

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other		5. Lease Serial No. NMNM113395	
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr. Other _____		6. If Indian, Allottee or Tribe Name	
2. Name of Operator MACK ENERGY CORPORATION		Contact: ROBERT CHASE E-Mail: JERRYS@MEC.COM	
3. Address ARTESIA, NM 88211-0960		3a. Phone No. (include area code) Ph: 575-748-1288	
4. Location of Well (Report location clearly and in accordance with Federal requirements)* Sec 24 T20S R25E Mer NMP At surface NWNW 180FNL 180FWL At top prod interval reported below At total depth		8. Lease Name and Well No. RATTLE TRAP FEDERAL 1	
14. Date Spudded 08/28/2010		15. Date T.D. Reached 09/04/2010	
16. Date Completed 09/07/2010		17. Elevations (DF, KB, RT, GL)* 3395 GL	
18. Total Depth: MD 4002 TVD		19. Plug Back T.D.: MD TVD	
20. Depth Bridge Plug Set: MD TVD		21. Type Electric & Other Mechanical Logs Run (Submit copy of each)	
22. Was well cored? ☒ No ☐ Yes (Submit analysis) Was DST run? ☒ No ☐ Yes (Submit analysis) Directional Survey? ☐ No ☒ Yes (Submit analysis)			

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17.500	8.625 J-55	24.0	0	1200		700		0	
12.250	8.625 J-55	24.0	0	1206		750		0	0
7.875	5.500 L-80	17.0	0	4300		750		0	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) YESO						
B)						
C)						
D)						

26. Perforation Record

Depth Interval	Amount and Type of Material

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #93405 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

RECEIVED
OCT 05 2010
NMNM113395

WILDCAT Dry & Abandon

ACCEPTED FOR RECORD
OCT 2 2010
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

dm



An Operating Unit of Smith International, Inc.

DIRECTIONAL SURVEY REPORT

3D-015-38110

MACK ENERGY

RATTLE TRAP FEDERAL #1

EDDY COUNTY, NEW MEXICO

PREPARED BY: FRANCISCO SINISTERRA

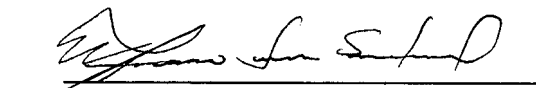
DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) JAY FULTON
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 09-01-10 TO 09-04-10
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: EDDY COUNTY, NM
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:

MACK ENERGY
RATTLE TRAP FEDERAL #1
RIG: SILVER OAK #7
API: 30-015-38110

9. SURVEY CERTIFIED FROM: 1249 TO 3945 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 223.92 FEET ON A BEARING OF 134.99 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 4002 FEET, ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.


FRANCISCO SINISTERRA
M/LWD SERVICE COORDINATOR

PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 09/01/2010
Date Completed: 09/04/2010

MACK ENERGY CORPORATION
RATTLE TRAP FEDERAL #1
EDDY COUNTY, NEW MEXICO
Rig:SILVER OAK #2
PathFinder Office Supervisor: FRANCISO SINISTERRA
PathFinder Field Engineers:JAY FULTON
RUSTY HAINES

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.33.55.8955 N LON:104.26.45.0646 W
GRID Reference:NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 465335.8000 Y: 569468.8000
North Aligned To:GRID NORTH
Total Magnetic Correction: 8.17° EAST TO GRID
Vertical Section Plane: 135.08
Survey Vert. Reference: 17.50' Rotary Table To Ground
Altitude:3390.00' Ground To MSL

Measured Depth	4002.00	(feet)
Inclination	1.32	(deg)
Azimuth	315.51	(deg)
True Vertical Depth	3973.05	(feet)
Vertical Section	223.92	(feet)
Survey X cord	465494.16	(feet)
Survey Y cord	569310.48	(feet)
Survey Lat	32.56509178 N	(deg)
Survey Lon	104.44533672 W	(deg)
Rectangular Corr. N/S	158.30 S	(feet)
Rectangular Corr. E/W	158.37 E	(feet)
Closure Distance	223.92	(feet)
Direction of Closure	134.99	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

MACK ENERGY CORPORATION
RATTLE TRAP FEDERAL #1
EDDY COUNTY, NEW MEXICO
Rig: SILVER OAK #2
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers: JAY FULTON
RUSTY HAINES

