

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*5. Lease Serial No.
NMLC029435B

6. If Indian, Allottee or Tribe Name

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

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other8. Well Name and No.
NFE FEDERAL 52H2. Name of Operator
APACHE CORPORATIONContact: SORINA FLORES
E-Mail: sorina.flores@apachecorp.com9. API Well No.
30-015-42907-00-X13a. Address
303 VETERANS AIRPARK LANE SUITE 3000
MIDLAND, TX 797053b. Phone No. (include area code)
Ph: 432-818-116710. Field and Pool, or Exploratory
CEDAR LAKE

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 6 T17S R31E Lot 1 485FNL 1025FEL
32.869329 N Lat, 103.903353 W Lon11. County or Parish, and State
EDDY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Change to Original A
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	PD

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

BLM-CO-1463 NATIONWIDE / NMB000736

APACHE CORP REQUEST TO CHANGE TVD & MD FOR THE NFE FEDERAL #52H
FROM: TVD: 4775' MD: 8205'
TO: TVD: 4765' MD: 8306' Landing point: 4876'

NEW DIRECTIONAL PLAN ATTACHED. NO OTHER CHANGE FROM ORIGINAL DRILLING PLAN.

Accepted for record
NMOC 2/13/15NM OIL CONSERVATION
ARTESIA DISTRICT

FEB 12 2015

RECEIVED

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #290402 verified by the BLM Well Information System
For APACHE CORPORATION, sent to the Carlsbad
Committed to AFMSS for processing by JENNIFER MASON on 02/06/2015 (15JAM0215SE)

Name (Printed/Typed) SORINA FLORES

Title SUBMITTING CONTACT

Signature (Electronic Submission)

Date 02/03/2015

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Title

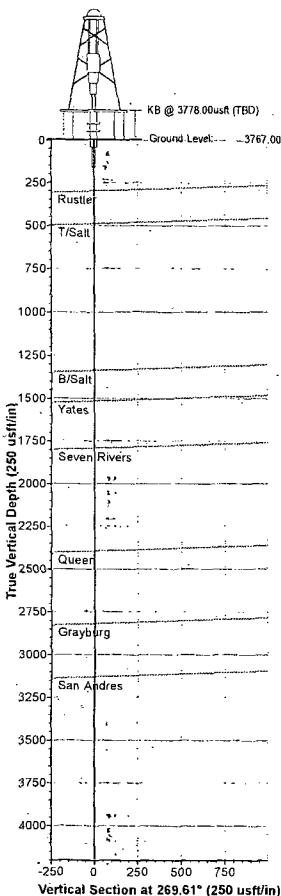
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

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.

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



WELL DETAILS									
				Ground Level:	3767.00				
				Easting	632019.30	Latitude	32° 52' 9.58533 N	Longitude	103° 54' 12.07028 W

SECTION DETAILS									
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Diag	TFace	Vsect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	4398.58	0.00	0.00	4398.58	0.00	0.00	0.00	0.00	0.00
3	5165.81	82.03	269.61	4876.00	-3.35	-494.49	12.00	269.61	494.50
4	8306.55	92.03	269.61	4765.00	-24.60	-3633.20	0.00	0.00	3633.28

