

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTNM OIL CONSERVATION
ARTESIAN DISTRICT
JUL 06 2015FORM 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.

8. Well Name and No.
NFE FEDERAL 58H (314794)9. API Well No.
30-015-43088-00-X1

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator
APACHE CORPORATIONContact: SORINA FLORES
E-Mail: sorina.flores@apachecorp.com3a. 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 9 T17S R31E SWNW 1710FNL 10FWL
32.851503 N Lat, 103.882758 W Lon

11. 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 REQUESTS TO MOVE SHL FROM ORIGINAL PERMITTED LOCATION AT 1710' FNL & 10' FWL, SEC 9, T17S, R31E

TO NEW LOCATION (95'WEST OF OLD LOCATION): 1672' FNL & 85' FEL, SEC 8, T17S, R31E.

THE MOVE OF SHL IS ACCOMMODATE A DRILLING RIG ON AN EXISTING WELL PAD WHICH CURRENTLY HAS THREE EXISTING PRODUCING WELLS. BLM REP, JEFFERY ROBERSTON, WAS ON LOCATION TO REVIEW AND APPROVE NEW SHL.

NEW C-102 AND DIRECTIONAL PLAN ATTACHED.

Accepted for record

Eng Okay 6/22/15 - C Wells

DD NMCCD 7/23/15

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

Electronic Submission #303286 verified by the BLM Well Information System

For APACHE CORPORATION, sent to the Carlsbad

Committed to AFMSS for processing by JENNIFER SANCHEZ on 06/08/2015 (15JAS0372SE)

Name (Printed/Typed) SORINA FLORES

Title SUBMITTING CONTACT

Signature

(Electronic Submission)

Date 05/28/2015

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Steph J. Kelly

Title

For FIELD MANAGER

Date

6/30/15

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

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 **

Additional data for EC transaction #303286 that would not fit on the form

32. Additional remarks, continued

MD: 9761' TVD: 5029' LP: 5100'

APACHE ALSO REQUEST TO ADD "COM" TO WELL NAME PER COMMUNITIZATION AGREEMENT: NM134086, EFFECTIVE 11/1/2013

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 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 & 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

DAMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-43088	Pool Code 96831	Pool Name Cedar Lake, Glorieta - Yaso
Property Code 308424 214794	Property Name NFE FEDERAL COM	Well Number 58H
OCRID No. 873	Operator Name APACHE CORPORATION	Elevation 3868'

Surface Location

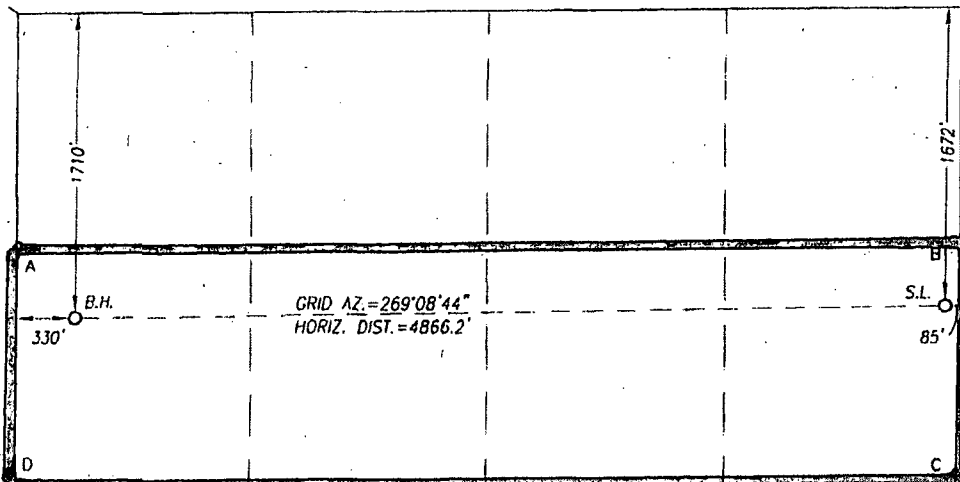
UL or lot No	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	8	17-S	31-E		1672	NORTH	85	EAST	EDDY

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
E	8	17-S	31-E		1710	NORTH	330	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

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



OPERATOR CERTIFICATION

I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Sorina L Flores 5/27/15
Signature Date

Sorina L. Flores
Printed Name

sorina.flores@apachecorp.com
E-mail Address

SURVEYOR 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.