Survey Horiz. Reference: WELLHEAD
Ref Coordinates: LAT: 32.33.55.8955 N LON: 104.26.45.0646 W
GRID Reference: NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 465335.8000 Y: 569468.8000
North Aligned To: GRID NORTH
Total Magnetic Correction: 8.17° EAST TO GRID
Vertical Section Plane: 135.08
Survey Vert. Reference: 17.50' Rotary Table To Ground
Altitude: 3390.00' Ground To MSL

Survey Calculations by RX4 using Minimum Curvature

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	Rectangular Offsets (ft)	TOTAL (ft)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
TIE-IN TO SCIENTIFIC DRILLING GYRO SURVEY @ 1142' MD.									
1142.00	1.90	36.15	1141.60	0.00	-6.58	24.79 N	15.54 E	29.26@	0.00
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.									
1249.00	1.85	40.28	1248.54	107.00	-7.00	27.54 N	17.70 E	32.74@	0.13
1280.00	1.67	46.86	1279.53	31.00	-7.03	28.23 N	18.36 E	33.67@	0.87
1311.00	1.32	74.08	1310.52	31.00	-6.84	28.64 N	19.03 E	34.38@	2.52
1341.00	1.67	115.99	1340.51	30.00	-6.26	28.54 N	19.75 E	34.71@	3.73
1404.00	4.22	147.78	1403.42	63.00	-3.13	26.18 N	21.82 E	34.08@	4.66
1436.00	5.36	151.39	1435.31	32.00	-0.55	23.87 N	23.16 E	33.26@	3.68
1531.00	8.27	152.33	1529.63	95.00	10.24	13.92 N	28.46 E	31.68@	3.06
1626.00	11.17	145.27	1623.26	95.00	25.82	0.30 N	36.88 E	36.88@	3.30
1722.00	14.33	142.70	1716.88	96.00	46.76	16.79 S	49.38 E	52.15@	3.34
1816.00	17.24	143.51	1807.33	94.00	72.07	37.25 S	64.71 E	74.67@	3.11
1912.00	18.20	143.20	1898.77	96.00	100.99	60.69 S	82.15 E	102.14@	1.00
2007.00	16.71	142.47	1989.39	95.00	129.22	83.40 S	99.36 E	129.73@	1.59
2102.00	14.95	142.70	2080.79	95.00	154.91	103.98 S	115.11 E	155.12@	1.85
2197.00	13.98	142.72	2172.78	95.00	178.43	122.86 S	129.48 E	178.50@	1.02
2293.00	11.78	141.41	2266.35	96.00	199.67	139.75 S	142.62 E	199.68@	2.31
2388.00	8.18	140.80	2359.90	95.00	216.03	152.57 S	152.95 E	216.03@	3.79
2483.00	4.66	139.30	2454.29	95.00	226.61	160.74 S	159.74 E	226.61@	3.71
2590.00	0.53	120.68	2561.16	107.00	231.43	164.29 S	163.00 E	231.43@	3.89
2685.00	0.70	323.75	2656.16	95.00	231.28	164.04 S	163.03 E	231.28@	1.27
2781.00	0.62	285.87	2752.15	96.00	230.25	163.43 S	162.19 E	230.25@	0.45
2876.00	0.79	272.69	2847.14	95.00	229.31	163.26 S	161.04 E	229.32@	0.25
2971.00	1.06	293.91	2942.13	95.00	228.01	162.87 S	159.58 E	228.02@	0.45
3066.00	0.97	306.12	3037.12	95.00	226.40	162.04 S	158.13 E	226.41@	0.25
3162.00	0.18	270.36	3133.11	96.00	225.49	161.56 S	157.32 E	225.50@	0.86

PathFinder Energy Services, Inc.