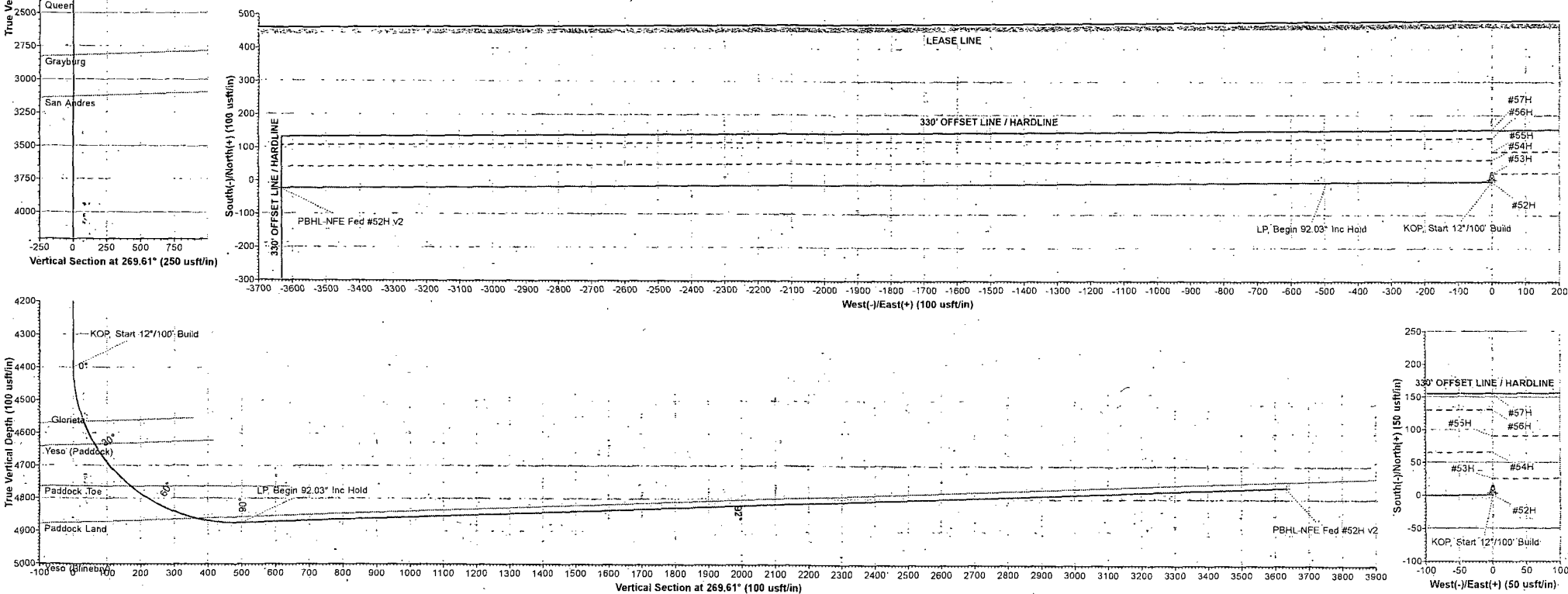
Annotation: KOP Start 12°/100' Build
LP Begin 92.03° Inc Hold
TD at 8306.55 MD

DESIGN TARGET DETAILS									
Name	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude	Shape	
PBHL-NFE Fed #52H v2	4765.00	-24.60	-3633.20	680217.60	628386.10	32° 52' 9.48932 N	103° 54' 34.66979 W	Point	
									plan hits target center

FORMATION TOP DETAILS									
TVDPath	MDPath	Formation	DipAngle	DipDir					
303.00	303.00	Rustler	-2.03	269.61					
494.00	494.00	T/Salt	-2.03	269.61					
1344.00	1344.00	B/Salt	-2.03	269.61					
1522.00	1522.00	Yates	-2.03	269.61					
1798.00	1798.00	Seven Rivers	-2.03	269.61					
2400.00	2400.00	Queen	-2.03	269.61					
2822.00	2822.00	Grayburg	-2.03	269.61					
3133.00	3133.00	San Andres	-2.03	269.61					
4568.92	4570.60	Glorieta	-2.03	269.61					
4635.71	4646.77	Yeso (Paddock)	-2.03	269.61					
4765.00	4816.17	Paddock Toe	-2.03	269.61					
4863.03	5036.08	Paddock Land	-2.03	269.61					

LEGEND									
---	#56H, WB1, Plan #1 05-19-14 V0								
---	#54H, WB1, Plan #2 01-30-15 V0								
---	#53H, WB1, Plan #3 01-30-15 V0								
---	#55H, WB1, Plan #2 01-30-15 V0								
---	#57H, WB1, Plan #1 05-19-14 V0								
---	Plan #2 01-30-15								