MAY 15, 2015

Date of Survey
Signature of Professional Surveyor

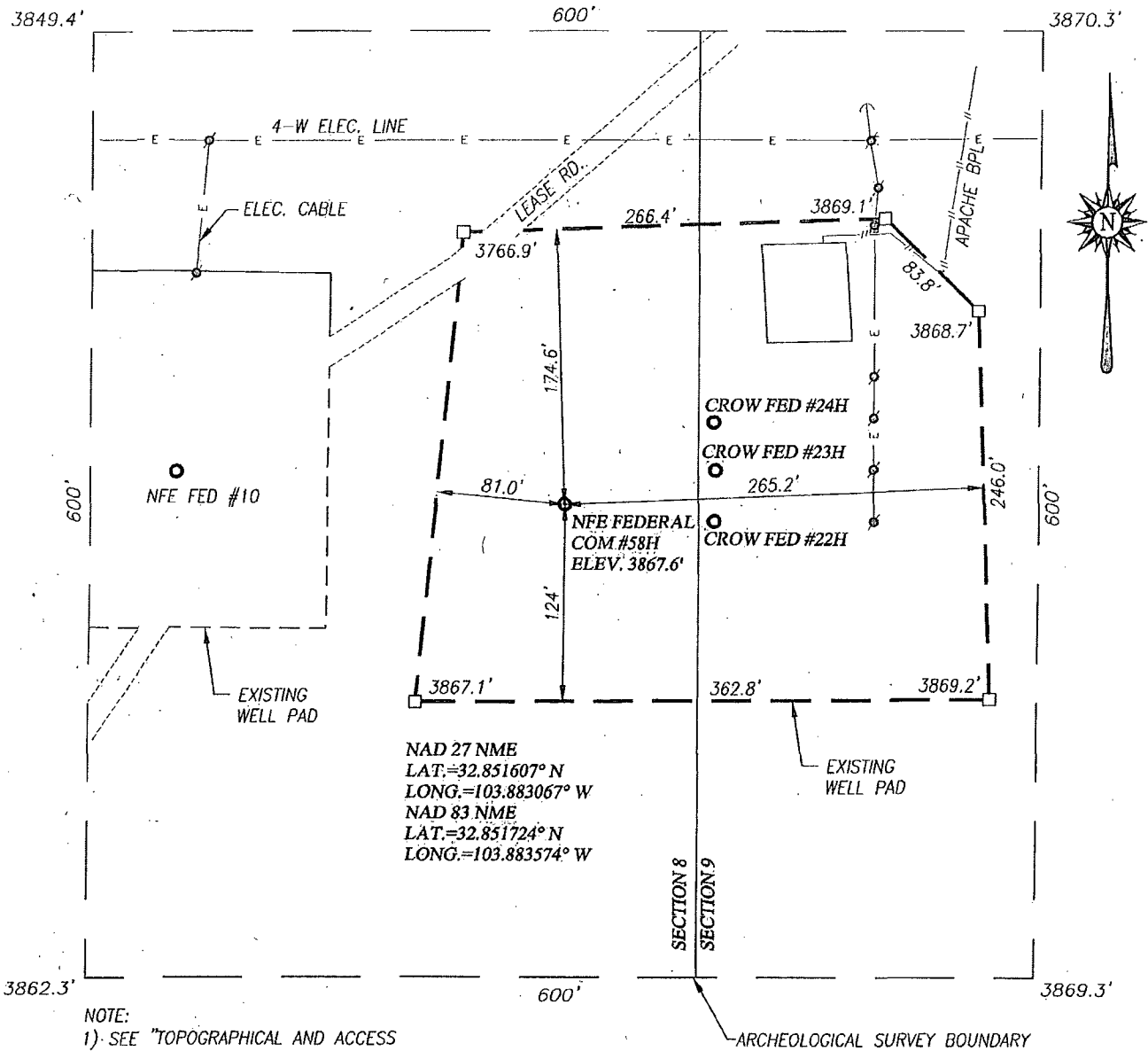
RONALD J. EIDSON
Professional Surveyor
NEW MEXICO
3239

Ronald J. Eidson 05/21/2015
Certificate Number
Ronald J. Eidson 12641
3239

LSL JWSC W.O. 1511.0572

BOTTOM HOLE LOCATION NAD 27 NME Y= 673748.0 N X= 633410.7 E LAT.=32.851464° N LONG.=103.898908° W LAT.=32°51'05" N LONG.=103°53'56" W	CORNER COORDINATES TABLE NAD 27 NME A - Y= 674135.2 N, X= 633078.5 E B - Y= 674172.6 N, X= 638358.2 E C - Y= 672852.6 N, X= 638365.7 E D - Y= 672815.3 N, X= 633086.2 E	SURFACE LOCATION NAD 27 NME Y= 673820.5 N X= 638275.2 E LAT.=32.851607° N LONG.=103.883067° W LAT.=32°51'06" N LONG.=103°52'59" W
BOTTOM HOLE LOCATION NAD 83 NME Y= 673812.0 N X= 674589.4 E LAT.=32.851581° N LONG.=103.899415° W LAT.=32°51'06" N LONG.=103°53'58" W	CORNER COORDINATES TABLE NAD 83 NME A - Y= 674199.2 N, X= 674257.2 E B - Y= 674236.7 N, X= 6679536.8 E C - Y= 672916.6 N, X= 679544.3 E D - Y= 672879.2 N, X= 674264.9 E	SURFACE LOCATION NAD 83 NME Y= 673884.6 N X= 679453.8 E LAT.=32.851724° N LONG.=103.883574° W LAT.=32°51'06" N LONG.=103°53'01" W

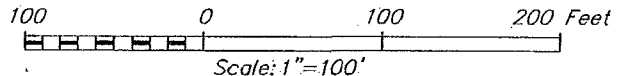
WELL SITE PLAN



NOTE:
1) SEE "TOPOGRAPHICAL AND ACCESS ROAD MAP" FOR PROPOSED ROAD LOCATION.

