

Submit 3 Copies To Appropriate District Office
District I
1625 N French Dr, Hobbs, NM 88240
District II
1301 W Grand Ave, Artesia, NM 88210
District III
1000 Rio Brazos Rd, Aztec, NM 87410
District IV
1220 S. St Francis Dr, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

S

WELL API NO. 30-005,64010	5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No. V-8033	7. Lease Name or Unit Agreement Name Falcon State
8. Well Number 4	9. OGRID Number 013837
10. Pool name or Wildcat Lone Wolf; San Andres, South	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3720' GR	
Pit or Below-grade Tank Application ☐ or Closure ☐	
Pit type _____ Depth Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____	
Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☒
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: _____ ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: _____ ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Mack Energy proposes to change this well from a horizontal to a vertical/deviated well. This well will be deviated to a legal location prior to penetrating the San Andres formation. Plans are to drill a 12 1/4 hole to 325', run 8 5/8 casing and cement to surface. Drill a 7 7/8 hole to 3502', run 5 1/2 casing and cement to surface.

3515'
JWS

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐ a general permit ☐ or an (attached) alternative OCD-approved plan ☐

SIGNATURE Jerry W. Sherrell TITLE Production Clerk DATE 11/7/08

Type or print name Jerry W. Sherrell E-mail address: jerrys@mackenergycorp.com Telephone No. (575)748-1288
For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____
Conditions of Approval (if any):

Accepted for record
NMOCD

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-005-64010	97662	Lone Wolf;San Andres,South
Property Code	Property Name	Well Number
36691	FALCON STATE	4H
OGRID No.	Operator Name	Elevation
013837	MACK ENERGY CORPORATION	3720'

Surface Location

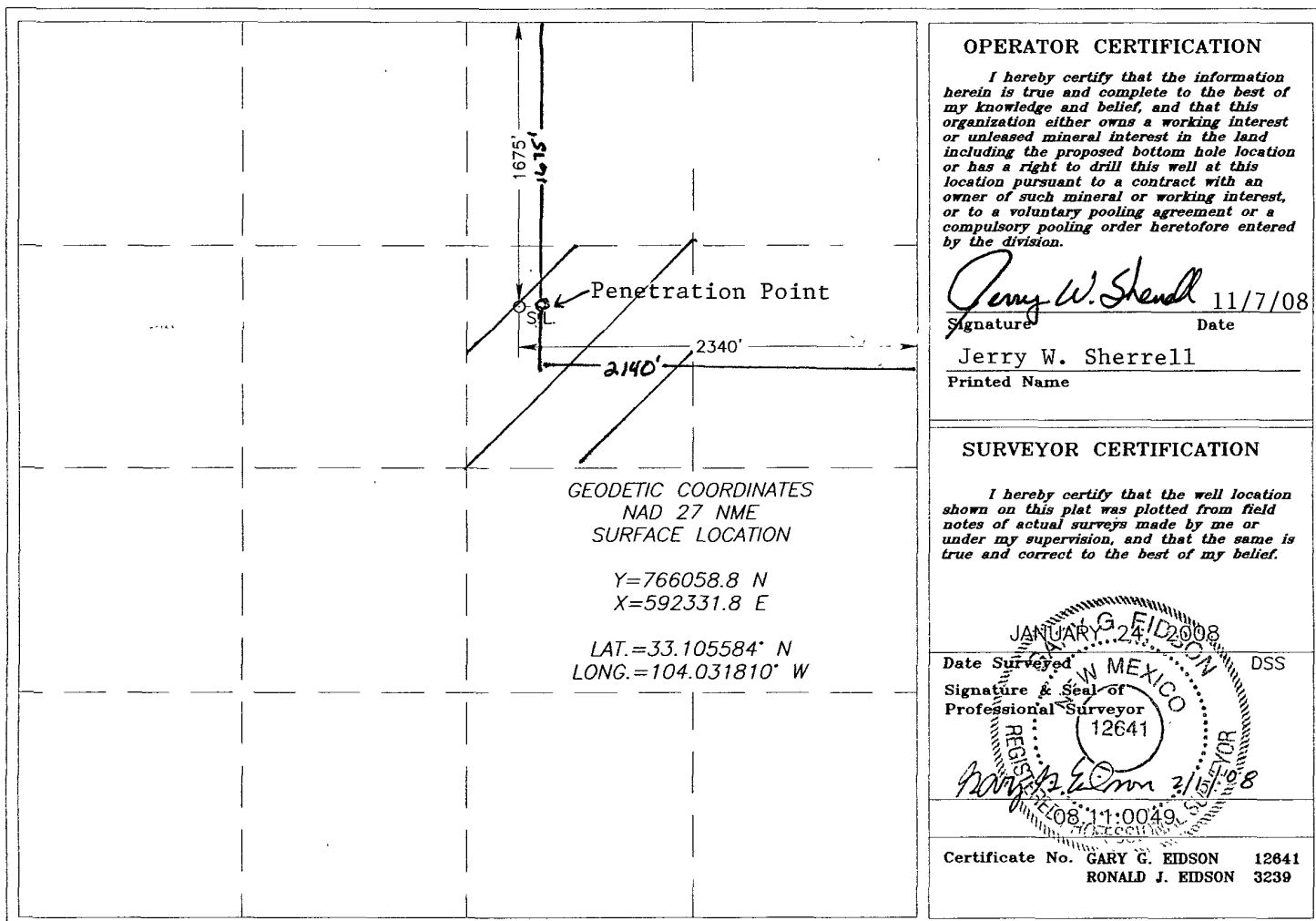
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/EAST line	County
G	16	14-S	29-E		1675	NORTH	2340	EAST	CHAVES