Survey Report

MACK ENERGY CORPORATION
 RATTLE TRAP FEDERAL #1
 EDDY COUNTY, NEW MEXICO
 RIG:SILVER OAK #2

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	Rectangular Offsets (ft)	TOTAL Rectangular Offsets (ft)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
3257.00	0.53	147.45	3228.11	95.00	225.81	161.93 S	157.41 E	225.83@ 135.81	0.68
3352.00	0.53	109.98	3323.11	95.00	226.64	162.45 S	158.06 E	226.65@ 135.79	0.36
3448.00	0.62	89.14	3419.10	96.00	227.40	162.60 S	158.99 E	227.41@ 135.64	0.24
3543.00	0.62	75.19	3514.10	95.00	228.02	162.46 S	160.00 E	228.02@ 135.44	0.16
3638.00	0.35	76.27	3609.09	95.00	228.42	162.26 S	160.78 E	228.42@ 135.26	0.28
3733.00	0.35	357.88	3704.09	95.00	228.36	161.90 S	161.05 E	228.36@ 135.15	0.47
3829.00	0.88	330.10	3800.09	96.00	227.43	160.96 S	160.67 E	227.43@ 135.05	0.62
3945.00	1.32	315.51	3916.06	116.00	225.24	159.24 S	159.29 E	225.24@ 134.99	0.45
STRAIGHT LINE PROJECTION TO BIT @ 4002' MD.									
4002.00	1.32	315.51	3973.05	57.00	223.92	158.30 S	158.37 E	223.92@ 134.99	0.00



TIE-IN SURVEY INFORMATION SHEET

CLIENT INFORMATION

CLIENT:	Mack Energy		
LEASE / WELL No.:	Rattle Trap Federal	#1	
WELL LOCATION:	Eddy County		
COUNTY / STATE / COUNTRY:	Eddy	NM	USA
RIG:	Silver Oak #2		
API WELL No:			
JOB No:	700000142 WT-WT		
P.O. / AFE No.	2779.001		
DIRECTIONAL COMPANY:	Pathfinder Energy		

WELL SITE INFORMATION

TOTAL MAGNETIC CORRECTION (TMC):			
On Wall Plat:	8.16	LWD Calculated:	8.17
X = 465335.800000 Feet		Y = 569468.800000 Feet	
SITE LATITUDE:	32.565526	SITE LONGITUDE:	104.445851
GRID SYSTEM:	TRUE ☐ UTM ☒ LAMBERT ☐	ZONE:	New Mexico East
PROPOSED DRIFT DIRECTION:	135.08		
KELLY BUSHING ELEVATION:	17.5		
ALTITUDE:	3390 Feet	WATER DEPTH:	Feet

TIE-IN SURVEY

MEASURED DEPTH:	1142		
DRIFT ANGLE:	1.9		
DRIFT DIRECTION:	36.15		
TRUE VERTICAL DEPTH:	1141.6		
VERTICAL SECTION:	-6.58		
RECTANGULAR COORDINATE (N / S) :	24.79		
RECTANGULAR COORDINATE (E / W) :	15.54		
CLOSURE DISTANCE / DIRECTION:	29.26	32.08	
SURVEY CALCULATION METHOD:	AA ☐	MC ☒	RC ☐ BT ☐
SOURCE OF TIE-IN DATA (COMPANY):	Scientific Drilling		
COPY OF TIE-IN SURVEY REPORT	☒ YES ☐ NO		

WELL PLAN

KICKOFF DEPTH:	1142	TOTAL DEPTH:	4026
KICKOFF ANGLE:	1.9	MAX ANGLE:	18

PES Engineers:

Jay Fulton

Rusty Haines

**Signature of both field engineers required if applicable

Directional Driller: Kevin Jezek

DATE: 1-Sep-2010

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

MACK ENERGY
RATTLE TRAP FEDERAL #1
EDDY COUNTY, NEW MEXICO
Rig: SILVER OAK 2

Mon Aug 30 14:37:07 2010

Coordinates

Latitude: 32.565527 N (32 deg. 33 min. 55.8955 sec.)
Longitude: 104.445851 W (-104 deg. 26 min. 45.0646 sec.)
Elevation: 3407.50 feet.
Calculation Date: Aug/30/2010

Magnetic Calculations

Model: IGRF2010
Dip Angle: 60.3683 degrees
Total Magnetic Field: 0.48802 gauss
Magnetic Declination: 8.105825 degrees
Horizontal Intensity: 0.241285 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 8.105825 Degr

Transverse Mercator Grid Calculations NAD27

Grid System: Transverse Mercator: new mexico east
Ellipsoid: Clarke 1866
X: 465335.8000 feet
Y: 569468.8000 feet
True to Grid: (convergence) 0.060564 degrees
Magnetic to Grid: 8.166390 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 8.166390 Degr.

