00	0.00	0.00
14,600.0	90.00	269.70	10,930.0	-20.7	-3,915.9	3,915.9	0.00	0.00	0.00
14,700.0	90.00	269.70	10,930.0	-21.2	-4,015.9	4,015.9	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well COOP 6 State #2H
Company:	Amtex Energy, Inc	**TVD Reference:**	Well @ 3674.5usft
Project:	Lea County, New Mexico	**MD Reference:**	Well @ 3674.5usft
Site:	Sec 6, T-22-S, R-33-E NMPM	**North Reference:**	Grid
Well:	COOP 6 State #2H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,800.0	90.00	269.70	10,930.0	-21.7	-4,115.9	4,115.9	0.00	0.00	0.00
14,900.0	90.00	269.70	10,930.0	-22.3	-4,215.9	4,215.9	0.00	0.00	0.00
15,000.0	90.00	269.70	10,930.0	-22.8	-4,315.9	4,315.9	0.00	0.00	0.00
15,100.0	90.00	269.70	10,930.0	-23.3	-4,415.9	4,415.9	0.00	0.00	0.00
15,200.0	90.00	269.70	10,930.0	-23.8	-4,515.9	4,515.9	0.00	0.00	0.00
15,300.0	90.00	269.70	10,930.0	-24.4	-4,615.9	4,615.9	0.00	0.00	0.00
15,400.0	90.00	269.70	10,930.0	-24.9	-4,715.8	4,715.9	0.00	0.00	0.00
PBHL @ 15496' MD / 10930' TVD									
15,495.8	90.00	269.70	10,930.0	-25.4	-4,811.6	4,811.7	0.00	0.00	0.00

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL COOP 6 State #2I - plan hits target center - Point	0.00	0.00	10,930.0	-25.4	-4,811.6	518,386.80	720,643.80	32° 25' 23.266 N	103° 37' 5.778 W

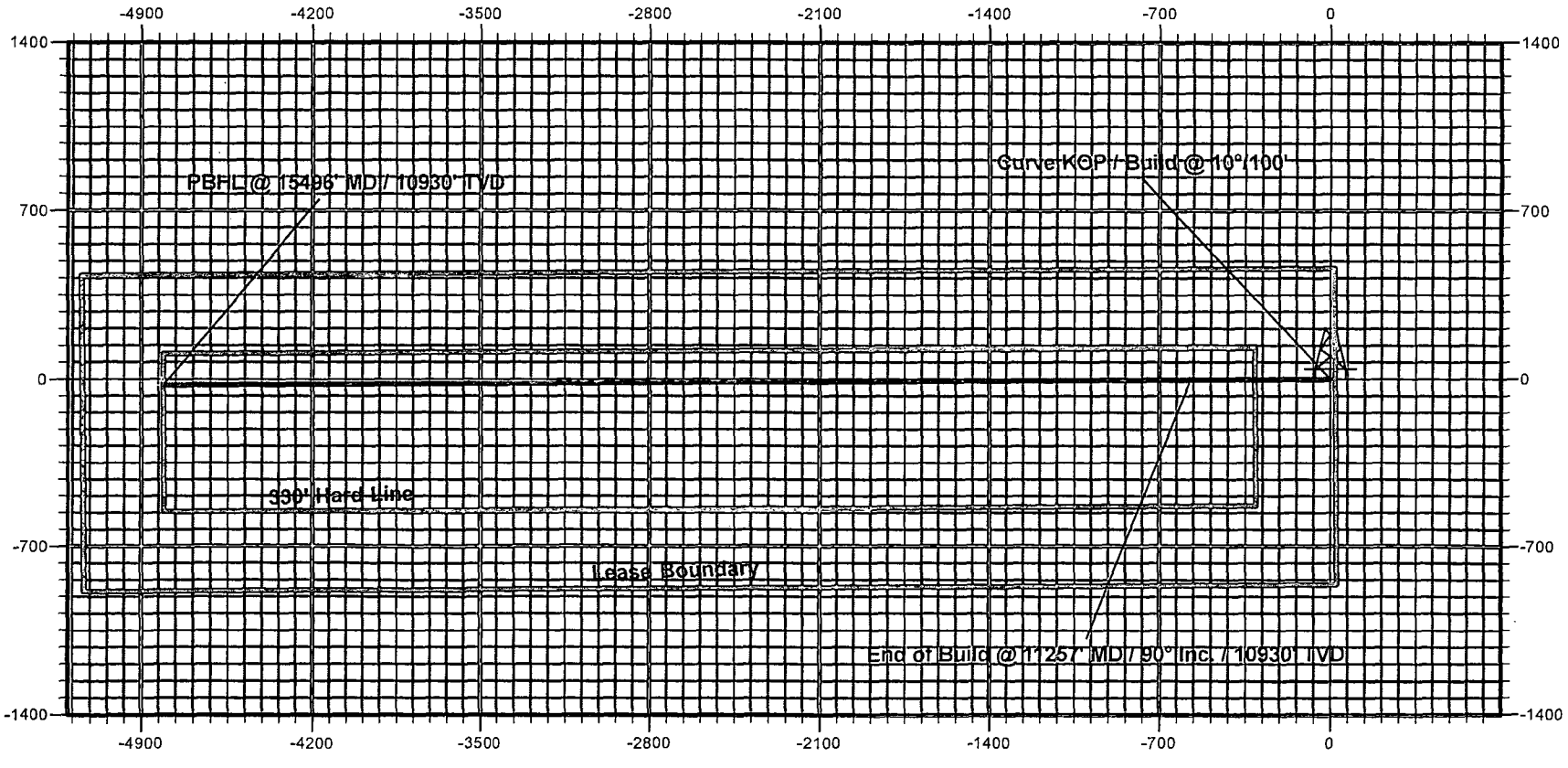
Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
10,357.0	10,357.0	0.0	0.0	Curve KOP / Build @ 10°/100'
11,257.0	10,930.0	-3.0	-572.9	End of Build @ 11257' MD / 90° Inc. / 10930' TVD
15,495.8	10,930.0	-25.4	-4,811.6	PBHL @ 15496' MD / 10930' TVD