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/EAST line	County
G	16	14-S	29-E		1675	NORTH	2140	EAST	CHAVES

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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





Mack Energy

Chaves County
Falcon State #4
Falcon #4
OH

Plan: Plan #1

Pathfinder X & Y Survey Report

07 November, 2008

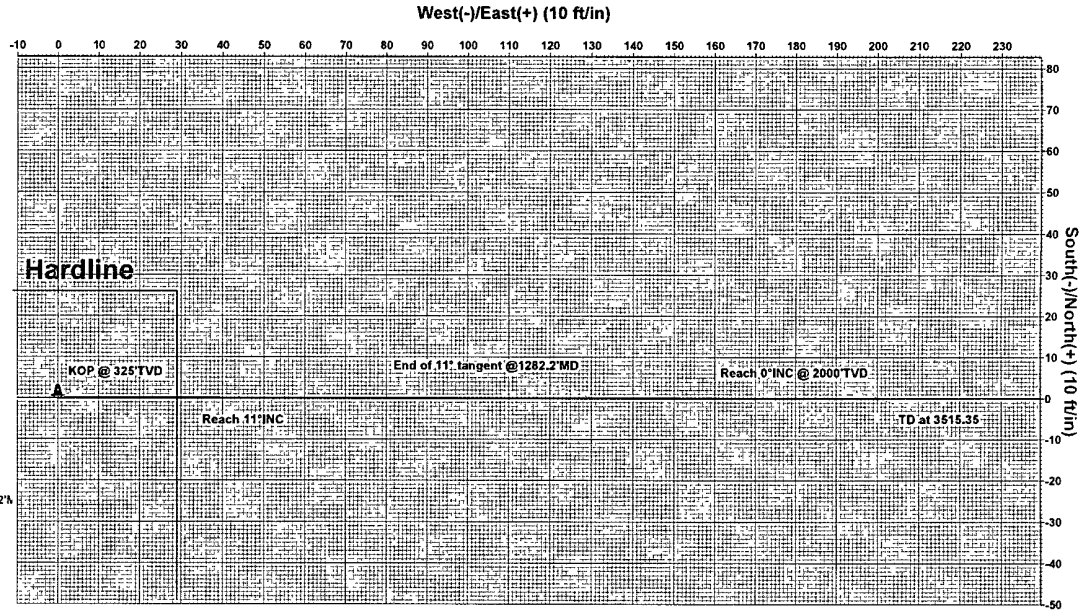
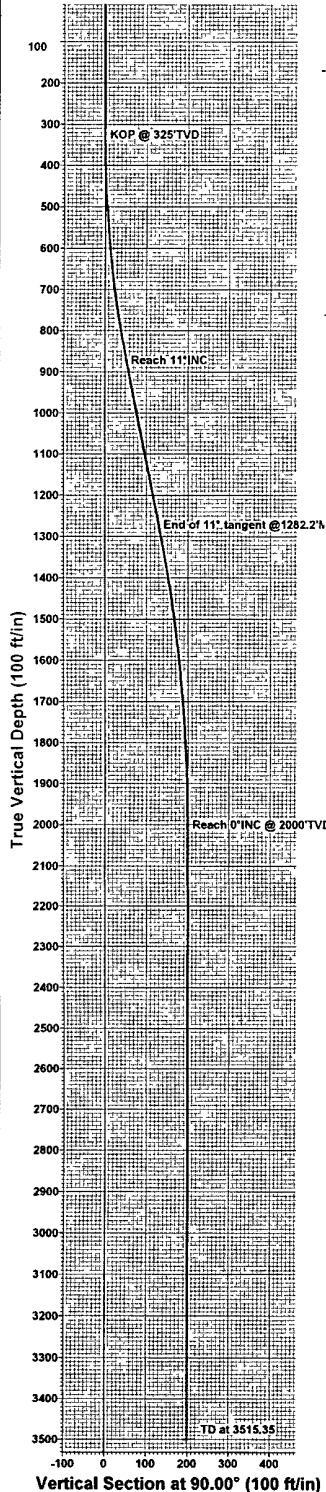
PATHFINDER
ENERGY SERVICES