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

Field
Calculations

MACK ENERGY
RATTLE TRAP FEDERAL #1
EDDY COUNTY
Rig:SILVER OAK #2

Wed Sep 01 03:07:05 2010

Coordinates

Latitude: 32.565527 N (32 deg. 33 min. 55.8955 sec.)
Longitude: 104.445851 W (-104 deg. 26 min. 45.0646 sec.)
Elevation: 3407.50 feet.
Calculation Date: Sep/01/2010

Magnetic Calculations

Model: IGRF2010
Dip Angle: 60.3682 degrees
Total Magnetic Field: 0.48801 gauss
Magnetic Declination: 8.105164 degrees
Horizontal Intensity: 0.241284 gauss

To Convert a Magnetic Dir. to a TRUE North Dir. Add 8.105164 Degs

Transverse Mercator Grid Calculations NAD27

Grid System: Transverse Mercator: new mexico east
Ellipsoid: Clarke 1866
X: 465335.8000 feet
Y: 569468.8000 feet
True to Grid: (convergence) 0.060564 degrees
Magnetic to Grid: 8.165728 degrees

To Convert a Magnetic Dir. to a GRID dir. Add 8.165728 Degs.



30-D15-3811D

RECEIVED

AUG 05 2010

HOBBSOCD

Mack Energy
Eddy County
Rattle Trap Federal
#1H
OH

Plan: Plan #1

Pathfinder X & Y Planning Report

04 August, 2010

PATHFINDER



Pathfinder

Pathfinder X & Y Planning Report



Company:	Mack Energy	Local Co-ordinate Reference:	Well #1H
Project:	Eddy County	TVD Reference:	WELL @ 3409.00ft (Original Well Elev)
Site:	Rattle Trap Federal	MD Reference:	WELL @ 3409.00ft (Original Well Elev)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	Midland Database
Project:	Eddy County		
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:	Rattle Trap Federal	Northings:	569,468.800 ft	Latitude:	32° 33' 55.895 N
Site Position:	Map	Easting:	465,335.800 ft	Longitude:	104° 26' 45.065 W
From:		Slot Radius:	"	Grid Convergence:	-0.06 °
Position Uncertainty:	0.00 ft				

Well:	#1H	Northings:	569,468.800 ft	Latitude:	32° 33' 55.895 N
Well Position	+N/S	Easting:	465,335.800 ft	Longitude:	104° 26' 45.065 W
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft	Ground Level:	3,390.00 ft

Wellbore:	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	08/04/2010	8.10	60.39	48,842

Design	Plan #1				
Audit Notes:					
Version:		Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:		Depth From (TVD) (ft)	+N/S (ft)	+E/W (ft)	Direction (°)
		0.00	0.00	0.00	135.04

Survey Tool Program	Date	08/04/2010			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.00	4,026.21	Plan #1 (OH)	MWD	MWD - Standard	



Pathfinder Pathfinder X & Y Planning Report



Company: Mack Energy
Project: Eddy County
Site: Ratle Trap Federal
Well: #1H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:
Well #1H
WELL @ 3409.00ft (Original Well Elev)
WELL @ 3409.00ft (Original Well Elev)
Grid
Minimum Curvature
Midland Database