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY 82 (ARTESIA HWY.) AND CO. RD. 221 (SKELLY RD.) GO NORTH ON SKELLY RD. APPROX. 1.4 MILES; TURN RIGHT AND GO NORTHEAST APPROX. 0.6 MILES; TURN RIGHT AND GO EAST APPROX. 0.7 MILES; TURN LEFT AND GO NORTH APPROX. 0.5 MILES; TURN RIGHT AND GO EAST APPROX. 0.85 MILES; TURN RIGHT AND GO SOUTHEAST APPROX. 0.1 MILES; TURN RIGHT AND GO SOUTHWEST APPROX. 0.15 MILES TO EXISTING CROW FEDERAL #22H, #23H AND #24H WELL PAD. LOCATION STAKE IS 95' WEST OF #22H.



APACHE CORPORATION

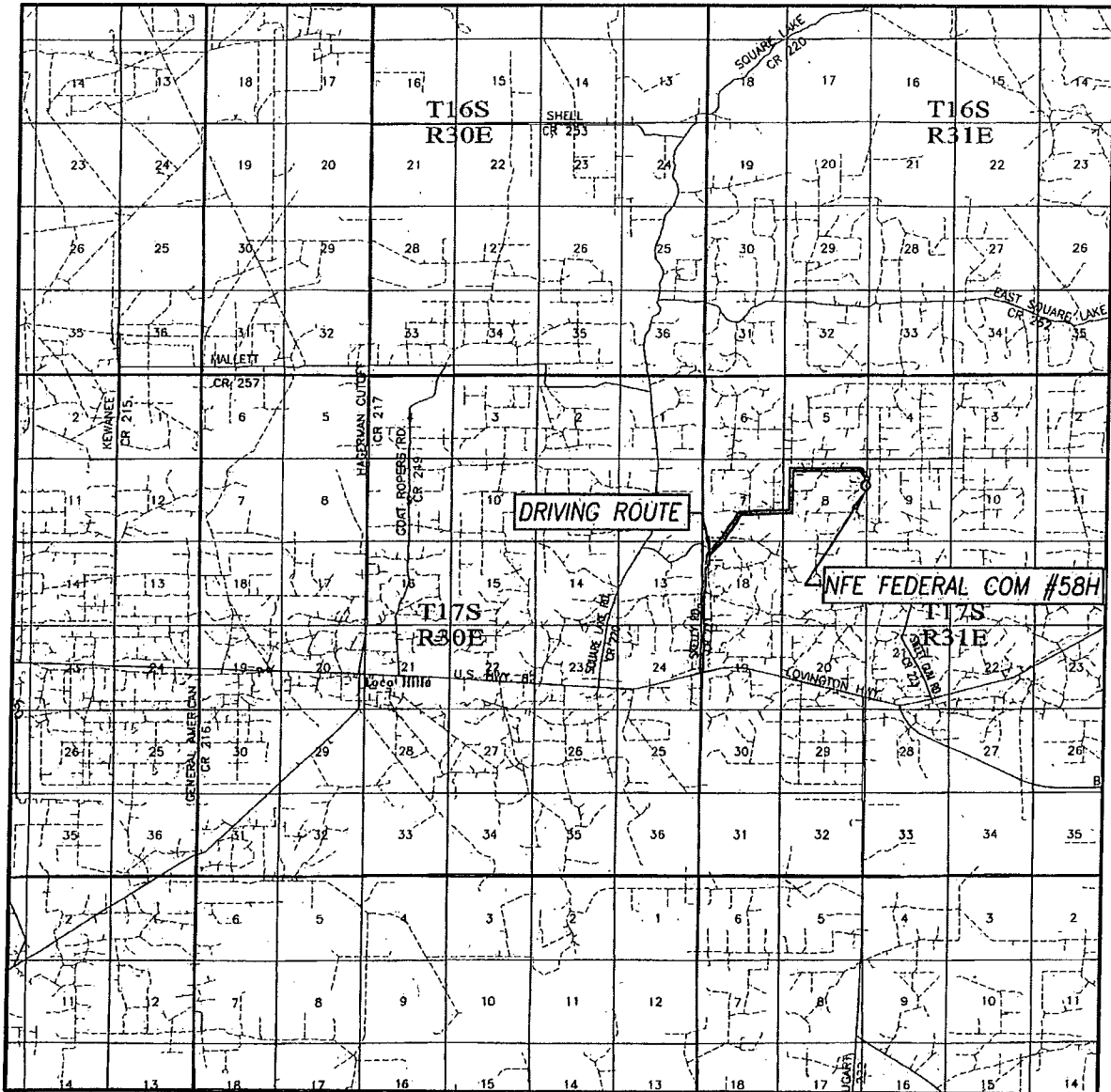
NFE FEDERAL COM #58H WELL
LOCATED 1672 FEET FROM THE NORTH LINE
AND 85 FEET FROM THE EAST LINE OF SECTION 8,
TOWNSHIP 17 SOUTH, RANGE 31 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO HOBBS, N.M. 88240
(575) 393-3117 www.jwsc.biz
TBPLS# 10021000

Survey Date: 5/15/15	CAD Date: 5/20/15	Drawn By: LSL
W.O. No.: 15110572	Rev: .	Rel. W.O.: .
		Sheet 1 of 1



VICINITY MAP



SCALE: 1" = 2 MILES

DRIVING ROUTE: SEE TOPOGRAPHICAL AND ACCESS ROAD MAP

SEC. 8 TWP. 17-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 1672' FNL & 85' FEL

ELEVATION 3868'