Map System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone Name: New Mexico East 3001
Local Origin: Well #52H, Grid North
Latitude: 32° 52' 9.58533 N
Longitude: 103° 54' 12.07028 W
Grid East: 632019.30
Grid North: 680242.20
Scale Factor: 1.000
Geomagnetic Model: BGGM2014
Sample Date: 30-Jan-15
Magnetic Declination: 7.52°
Dip Angle from Horizontal: 60.63°
Magnetic Field Strength: 48551
To convert a Magnetic Direction to a Grid Direction, Add 7.29°
To convert a Magnetic Direction to a True Direction, Add 7.52° East
To convert a True Direction to a Grid Direction, Subtract 0.23°





EXPLORING WHAT'S POSSIBLE

Apache Corporation

Eddy County, NM (NAD27 NME)

NFE Federal

#52H

WB1

Plan: Plan #2 01-30-15

Standard Planning Report

30 January, 2015



PHOENIX
TECHNOLOGY SERVICES

Database:	Compass 5000 GCR	Local Co-ordinate Reference	Well #52H
Company:	Apache Corporation	TVD Reference:	KB @ 3778.00usft (TBD)
Project:	Eddy County NM (NAD27 NME)	MD Reference:	KB @ 3778.00usft (TBD)
Site:	NFE Federal	North Reference:	Grid
Well:	#52H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB1		
Design:	Plan #2.01-30-15		

Project:	Eddy County NM (NAD27 NME)		
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:	NFE Federal		
Site Position:		Northing:	673,264.70 usft
From:	Map	Easting:	633,303.50 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 51' 0.49036 N
		Longitude:	103° 53' 57.34966 W
		Grid Convergence:	0.24 °

Well:	#52H		
Well Position	+N-S	6,977.50 usft	Northing:
	+E-W	-1,284.20 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	Ground Level:
			3,767.00 usft

Wellbore	WB1		
Magnetics	Model Name	Sample Date	Declination
	BGGM2014	1/30/2015	7.52
			60.63
			48,551

Design:	Plan #2.01-30-15		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.00
Vertical Section:	Depth From (TVD)	+N-S	+E-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			269.61

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N-S	+E-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)			(usft)			(°/100usft)	(°/100usft)	(°/100usft)		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,398.68	0.00	0.00	4,398.68	0.00	0.00	0.00	0.00	0.00	0.00	
5,165.81	92.03	269.61	4,876.00	-3.35	-494.49	12.00	12.00	-11.78	269.61	
8,306.55	92.03	269.61	4,765.00	-24.60	-3,633.20	0.00	0.00	0.00	0.00	PBHL-NFE Fed #52H

Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well #52H
Company:	Apache Corporation	TVD Reference:	KB @ 3778.00usft (TBD)
Project:	Eddy County NM (NAD27 NME)	MD Reference:	KB @ 3778.00usft (TBD)
Site:	NRE Federal	North Reference:	Grid
Well:	#52H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB1		
Design:	Plan #2013015		