Planned Survey	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
	0.00	0.00	0.00	0.00	-3.409.00	0.00	0.00	0.00	0.00	569,468.80	465,335.80
	100.00	0.00	0.00	100.00	-3.309.00	0.00	0.00	0.00	0.00	569,468.80	465,335.80
	200.00	0.00	0.00	200.00	-3.209.00	0.00	0.00	0.00	0.00	569,468.80	465,335.80
	300.00	0.00	0.00	300.00	-3.109.00	0.00	0.00	0.00	0.00	569,468.80	465,335.80
	400.00	0.00	0.00	400.00	-3.009.00	0.00	0.00	0.00	0.00	569,468.80	465,335.80
	500.00	0.00	0.00	500.00	-2.909.00	0.00	0.00	0.00	0.00	569,468.80	465,335.80
	600.00	0.00	0.00	600.00	-2.809.00	0.00	0.00	0.00	0.00	569,468.80	465,335.80
	700.00	0.00	0.00	700.00	-2.709.00	0.00	0.00	0.00	0.00	569,468.80	465,335.80
	800.00	0.00	0.00	800.00	-2.609.00	0.00	0.00	0.00	0.00	569,468.80	465,335.80
	900.00	0.00	0.00	900.00	-2.509.00	0.00	0.00	0.00	0.00	569,468.80	465,335.80
	1,000.00	0.00	0.00	1,000.00	-2.409.00	0.00	0.00	0.00	0.00	569,468.80	465,335.80
	1,100.00	0.00	0.00	1,100.00	-2.309.00	0.00	0.00	0.00	0.00	569,468.80	465,335.80
	1,200.00	0.00	0.00	1,200.00	-2.209.00	0.00	0.00	0.00	0.00	569,468.80	465,335.80
	1,300.00	0.00	0.00	1,300.00	-2.109.00	0.00	0.00	0.00	0.00	569,468.80	465,335.80
	1,400.00	3.00	135.04	1,399.95	-2.009.05	-1.85	1.85	2.62	3.00	569,466.95	465,337.65
	1,500.00	6.00	135.04	1,499.63	-1.909.37	-7.40	7.39	10.46	3.00	569,461.40	465,343.19
	1,600.00	9.00	135.04	1,598.77	-1.810.23	-16.64	16.62	23.51	3.00	569,452.16	465,352.42
	1,700.00	12.00	135.04	1,697.08	-1.711.92	-29.53	29.49	41.74	3.00	569,439.27	465,365.29
	1,800.00	15.00	135.04	1,794.31	-1.614.69	-46.04	45.99	65.08	3.00	569,422.76	465,381.79
	1,900.00	18.00	135.04	1,890.18	-1.518.82	-66.14	66.06	93.48	3.00	569,402.66	465,401.86
	1,922.81	18.68	135.04	1,911.83	-1.497.17	-71.22	71.13	100.65	3.00	569,397.58	465,406.93
	2,003.40	18.68	135.04	1,988.17	-1.420.83	-89.48	89.37	126.47	0.00	569,379.32	465,425.17
	2,100.00	15.79	135.04	2,080.43	-1.328.57	-109.73	109.60	155.09	3.00	569,359.07	465,445.40
	2,200.00	12.79	135.04	2,177.32	-1.231.68	-127.19	127.03	179.76	3.00	569,341.61	465,462.83
	2,300.00	9.79	135.04	2,275.38	-1.133.62	-141.04	140.86	199.33	3.00	569,327.76	465,476.66
	2,400.00	6.79	135.04	2,374.32	-1.034.68	-151.23	151.04	213.74	3.00	569,317.57	465,486.84
	2,500.00	3.79	135.04	2,473.88	-935.12	-157.75	157.55	222.95	3.00	569,311.05	465,493.35



Pathfinder

Pathfinder X & Y Planning Report



Company:	Mack Energy	Local Co-ordinate Reference:	Well #1H
Project:	Eddy County	TVD Reference:	WELL @ 3409.00ft (Original Well Elev)
Site:	Rattle Trap Federal	MD Reference:	WELL @ 3409.00ft (Original Well Elev)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey/Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	Midland Database

Planned Survey	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	NS (ft)	EW (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
	2,600.00	0.79	135.04	2,573.79	-835.21	-160.57	160.37	226.94	3.00	569,308.23	465,496.17
	2,626.21	0.00	0.00	2,600.00	-809.00	-160.70	160.50	227.12	3.00	569,308.10	465,496.30
	2,700.00	0.00	0.00	2,673.79	-735.21	-160.70	160.50	227.12	0.00	569,308.10	465,496.30
	2,800.00	0.00	0.00	2,773.79	-635.21	-160.70	160.50	227.12	0.00	569,308.10	465,496.30
	2,900.00	0.00	0.00	2,873.79	-535.21	-160.70	160.50	227.12	0.00	569,308.10	465,496.30
	3,000.00	0.00	0.00	2,973.79	-435.21	-160.70	160.50	227.12	0.00	569,308.10	465,496.30
	3,100.00	0.00	0.00	3,073.79	-335.21	-160.70	160.50	227.12	0.00	569,308.10	465,496.30
	3,200.00	0.00	0.00	3,173.79	-235.21	-160.70	160.50	227.12	0.00	569,308.10	465,496.30
	3,300.00	0.00	0.00	3,273.79	-135.21	-160.70	160.50	227.12	0.00	569,308.10	465,496.30
	3,400.00	0.00	0.00	3,373.79	-35.21	-160.70	160.50	227.12	0.00	569,308.10	465,496.30
	3,500.00	0.00	0.00	3,473.79	64.79	-160.70	160.50	227.12	0.00	569,308.10	465,496.30
	3,600.00	0.00	0.00	3,573.79	164.79	-160.70	160.50	227.12	0.00	569,308.10	465,496.30
	3,700.00	0.00	0.00	3,673.79	264.79	-160.70	160.50	227.12	0.00	569,308.10	465,496.30
	3,800.00	0.00	0.00	3,773.79	364.79	-160.70	160.50	227.12	0.00	569,308.10	465,496.30
	3,900.00	0.00	0.00	3,873.79	464.79	-160.70	160.50	227.12	0.00	569,308.10	465,496.30
	4,000.00	0.00	0.00	3,973.79	564.79	-160.70	160.50	227.12	0.00	569,308.10	465,496.30
	4,026.21	0.00	0.00	4,000.00	591.00	-160.70	160.50	227.12	0.00	569,308.10	465,496.30