OPERATOR APACHE CORPORATION

LEASE NFE FEDERAL COM

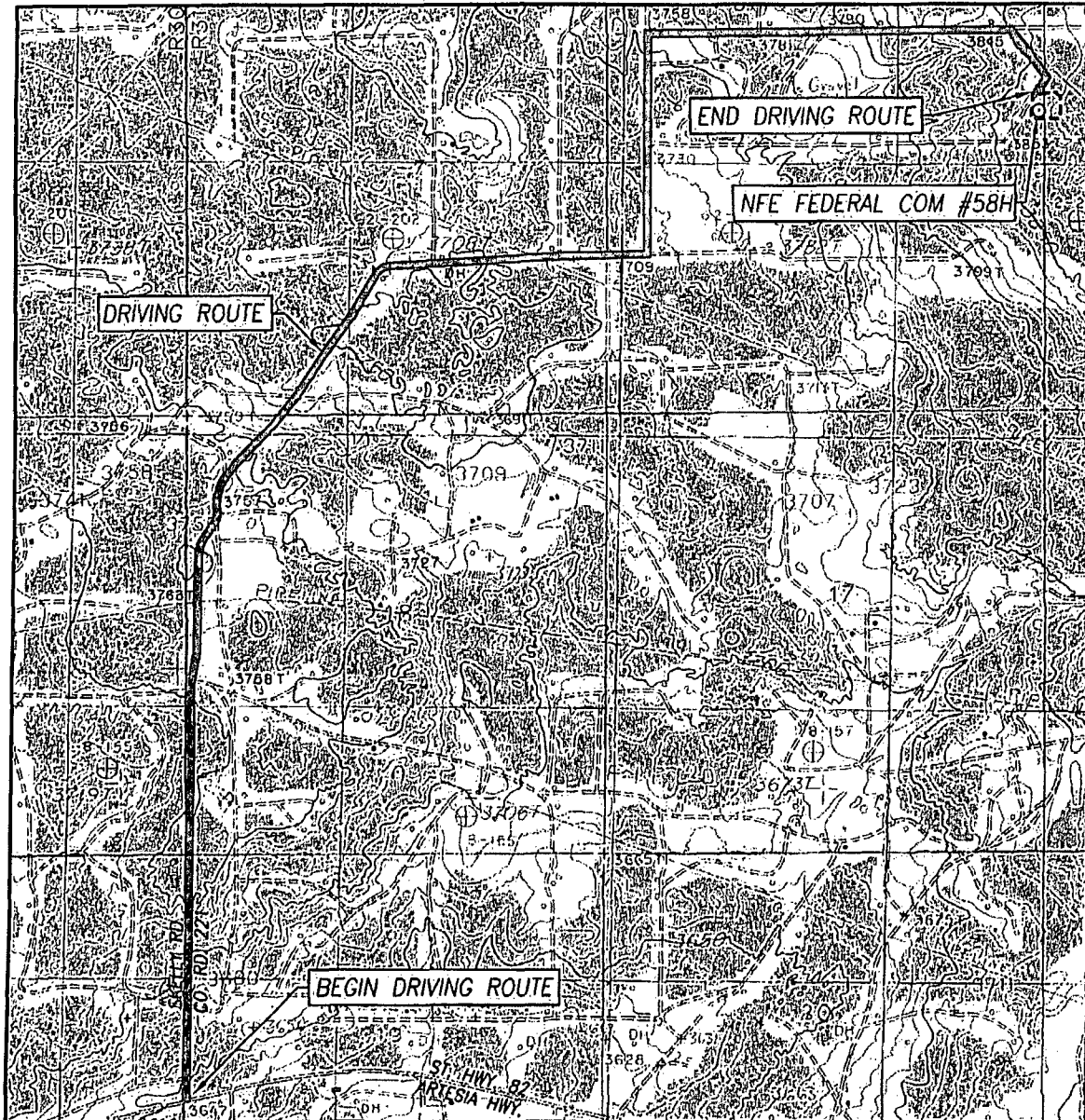


PROVIDING SURVEYING SERVICES
SINCE 1946

JOHN WEST SURVEYING COMPANY

412 N. DAL PASO HOBBS, N.M. 88240
(575) 393-3117 www.jwsc.biz
TBPLS# 10021000

TOPOGRAPHICAL AND ACCESS ROAD MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:

DIRECTIONS TO LOCATION

LOCO HILLS, N.M. - 10'

SEC. 8 TWP. 17-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 1672' FNL & 85' FEL

ELEVATION 3868'

OPERATOR APACHE CORPORATION

LEASE NFE FEDERAL COM

U.S.G.S. TOPOGRAPHIC MAP
LOCO HILLS, N.M.

FROM THE INTERSECTION OF ST. HWY 82 (ARTESIA HWY.) AND CO. RD. 221 (SKELLY RD.) GO NORTH ON SKELLY RD. APPROX. 1.4 MILES; TURN RIGHT AND GO NORTHEAST APPROX. 0.7 MILES; TURN RIGHT AND GO EAST APPROX. 0.6 MILES; TURN LEFT AND GO NORTH APPROX. 0.5 MILES; TURN RIGHT AND GO EAST APPROX. 0.85 MILES; TURN RIGHT AND GO SOUTHEAST APPROX. 0.1 MILES; TURN RIGHT AND GO SOUTHWEST APPROX. 0.15 MILES TO EXISTING CROW FEDERAL #22H, #23H AND #24H WELL PAD. LOCATION STAKE IS 95' WEST OF #22H.