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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
303.00	0.00	0.00	303.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
494.00	0.00	0.00	494.00	0.00	0.00	0.00	0.00	0.00	0.00
T/Salt									
1,344.00	0.00	0.00	1,344.00	0.00	0.00	0.00	0.00	0.00	0.00
B/Salt									
1,522.00	0.00	0.00	1,522.00	0.00	0.00	0.00	0.00	0.00	0.00
Tates									
1,798.00	0.00	0.00	1,798.00	0.00	0.00	0.00	0.00	0.00	0.00
Seven Rivers									
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
Queen									
2,822.00	0.00	0.00	2,822.00	0.00	0.00	0.00	0.00	0.00	0.00
Grayburg									
3,133.00	0.00	0.00	3,133.00	0.00	0.00	0.00	0.00	0.00	0.00
San Andres									
4,398.68	0.00	0.00	4,398.68	0.00	0.00	0.00	0.00	0.00	0.00
KOP Start 12°/100' Build									
4,400.00	0.16	269.61	4,400.00	0.00	0.00	0.00	12.00	12.00	0.00
4,500.00	12.15	269.61	4,499.24	-0.07	-10.71	10.71	12.00	12.00	0.00
4,570.60	20.62	269.61	4,566.92	-0.21	-30.61	30.61	12.00	12.00	0.00
Glorieta									
4,600.00	24.15	269.61	4,594.09	-0.28	-41.80	41.80	12.00	12.00	0.00
4,646.77	29.76	269.61	4,635.77	-0.43	-63.00	63.00	12.00	12.00	0.00
Yeso (Paddock)									
4,700.00	36.15	269.61	4,680.41	-0.62	-91.93	91.94	12.00	12.00	0.00
4,800.00	48.14	269.61	4,754.42	-1.08	-158.91	158.91	12.00	12.00	0.00
4,816.17	50.08	269.61	4,765.00	-1.16	-171.13	171.14	12.00	12.00	0.00
Paddock Toe									
4,900.00	60.14	269.61	4,812.89	-1.62	-239.81	239.81	12.00	12.00	0.00
5,000.00	72.13	269.61	4,853.27	-2.24	-331.09	331.10	12.00	12.00	0.00
5,036.08	76.46	269.61	4,863.03	-2.48	-365.81	365.82	12.00	12.00	0.00
Paddock Land									
5,100.00	84.13	269.61	4,873.80	-2.90	-428.77	428.78	12.00	12.00	0.00
5,165.81	92.03	269.61	4,876.00	-3.35	-494.49	494.50	12.00	12.00	0.00
LP Begin 92.03° Inc Hold									
5,200.00	92.03	269.61	4,874.80	-3.58	-528.66	528.67	0.00	0.00	0.00
5,300.00	92.03	269.61	4,871.26	-4.26	-628.59	628.61	0.00	0.00	0.00
5,400.00	92.03	269.61	4,867.73	-4.93	-728.53	728.54	0.00	0.00	0.00
5,500.00	92.03	269.61	4,864.19	-5.61	-828.46	828.48	0.00	0.00	0.00
5,600.00	92.03	269.61	4,860.66	-6.29	-928.40	928.42	0.00	0.00	0.00
5,700.00	92.03	269.61	4,857.12	-6.96	-1,028.33	1,028.36	0.00	0.00	0.00
5,800.00	92.03	269.61	4,853.59	-7.64	-1,128.27	1,128.29	0.00	0.00	0.00
5,900.00	92.03	269.61	4,850.06	-8.32	-1,228.20	1,228.23	0.00	0.00	0.00
6,000.00	92.03	269.61	4,846.52	-8.99	-1,328.14	1,328.17	0.00	0.00	0.00
6,100.00	92.03	269.61	4,842.99	-9.67	-1,428.07	1,428.11	0.00	0.00	0.00
6,200.00	92.03	269.61	4,839.45	-10.35	-1,528.01	1,528.04	0.00	0.00	0.00
6,300.00	92.03	269.61	4,835.92	-11.02	-1,627.95	1,627.98	0.00	0.00	0.00
6,400.00	92.03	269.61	4,832.38	-11.70	-1,727.88	1,727.92	0.00	0.00	0.00
6,500.00	92.03	269.61	4,828.85	-12.38	-1,827.82	1,827.86	0.00	0.00	0.00
6,600.00	92.03	269.61	4,825.32	-13.05	-1,927.75	1,927.80	0.00	0.00	0.00
6,700.00	92.03	269.61	4,821.78	-13.73	-2,027.69	2,027.73	0.00	0.00	0.00

Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well #52H
Company:	Apache Corporation	TVD Reference:	KB @ 3778.00usft (TBD)
Project:	Eddy County NM (NAD27 NME)	MD Reference:	KB @ 3778.00usft (TBD)
Site:	NFE/Federal	North Reference:	Grid
Well:	#52H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB1		
Design:	Plan #2013015		