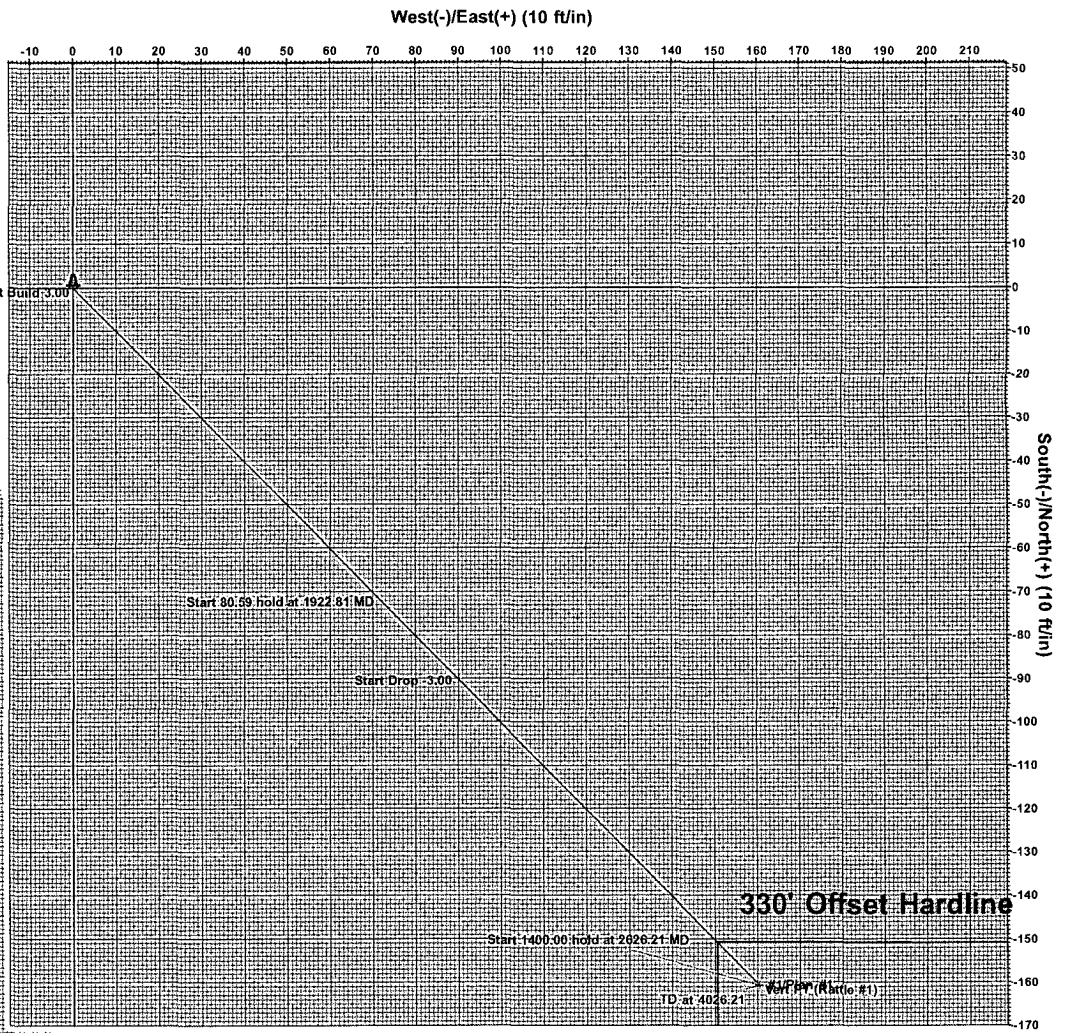
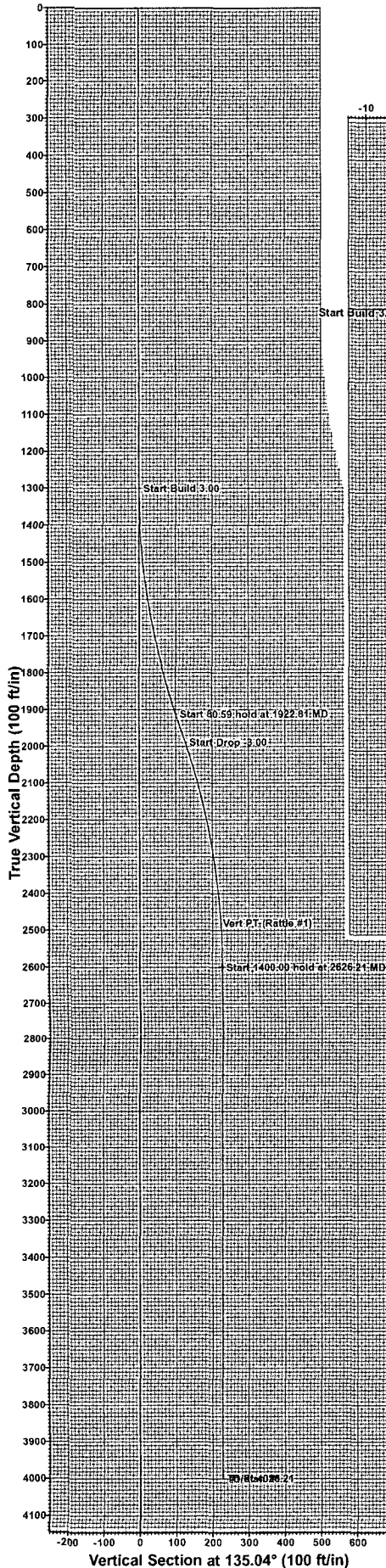
Targets	Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/S (ft)	+E/W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target										
- Shape										
Vert PT (Rattle #1)		0.00	0.00	2,600.00	-160.70	160.50	569,308.100	465,496.300	32° 33' 54.307 N	104° 26' 43.187 W
- plan hits target center										
- Point										