PROVIDING SURVEYING SERVICES
SINCE 1946

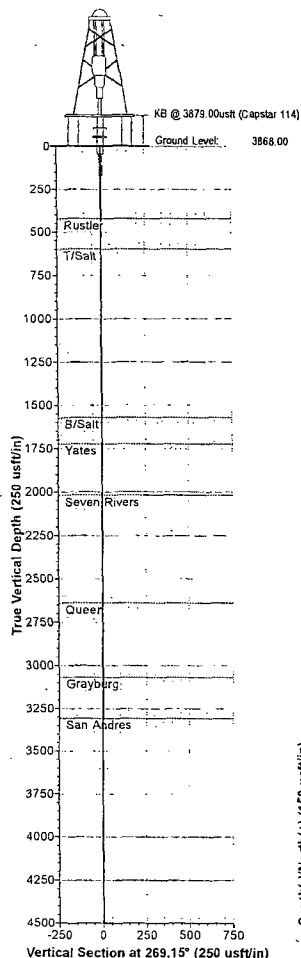
JOHN WEST SURVEYING COMPANY

412 N. DAL PASO HOBBS, N.M. 88240

(575) 393-3117 www.jwsc.biz

TBPLS# 10021000

Project: Eddy County, NM (NAD27 NME)
Site: NFE Federal
Well: #58H
Wellbore: WB1 / Job #1513674
Design: Plan #3 05-28-15
Rig: Capstar 114



WELL DETAILS									
	+N-S	+E-W	North	Ground Level	3868.00	Latitude	Longitude		
	0.00	0.00	673820.50	Easting	638275.20	32° 51' 5.78410 N	103° 52' 59.04266 W		

SECTION DETAILS									
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	Vsect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	4622.76	0.00	0.00	4622.76	0.00	0.00	0.00	0.00	0.00
3	5380.24	90.93	269.15	5100.00	-7.23	-484.89	12.00	269.15	485.04
4	9760.82	90.93	269.15	5029.00	-72.50	-4864.50	0.00	0.00	4865.04

Annotation: KOP, Start 12°/100' Build
LP, Begin 90.93° Inc Hold, 269.15° Azm
TD at 9760.82' MD

DESIGN TARGET DETAILS									
Name	TVD	+N-S	+E-W	North	Easting	Latitude	Longitude	Shape	
BHL (NFE Fed #58H) v3	5029.00	-72.50	-4864.50	673770.88	634952.76	32° 51' 5.43259 N	103° 53' 37.99196 W	Point	
MP (NFE Fed #58H) v3	5654.00	-45.52	-3322.44	673770.88	634952.76	32° 51' 5.43259 N	103° 53' 37.99196 W	Point	

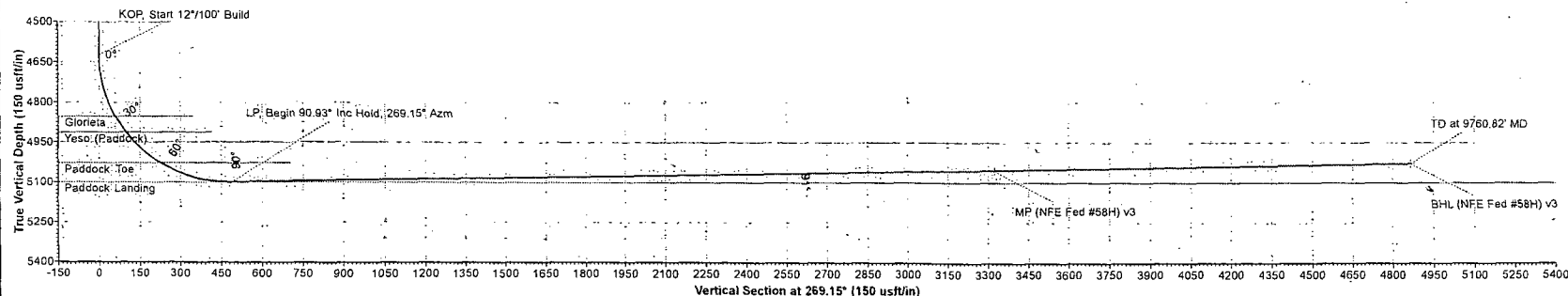
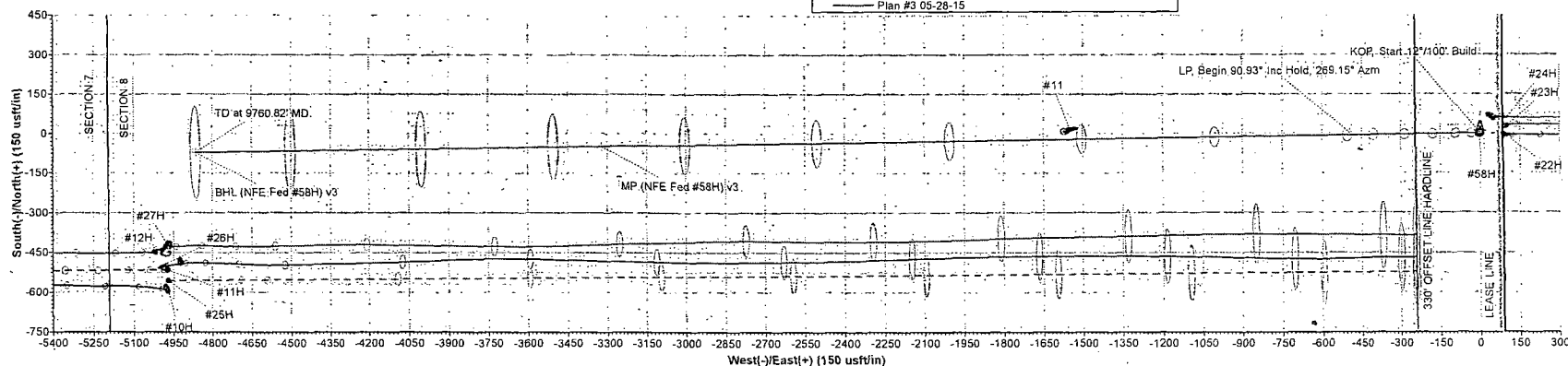
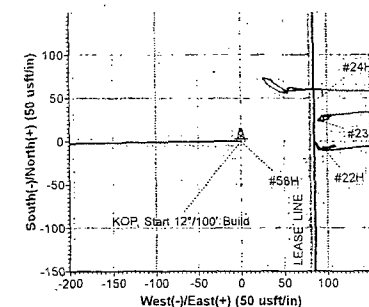
plan hits target center
plan hits target center