PATHFINDER

ENERGY SERVICES

PROJECT DETAILS: Chaves 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

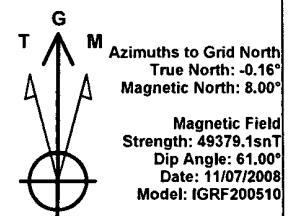


Project: Chaves County
 Site: Falcon State #4
 Well: Falcon #4
 Wellbore: OH
 Plan: Plan #1 (Falcon #4/OH)

WELL DETAILS: Falcon #4						
Ground Elevation: 3720.00						
RKB Elevation: WELL @ 3738.00ft (Original Well Elev)						
Rig Name: Original Well Elev						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	766058.800	592331.800	33° 6' 20.102 N	104° 1' 54.517 W	

SECTION DETAILS										Target
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	325.00	0.00	0.00	325.00	0.00	0.00	0.00	0.00	0.00	0.00
3	875.00	11.00	90.00	871.63	0.00	52.63	2.00	90.00	52.63	0.00
4	1282.20	11.00	90.00	1271.35	0.00	130.33	0.00	0.00	130.33	0.00
5	2015.53	0.00	0.00	2000.18	0.00	200.51	1.50	180.00	200.51	0.00
6	3515.35	0.00	0.00	3500.00	0.00	200.51	0.00	0.00	200.51	0.00

WELLBORE TARGET DETAILS			
Name	TVD	+N/-S	+E/-W
PBHL FS#4	3500.00	0.00	200.00



Plan: Plan #1 (Falcon #4/OH)

Created By: Nate Bingham Date: 11 29, November 07 2008

Checked: _____ Date: _____



Pathfinder Energy Services

Pathfinder X & Y Survey Report



Company:	Mack Energy	Local Co-ordinate Reference:	Well Falcon #4
Project:	Chaves County	TVD Reference:	WELL @ 3738.00ft (Original Well Elev)
Site:	Falcon State #4	MD Reference:	WELL @ 3738.00ft (Original Well Elev)
Well:	Falcon #4	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	Midland DB

Project	Chaves 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	Falcon State #4		
Site Position:		Northing:	766,058.800 ft
From:	Map	Easting:	592,331.800 ft
Position Uncertainty:	0.00 ft	Slot Radius:	"
		Latitude:	33° 6' 20.102 N
		Longitude:	104° 1' 54.517 W
		Grid Convergence:	0.16 °

Well	Falcon #4		
Well Position	+N/-S	0.00 ft	Northing:
	+E/-W	0.00 ft	Easting:
Position Uncertainty		0.00 ft	Wellhead Elevation:
			ft
			Latitude:
			33° 6' 20.102 N
			Longitude:
			104° 1' 54.517 W
			Ground Level:
			3,720.00 ft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
			(°)
			Dip Angle
			(°)
			Field Strength
			(nT)
	IGRF200510	11/07/2008	8.17
			61.00
			49,379

Design	Plan #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0.00	0.00	0.00
			Direction
			(°)
			90.00

Survey Tool Program	Date 11/07/2008		
From	To	Survey (Wellbore)	Tool Name
(ft)	(ft)		Description
0.00	3,515.35	Plan #1 (OH)	MWD
			MWD - Standard