Amtex Energy, Inc.

Lea County, New Mexico
Sec 6, T-22-S, R-33-E NMPM
COOP 6 State #2H
Design #1

The DIRECTIONAL DRILLING COMPANY



Amtex Energy, Inc

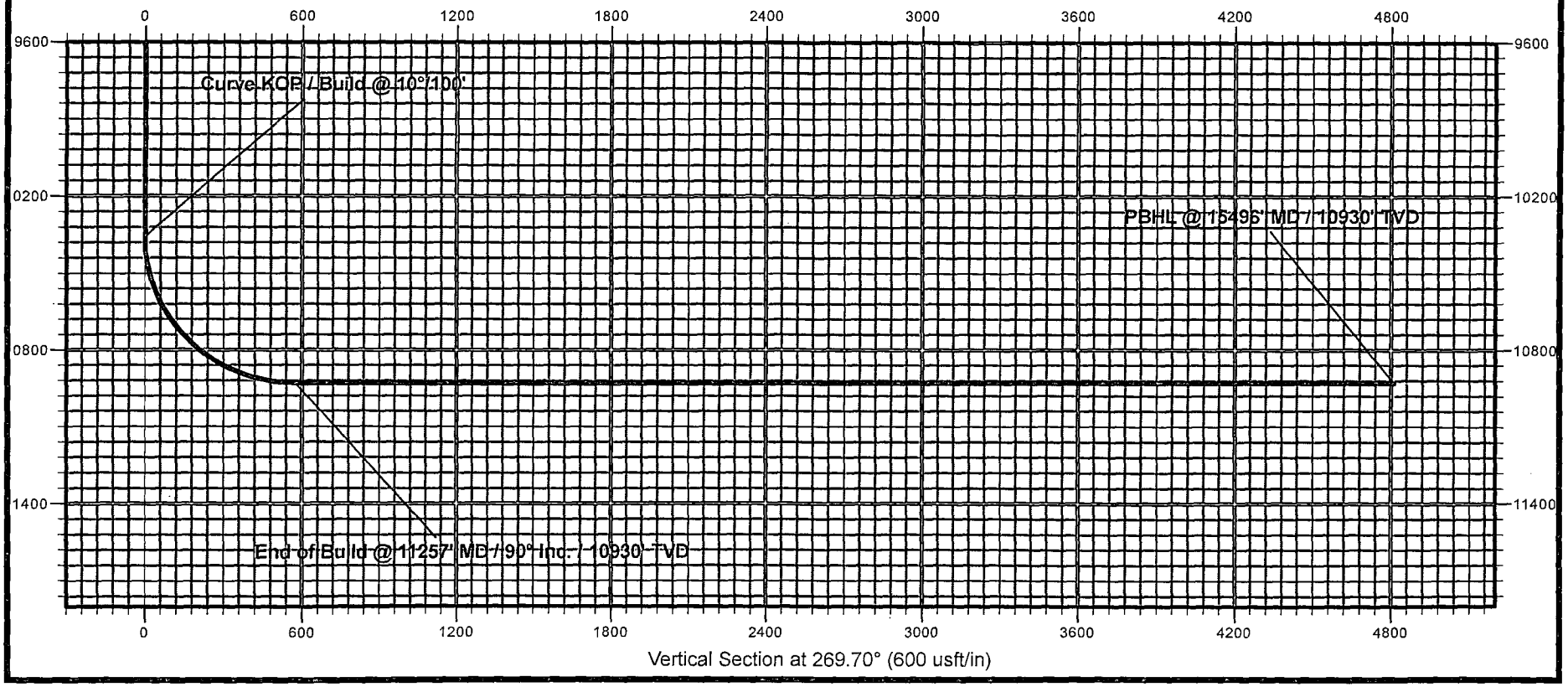
Lea County, New Mexico

Sec 6, T-22-S, R-33-E NMPM

COOP 6 State #2H

Design #1

The DIRECTIONAL DRILLING COMPANY



DISTRICT I --- CHECKLIST FOR INTENTS TO DRILL APD is for N P E A D

WELL TYPE: O, G, I, S, OTHER

39892 Operator Amtex Energy LWC OGRID # 785

Well Name & # COOP 67 State #2H Surface Type (F) (S) (P)

Location: UL K, Sect 6, Twnship 22 s, RNG 33e, Sub-surface Type (F) (S) (P)

1: BHL @: UL B, Sect 6, Twnship 22s, RNG 33 e, H DD

2: BHL@: UL, Sect, Twnship s, RNG e, H DD

INT TO RE-ENTER 26-36595 4/23/14

Date C101 rec'd 7/23/14 C101 reviewed / /

B. 1. Check mark, Information is OK on Forms:

OGRID, BONDING, PROP CODE, WELL #, SIGNATURE

2. Inactive Well list as of : 7/23/14 # wells 21, # Inactive wells 2

a. District Grant APD but see number of inactive wells:

No letter required; Sent Letter to Operator, to Santa Fe

3. Additional Bonding as of: 7/23/14

a. District Denial because operator needs addition bonding:

No Letter required; Sent Letter to Operator, To Santa Fe