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 #58H, Grid North
Latitude: 32° 51' 5.78410 N
Longitude: 103° 52' 59.04266 W
Grid East: 638275.20
Grid North: 673820.50
Scale Factor: 1.000
Geomagnetic Model: HDGM
Sample Date: 28-May-15
Magnetic Declination: 7.65°
Dip Angle from Horizontal: 60.80°
Magnetic Field Strength: 48611
To convert a Magnetic Direction to a Grid Direction, Add 7.41°
To convert a Magnetic Direction to a True Direction, Add 7.65° East
To convert a True Direction to a Grid Direction, Subtract 0.24°

LEGEND

- #11H, Wellbore #1 / Job #1310356, Plan #1 05-01-12 V0
- #12H, Wellbore #1 / Job #1211107, Surveys (Basic 44) V0
- #10H, Wellbore #1 / Job #1211217, Surveys (Basic 44) V0
- #22H, WB1/Job #1311182, Surveys (Capstar 114) V0
- #24H, WB1/Job #1311334, Survey (Capstar 114) V0
- #23H, WB1/Job #1311257, Surveys (Capstar 114) V0
- #25H, Wellbore #1/Job #1210327, Plan #2 041812 V0
- #26H, Wellbore #1 / Job #1310211, Surveys (Basic 44) V0
- #27H, Wellbore #1/Job #1210329, Surveys (Basic 44) V0
- #11, Wellbore #1, Surveys V0
- Plan #3 05-28-15

FORMATION TOP DETAILS				
TVDPath	MDPath	Formation	DipAngle	DipDir
424.00	424.00	Rustle		
600.00	600.00	T/Salt		
1572.00	1572.00	B/Salt		
1724.00	1724.00	Yates		
2019.00	2019.00	Seven Rivers		
2639.00	2639.00	Queen		
3059.00	3059.00	Grayburg		
3309.00	3309.00	San Andres		
4854.00	4854.16	Glorieta		
4914.00	4935.01	Yeso (Paddock)		
5029.00	5108.70	Paddock Toe		
5106.00	5364.71	Paddock Landing		





EXPLORING WHAT'S POSSIBLE

Apache Corporation

Eddy County, NM (NAD27 NME)

NFE Federal

#58H

WB1 / Job #1513674

Plan: Plan #3 05-28-15

Standard Planning Report

28 May, 2015



PHOENIX
TECHNOLOGY SERVICES

Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well #58H
Company:	Apache Corporation	TVD Reference:	KB @ 3879.00usft (Capstar 114)
Project:	Eddy County, NM (NAD27 NME)	MD Reference:	KB @ 3879.00usft (Capstar 114)
Site:	NFE Federal	North Reference:	Grid
Well:	#58H	Survey/Calculation Method:	Minimum Curvature
Wellbore:	WB1 / Job #1513674		
Design:	Plan #3 05-28-15		

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:	#58H		
Well Position	+N/-S	555.80 usft	Northing:
	+E/-W	4,971.70 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	Ground Level:
			3,868.00 usft

Wellbore:	WB1 / Job #1513674		
Magnetics	Model Name	Sample Date	Declination
	HDGM	5/28/2015	7.65
			Dip Angle
			60.80
			Field Strength
			48,611

Design:	Plan #3 05-28-15		
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
			Direction
			(°)
			269.15

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	
4,622.76	0.00	0.00	4,622.76	0.00	0.00	0.00	0.00	0.00	0.00	
5,380.24	90.93	269.15	5,100.00	-7.23	-484.99	12.00	12.00	-11.99	269.15	
9,760.82	90.93	269.15	5,029.00	-72.50	-4,864.50	0.00	0.00	0.00	0.00	BHL (NFE Fed #58H)