Pathfinder Energy Services

Pathfinder X & Y Survey Report



Company:	Mack Energy	Local Co-ordinate Reference:	Well Falcon #4
Project:	Chaves County	TVD Reference:	WELL @ 3738.00ft (Original Well Elev)
Site:	Falcon State #4	MD Reference:	WELL @ 3738.00ft (Original Well Elev)
Well:	Falcon #4	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	Midland DB

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	-3,738.00	0.00	0.00	0.00	0.00	766,058.80	592,331.80	
100.00	0.00	0.00	100.00	-3,638.00	0.00	0.00	0.00	0.00	766,058.80	592,331.80	
200.00	0.00	0.00	200.00	-3,538.00	0.00	0.00	0.00	0.00	766,058.80	592,331.80	
300.00	0.00	0.00	300.00	-3,438.00	0.00	0.00	0.00	0.00	766,058.80	592,331.80	
325.00	0.00	0.00	325.00	-3,413.00	0.00	0.00	0.00	0.00	766,058.80	592,331.80	
KOP @ 325'TVD											
400.00	1.50	90.00	399.99	-3,338.01	0.00	0.98	0.98	2.00	766,058.80	592,332.78	
500.00	3.50	90.00	499.89	-3,238.11	0.00	5.34	5.34	2.00	766,058.80	592,337.14	
600.00	5.50	90.00	599.58	-3,138.42	0.00	13.19	13.19	2.00	766,058.80	592,344.99	
700.00	7.50	90.00	698.93	-3,039.07	0.00	24.51	24.51	2.00	766,058.80	592,356.31	
800.00	9.50	90.00	797.83	-2,940.17	0.00	39.29	39.29	2.00	766,058.80	592,371.09	
875.00	11.00	90.00	871.63	-2,866.37	0.00	52.63	52.63	2.00	766,058.80	592,384.43	
Reach 11°INC											
900.00	11.00	90.00	896.17	-2,841.83	0.00	57.40	57.40	0.00	766,058.80	592,389.20	
1,000.00	11.00	90.00	994.33	-2,743.67	0.00	76.49	76.49	0.00	766,058.80	592,408.29	
1,100.00	11.00	90.00	1,092.49	-2,645.51	0.00	95.57	95.57	0.00	766,058.80	592,427.37	
1,200.00	11.00	90.00	1,190.66	-2,547.34	0.00	114.65	114.65	0.00	766,058.80	592,446.45	
1,282.20	11.00	90.00	1,271.35	-2,466.65	0.00	130.33	130.33	0.00	766,058.80	592,462.13	
End of 11° tangent @1282.2'MD											
1,300.00	10.73	90.00	1,288.83	-2,449.17	0.00	133.69	133.69	1.50	766,058.80	592,465.49	
1,400.00	9.23	90.00	1,387.31	-2,350.69	0.00	151.02	151.02	1.50	766,058.80	592,482.82	
1,500.00	7.73	90.00	1,486.21	-2,251.79	0.00	165.77	165.77	1.50	766,058.80	592,497.57	
1,600.00	6.23	90.00	1,585.47	-2,152.53	0.00	177.93	177.93	1.50	766,058.80	592,509.73	
1,700.00	4.73	90.00	1,685.01	-2,052.99	0.00	187.49	187.49	1.50	766,058.80	592,519.29	
1,800.00	3.23	90.00	1,784.76	-1,953.24	0.00	194.43	194.43	1.50	766,058.80	592,526.23	
1,900.00	1.73	90.00	1,884.67	-1,853.33	0.00	198.76	198.76	1.50	766,058.80	592,530.56	
2,000.00	0.23	90.00	1,984.65	-1,753.35	0.00	200.48	200.48	1.50	766,058.80	592,532.28	



Pathfinder Energy Services
Pathfinder X & Y Survey Report



Company:	Mack Energy	Local Co-ordinate Reference:	Well Falcon #4
Project:	Chaves County	TVD Reference:	WELL @ 3738.00ft (Original Well Elev)
Site:	Falcon State #4	MD Reference:	WELL @ 3738.00ft (Original Well Elev)
Well:	Falcon #4	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	Midland DB