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)	
6,800.00	92.03	269.61	4,818.25	-14.41	-2,127.62	2,127.67	0.00	0.00	0.00	
6,900.00	92.03	269.61	4,814.71	-15.08	-2,227.56	2,227.61	0.00	0.00	0.00	
7,000.00	92.03	269.61	4,811.18	-15.76	-2,327.49	2,327.55	0.00	0.00	0.00	
7,100.00	92.03	269.61	4,807.64	-16.44	-2,427.43	2,427.48	0.00	0.00	0.00	
7,200.00	92.03	269.61	4,804.11	-17.11	-2,527.36	2,527.42	0.00	0.00	0.00	
7,300.00	92.03	269.61	4,800.58	-17.79	-2,627.30	2,627.36	0.00	0.00	0.00	
7,400.00	92.03	269.61	4,797.04	-18.47	-2,727.23	2,727.30	0.00	0.00	0.00	
7,500.00	92.03	269.61	4,793.51	-19.14	-2,827.17	2,827.23	0.00	0.00	0.00	
7,600.00	92.03	269.61	4,789.97	-19.82	-2,927.10	2,927.17	0.00	0.00	0.00	
7,700.00	92.03	269.61	4,786.44	-20.50	-3,027.04	3,027.11	0.00	0.00	0.00	
7,800.00	92.03	269.61	4,782.90	-21.17	-3,126.97	3,127.05	0.00	0.00	0.00	
7,900.00	92.03	269.61	4,779.37	-21.85	-3,226.91	3,226.98	0.00	0.00	0.00	
8,000.00	92.03	269.61	4,775.83	-22.53	-3,326.84	3,326.92	0.00	0.00	0.00	
8,100.00	92.03	269.61	4,772.30	-23.20	-3,426.78	3,426.86	0.00	0.00	0.00	
8,200.00	92.03	269.61	4,768.77	-23.88	-3,526.71	3,526.80	0.00	0.00	0.00	
8,300.00	92.03	269.61	4,765.23	-24.56	-3,626.65	3,626.73	0.00	0.00	0.00	
8,306.55	92.03	269.61	4,765.00	-24.60	-3,633.20	3,633.28	0.00	0.00	0.00	
TD at 8306.55 MD										

Design Targets										
Target Name	hit/miss target	Dip Angle (°)	Dip Dir (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL-NFE Fed #52H v2	- plan hits target center - Point	0.00	0.00	4,765.00	-24.60	-3,633.20	680,217.60	628,386.10	32° 52' 9.48632 N	103° 54' 54.66979 W

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
303.00	303.00	Rustler		-2.03	269.61	
494.00	494.00	T/Salt		-2.03	269.61	
1,344.00	1,344.00	B/Salt		-2.03	269.61	
1,522.00	1,522.00	Yates		-2.03	269.61	
1,798.00	1,798.00	Seven Rivers		-2.03	269.61	
2,400.00	2,400.00	Queen		-2.03	269.61	
2,822.00	2,822.00	Grayburg		-2.03	269.61	
3,133.00	3,133.00	San Andres		-2.03	269.61	
4,570.60	4,566.92	Glorieta		-2.03	269.61	
4,646.77	4,635.77	Yeso (Paddock)		-2.03	269.61	
4,816.17	4,765.00	Paddock Toe				
5,036.08	4,863.03	Paddock Land		-2.03	269.61	

Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well #52H
Company:	Apache Corporation	IVD Reference:	KB @ 3778.00usft (TBD)
Project:	Eddy County NM (NAD27 NME)	MD Reference:	KB @ 3778.00usft (TBD)
Site:	NFE Federal	North Reference:	Grid
Well:	#52H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB1		
Design:	Plan #2 01-30-15		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		N-S (usft)	E-W (usft)	
4,398.68	4,398.68	0.00	0.00	KOP, Start 12°/100' Build
5,165.81	4,876.00	-3.35	-494.49	LP, Begin 92.03° Inc Hold
8,306.55	4,765.00	-24.60	-3,633.20	TD at 8306.55' MD