Checked By: _____ Approved By: _____ Date: _____



Azimuths to Grid North
 True North: 0.06°
 Magnetic North: 8.16°
 Magnetic Field
 Strength: 48841.8snT
 Dip Angle: 60.39°
 Date: 08/04/2010
 Model: IGRF200510

PATHFINDER



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.00	0.00	
3	1922.81	18.68	135.04	1911.83	-71.22	71.13	3.00	135.04	100.65	
4	2003.40	18.68	135.04	1988.17	-89.48	89.37	0.00	0.00	126.47	
5	2626.21	0.00	0.00	2600.00	-160.70	160.50	3.00	180.00	227.12	Vert PT (Rattle #1)
6	4026.21	0.00	0.00	4000.00	-160.70	160.50	0.00	0.00	227.12	

WELL DETAILS: #1						
Ground Elevation: 3390.00						
RKB Elevation: WELL @ 3409.00ft (Original Well Elev)						
Rig Name: Original Well Elev						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	569468.800	465335.800	32° 33' 55.895 N	104° 26' 45.065 W	

Project: Eddy County
 Site: Rattle Trap Federal
 Well: #1
 Wellbore: OH
 Plan: Plan #1 (#1/OH)

PROJECT DETAILS: Eddy County
 Geodetic System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: New Mexico East 3001
 System Datum: Mean Sea Level
 Local North: Grid

Plan: Plan #1 (#1/OH)	
Created By: Nate Bingham	Date: 15:08, August 04 2010
Checked: _____	Date: _____