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)
2,015.53	0.00	0.00	2,000.18	-1,737.82	0.00	200.51	200.51	1.50	766,058.80	592,532.31
Reach 0°INC @ 2000'TVD										
2,100.00	0.00	0.00	2,084.65	-1,653.35	0.00	200.51	200.51	0.00	766,058.80	592,532.31
2,200.00	0.00	0.00	2,184.65	-1,553.35	0.00	200.51	200.51	0.00	766,058.80	592,532.31
2,300.00	0.00	0.00	2,284.65	-1,453.35	0.00	200.51	200.51	0.00	766,058.80	592,532.31
2,400.00	0.00	0.00	2,384.65	-1,353.35	0.00	200.51	200.51	0.00	766,058.80	592,532.31
2,500.00	0.00	0.00	2,484.65	-1,253.35	0.00	200.51	200.51	0.00	766,058.80	592,532.31
2,600.00	0.00	0.00	2,584.65	-1,153.35	0.00	200.51	200.51	0.00	766,058.80	592,532.31
2,700.00	0.00	0.00	2,684.65	-1,053.35	0.00	200.51	200.51	0.00	766,058.80	592,532.31
2,800.00	0.00	0.00	2,784.65	-953.35	0.00	200.51	200.51	0.00	766,058.80	592,532.31
2,900.00	0.00	0.00	2,884.65	-853.35	0.00	200.51	200.51	0.00	766,058.80	592,532.31
3,000.00	0.00	0.00	2,984.65	-753.35	0.00	200.51	200.51	0.00	766,058.80	592,532.31
3,100.00	0.00	0.00	3,084.65	-653.35	0.00	200.51	200.51	0.00	766,058.80	592,532.31
3,200.00	0.00	0.00	3,184.65	-553.35	0.00	200.51	200.51	0.00	766,058.80	592,532.31
3,300.00	0.00	0.00	3,284.65	-453.35	0.00	200.51	200.51	0.00	766,058.80	592,532.31
3,400.00	0.00	0.00	3,384.65	-353.35	0.00	200.51	200.51	0.00	766,058.80	592,532.31
3,500.00	0.00	0.00	3,484.65	-253.35	0.00	200.51	200.51	0.00	766,058.80	592,532.31
3,515.35	0.00	0.00	3,500.00	-238.00	0.00	200.51	200.51	0.00	766,058.80	592,532.31
TD at 3515.35 - PBHL FS#4										



Pathfinder Energy Services
Pathfinder X & Y Survey Report



Company:	Mack Energy	Local Co-ordinate Reference:	Well Falcon #4
Project:	Chaves County	TVD Reference:	WELL @ 3738.00ft (Original Well Elev)
Site:	Falcon State #4	MD Reference:	WELL @ 3738.00ft (Original Well Elev)
Well:	Falcon #4	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Plan #1	Database:	Midland DB

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
PBHL FS#4	0.00	0.00	3,500.00	0.00	200.00	766,058.800	592,531.800	33° 6' 20.096 N	104° 1' 52.166 W
- plan hits target									
- Point									

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
325.00	325.00	0.00	0.00	KOP @ 325'TVD
875.00	871.63	0.00	52.63	Reach 11°INC
1,282.20	1,271.35	0.00	130.33	End of 11° tangent @1282.2'MD
2,015.53	2,000.18	0.00	200.51	Reach 0°INC @ 2000'TVD
3,515.35	3,500.00	0.00	200.51	TD at 3515.35