Phoenix Technology Services Planning Report



Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well #58H
Company:	Apache Corporation	TVD Reference:	KB @ 3879.00usft (Capstar 114)
Project:	Eddy County, NM (NAD27 NME)	MD Reference:	KB @ 3879.00usft (Capstar 114)
Site:	NFE Federal	North Reference:	Grid
Well:	#58H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB1 / Job #1513674		
Design:	Plan #3 05-28-15		

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
424.00	0.00	0.00	424.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
T/Salt									
1,572.00	0.00	0.00	1,572.00	0.00	0.00	0.00	0.00	0.00	0.00
B/Salt									
1,724.00	0.00	0.00	1,724.00	0.00	0.00	0.00	0.00	0.00	0.00
Yates									
2,019.00	0.00	0.00	2,019.00	0.00	0.00	0.00	0.00	0.00	0.00
Seven Rivers									
2,639.00	0.00	0.00	2,639.00	0.00	0.00	0.00	0.00	0.00	0.00
Queen									
3,069.00	0.00	0.00	3,069.00	0.00	0.00	0.00	0.00	0.00	0.00
Grayburg									
3,309.00	0.00	0.00	3,309.00	0.00	0.00	0.00	0.00	0.00	0.00
San Andres									
4,622.76	0.00	0.00	4,622.76	0.00	0.00	0.00	0.00	0.00	0.00
KOP: Start 12°/100' Build									
4,700.00	9.27	269.15	4,699.66	-0.09	-6.24	6.24	12.00	12.00	0.00
4,800.00	21.28	269.15	4,795.95	-0.48	-32.53	32.53	12.00	12.00	0.00
4,864.16	28.98	269.15	4,854.00	-0.89	-59.75	59.76	12.00	12.00	0.00
Glorieta									
4,900.00	33.28	269.15	4,884.67	-1.17	-78.27	78.28	12.00	12.00	0.00
4,936.01	37.60	269.15	4,914.00	-1.48	-99.14	99.15	12.00	12.00	0.00
Yeso (Paddock)									
5,000.00	45.28	269.15	4,961.93	-2.11	-141.46	141.48	12.00	12.00	0.00
5,100.00	57.29	269.15	5,024.36	-3.27	-219.34	219.36	12.00	12.00	0.00
5,108.71	58.33	269.15	5,029.00	-3.38	-226.70	226.73	12.00	12.00	0.00
Paddock Toe									
5,200.00	69.29	269.15	5,069.23	-4.60	-308.49	308.53	12.00	12.00	0.00
5,300.00	81.30	269.15	5,094.57	-6.04	-405.03	405.08	12.00	12.00	0.00
5,364.71	89.06	269.15	5,100.00	-7.00	-469.46	469.51	12.00	12.00	0.00
Paddock Landing									
5,380.24	90.93	269.15	5,100.00	-7.23	-484.99	485.04	12.00	12.00	0.00
LP: Begin 90.93° Inc Hold, 269.15° Azm									
5,400.00	90.93	269.15	5,099.68	-7.52	-504.74	504.79	0.00	0.00	0.00
5,500.00	90.93	269.15	5,098.06	-9.01	-604.71	604.78	0.00	0.00	0.00
5,600.00	90.93	269.15	5,096.44	-10.50	-704.69	704.77	0.00	0.00	0.00
5,700.00	90.93	269.15	5,094.82	-11.99	-804.67	804.75	0.00	0.00	0.00
5,800.00	90.93	269.15	5,093.20	-13.48	-904.64	904.74	0.00	0.00	0.00
5,900.00	90.93	269.15	5,091.58	-14.97	-1,004.62	1,004.73	0.00	0.00	0.00
6,000.00	90.93	269.15	5,089.96	-16.46	-1,104.59	1,104.72	0.00	0.00	0.00
6,100.00	90.93	269.15	5,088.34	-17.95	-1,204.57	1,204.70	0.00	0.00	0.00
6,200.00	90.93	269.15	5,086.71	-19.44	-1,304.54	1,304.69	0.00	0.00	0.00
6,300.00	90.93	269.15	5,085.09	-20.93	-1,404.52	1,404.68	0.00	0.00	0.00
6,400.00	90.93	269.15	5,083.47	-22.42	-1,504.50	1,504.66	0.00	0.00	0.00
6,500.00	90.93	269.15	5,081.85	-23.91	-1,604.47	1,604.65	0.00	0.00	0.00
6,600.00	90.93	269.15	5,080.23	-25.40	-1,704.45	1,704.64	0.00	0.00	0.00
6,700.00	90.93	269.15	5,078.61	-26.89	-1,804.42	1,804.62	0.00	0.00	0.00
6,800.00	90.93	269.15	5,076.99	-28.38	-1,904.40	1,904.61	0.00	0.00	0.00
6,900.00	90.93	269.15	5,075.37	-29.87	-2,004.37	2,004.60	0.00	0.00	0.00
7,000.00	90.93	269.15	5,073.75	-31.36	-2,104.35	2,104.58	0.00	0.00	0.00

Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well #58H
Company:	Apache Corporation	TVD Reference:	KB @ 3879.00usft (Capstar 114)
Project:	Eddy County, NM (NAD27 NME)	MD Reference:	KB @ 3879.00usft (Capstar 114)
Site:	NFE Federal	North Reference:	Grid
Well:	#58H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB1 / Job #1513674		
Design:	Plan #3 05-28-15		