b. District Denial because of Inactive well list and Financial Assurance:

No Letter required; Sent Letter to Operator, To Santa Fe

C102 YES, NO, Signature MATCHING TO C101 OP. NAME LOCATION

Pool Legg Bone Spring, Code 37870

a. Dedicated acreage 160, What Units HGF Lot 5

b. SUR. Location Standard : Non-Standard Location

c. Well shares acres: Yes, No, # of wells 1 plus this well # 2H

1. 2nd Operator in-same-acreage, Yes, No WELL(S) SHARING:

WELL(S) BY 2nd OPER: Agreement Letter, Disagreement letter #2=25-27573

2. Intent to Directional Drill Yes, No

Dedicated acreage 160, What Units HGF Lot 5

Bottomhole Location Standard, Non-Standard Bottomhole

3. Downhole Commingle: Yes, No

a. Pool #2 ,Code , Acres

Pool #3 , Code , Acres

Pool #4 , Code , Acres

4. POTASH Area Yes, No

C. Blowout Preventer Yes, No

D. H2S Yes, No

E. C144 Pit Registration Yes, No, CLOSED-LOOP STATEMENT

F. Does APD require Santa Fe Approval:

1. Non-Standard Location: Yes, No, NSL #

2. Non-Standard Proration: Yes, No, NSP #

3. Simultaneous Dedication: Yes, No, SD #

Number of wells Plus #

4. Injection order Yes, No; PMX # or WFX #

5. SWD order Yes, NO; SWD #

6. DHC from SF; DHC-HOB; Holding

7. OCD Approval Date 7/23/14 API #30-0 25-41981

8. Reviewers dm