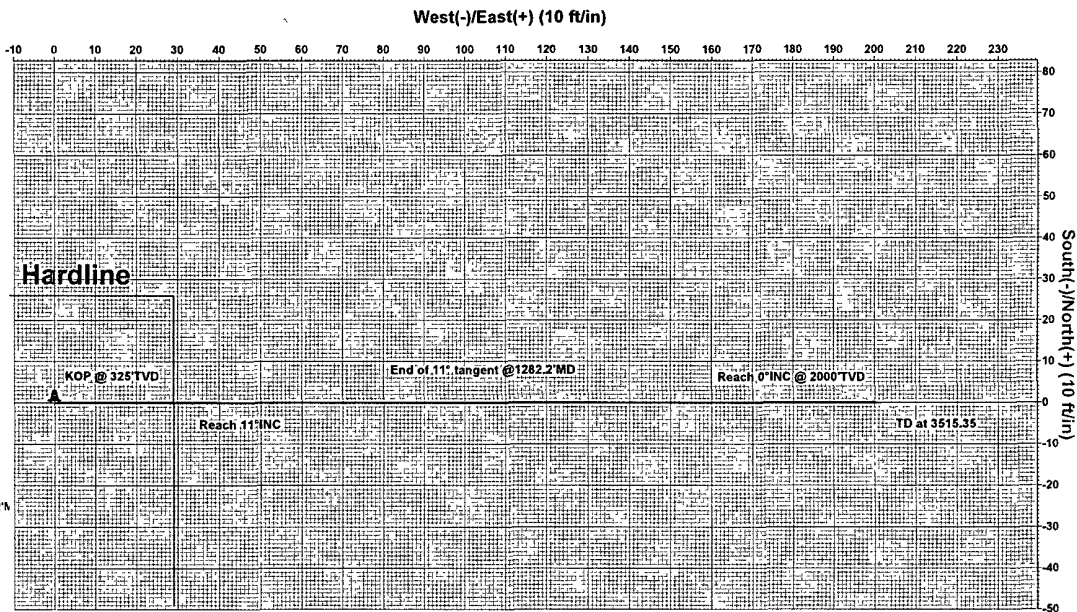
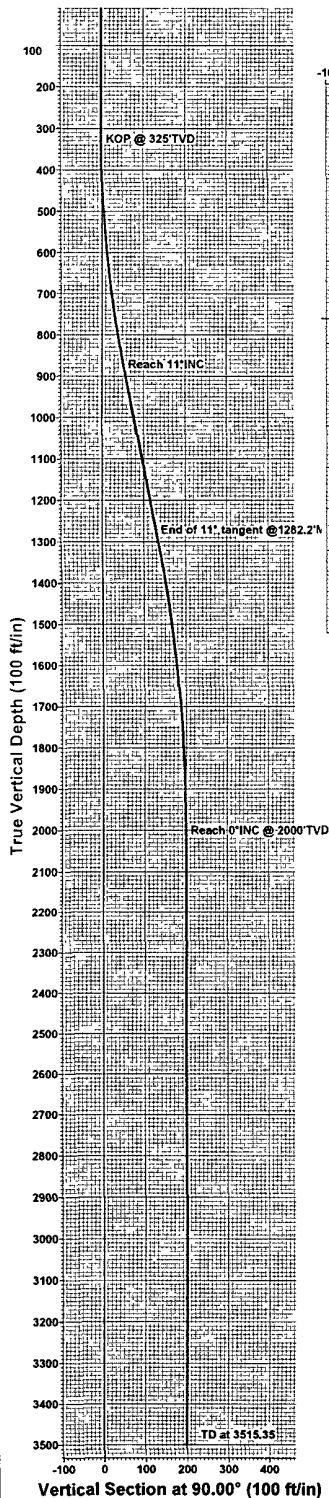
Checked By: _____ Approved By: _____ Date: _____



PATHFINDER

ENERGY SERVICES

PROJECT DETAILS: Chaves 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

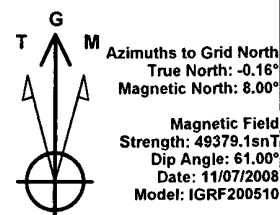


Project: Chaves County
 Site: Falcon State #4
 Well: Falcon #4
 Wellbore: OH
 Plan: Plan #1 (Falcon #4/OH)

WELL DETAILS Falcon #4						
Ground Elevation: 3720.00						
RKB Elevation WELL @ 3738.00ft (Original Well Elev)						
Rig Name: Original Well Elev						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	766058.800	592331.800	33° 6' 20 102 N	104° 1' 54.517 W	

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	325.00	0.00	0.00	325.00	0.00	0.00	0.00	0.00	0.00
3	875.00	11.00	90.00	871.63	0.00	52.63	2.00	90.00	52.63
4	1282.20	11.00	90.00	1271.35	0.00	130.33	0.00	0.00	130.33
5	2015.53	0.00	0.00	2000.18	0.00	200.51	1.50	180.00	200.51
6	3515.35	0.00	0.00	3500.00	0.00	200.51	0.00	0.00	200.51

WELLBORE TARGET DETAILS			
Name	TVD	+N/-S	+E/-W Shape
PBHL FS#4	3500.00	0.00	200.00 Point



Plan Plan #1 (Falcon #4/OH)
 Created By: Nate Bingham Date: 11/29, November 07 2008
 Checked: _____ Date: _____