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)
7,100.00	90.93	269.15	5,072.13	-32.85	-2,204.33	2,204.57	0.00	0.00	0.00
7,200.00	90.93	269.15	5,070.51	-34.34	-2,304.30	2,304.56	0.00	0.00	0.00
7,300.00	90.93	269.15	5,068.89	-35.83	-2,404.28	2,404.54	0.00	0.00	0.00
7,400.00	90.93	269.15	5,067.26	-37.32	-2,504.25	2,504.53	0.00	0.00	0.00
7,500.00	90.93	269.15	5,065.64	-38.81	-2,604.23	2,604.52	0.00	0.00	0.00
7,600.00	90.93	269.15	5,064.02	-40.30	-2,704.20	2,704.50	0.00	0.00	0.00
7,700.00	90.93	269.15	5,062.40	-41.79	-2,804.18	2,804.49	0.00	0.00	0.00
7,800.00	90.93	269.15	5,060.78	-43.28	-2,904.16	2,904.48	0.00	0.00	0.00
7,900.00	90.93	269.15	5,059.16	-44.77	-3,004.13	3,004.47	0.00	0.00	0.00
8,000.00	90.93	269.15	5,057.54	-46.26	-3,104.11	3,104.45	0.00	0.00	0.00
8,100.00	90.93	269.15	5,055.92	-47.75	-3,204.08	3,204.44	0.00	0.00	0.00
8,200.00	90.93	269.15	5,054.30	-49.24	-3,304.06	3,304.43	0.00	0.00	0.00
8,300.00	90.93	269.15	5,052.68	-50.73	-3,404.03	3,404.41	0.00	0.00	0.00
8,400.00	90.93	269.15	5,051.06	-52.22	-3,504.01	3,504.40	0.00	0.00	0.00
8,500.00	90.93	269.15	5,049.44	-53.71	-3,603.99	3,604.39	0.00	0.00	0.00
8,600.00	90.93	269.15	5,047.81	-55.20	-3,703.96	3,704.37	0.00	0.00	0.00
8,700.00	90.93	269.15	5,046.19	-56.69	-3,803.94	3,804.36	0.00	0.00	0.00
8,800.00	90.93	269.15	5,044.57	-58.18	-3,903.91	3,904.35	0.00	0.00	0.00
8,900.00	90.93	269.15	5,042.95	-59.67	-4,003.89	4,004.33	0.00	0.00	0.00
9,000.00	90.93	269.15	5,041.33	-61.16	-4,103.87	4,104.32	0.00	0.00	0.00
9,100.00	90.93	269.15	5,039.71	-62.65	-4,203.84	4,204.31	0.00	0.00	0.00
9,200.00	90.93	269.15	5,038.09	-64.14	-4,303.82	4,304.29	0.00	0.00	0.00
9,300.00	90.93	269.15	5,036.47	-65.63	-4,403.79	4,404.28	0.00	0.00	0.00
9,400.00	90.93	269.15	5,034.85	-67.12	-4,503.77	4,504.27	0.00	0.00	0.00
9,500.00	90.93	269.15	5,033.23	-68.61	-4,603.74	4,604.26	0.00	0.00	0.00
9,600.00	90.93	269.15	5,031.61	-70.10	-4,703.72	4,704.24	0.00	0.00	0.00
9,700.00	90.93	269.15	5,029.99	-71.59	-4,803.70	4,804.23	0.00	0.00	0.00
9,760.82	90.93	269.15	5,029.00	-72.50	-4,864.50	4,865.04	0.00	0.00	0.00
TD at 9760.82' 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
BHL (NFE Fed #58H) v3	- plan hits target center	0.00	0.00	5,029.00	-72.50	-4,864.50	673,748.00	633,410.70	32° 51' 5.26830 N 103° 53' 56.06974 W
	- Point								
MP (NFE Fed #58H) v3	- plan hits target center	0.00	0.00	5,054.00	-49.52	-3,322.44	673,770.98	634,952.77	32° 51' 5.43259 N 103° 53' 37.99199 W
	- Point								

Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well #58H
Company:	Apache Corporation	TVD Reference:	KB @ 3879.00usft (Capstar 114)
Project:	Eddy County, NM (NAD27 NME)	MD Reference:	KB @ 3879.00usft (Capstar 114)
Site:	NFE Federal	North Reference:	Grid
Well:	#58H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB1 / Job #1513674		
Design:	Plan #3 05-28-15		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction	
424.00	424.00	Rustler				
600.00	600.00	T/Salt				
1,572.00	1,572.00	B/Salt				
1,724.00	1,724.00	Yates				
2,019.00	2,019.00	Seven Rivers				
2,639.00	2,639.00	Queen				
3,069.00	3,069.00	Grayburg				
3,309.00	3,309.00	San Andres				
4,864.16	4,854.00	Glorieta				
4,936.01	4,914.00	Yeso (Paddock)				
5,108.71	5,029.00	Paddock Toe				
5,364.71	5,100.00	Paddock Landing				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		N/S (usft)	E/W (usft)		
4,622.76	4,622.76	0.00	0.00	KOP, Start 12°/100' Build	
5,380.24	5,100.00	-7.23	-484.99	LP, Begin 90.93° Inc Hold, 269.15° Azm	
9,760.82	5,029.00	-72.50	-4,864.50	TD at 9760.82' MD	