



PHOENIX
TECHNOLOGY SERVICES

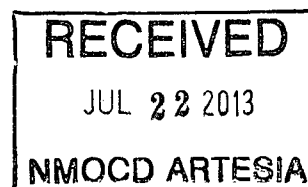
July 17, 2013

Oil Conservation Division
State of New Mexico
811 S. First St.
Artesia, New Mexico 88210

Dear District 2 - Artesia

Attention: Regulatory Department

Re: Apache Corporation
Crow Federal 15H
Eddy Co., NM
API #30-015-40579
Job No. 1310461



Enclosed please find the Survey Data Certification, and the original Plat and one copy of the Survey Report performed on the above referenced Well by Phoenix Technology Services, Inc. (P-5 No. 664171). Other information required by your office is as follows:

Name & Title of Surveyor	Drainhole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Matthew Dice	15H	604	11,029	06/30/13	07/15/13	MWD

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Best Regards,

Kia Foster

Kia Foster
Operations Administrator

Certified mail receipt number: 7011 1570 0001 4364 9117

RECEIVED

JUL 22 2013

Phoenix Technology Services
SURVEY DATA CERTIFICATION

NMOCD ARTESIA



PHOENIX
TECHNOLOGY SERVICES

PHOENIX JOB NUMBER

1310461

OPERATOR

Apache Corporation

WELL NAME

Crow Federal 15H

COUNTY & STATE

Eddy, NM

API WELL NUMBER

30-015-40579

PROPOSED DIRECTION

269.63

TIE-IN DATA						
MEASURED	VERTICAL			N-S	E-W	DATA
DEPTH	DEPTH	INCLIN	AZIMUTH	COORD	COORD	SOURCE
ft	.00 ft	.0 ft	.0 ft	.00 ft	.00 ft	Surface

FIRST	FIRST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
30-Jun-13	604 ft	0.7	211.5

SURVEY INSTRUMENT

TYPE

Phoenix MWD

LAST	LAST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
15-Jul-13	11,029 ft	90	269.2

TO THE BEST OF MY KNOWLEDGE I
CERTIFY THIS SURVEY DATA TO BE
TRUE AND CORRECT.

PROJECTED	PROJECTED		
TD SURVEY	TD SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
15-Jul-13	11,084 ft	90	269.2

Matthew Dice

PRINT YOUR NAME ABOVE:

SIGN YOUR NAME ABOVE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED

0.25

DECLINATION OR GRID

DECLINATION

7/15/2013

TODAY'S DATE

MWD SUPERVISOR 1

Brad Hill

DIRECTIONAL DRILLER 1

Matt Boyt

MWD SUPERVISOR 2

Matt Dice

DIRECTIONAL DRILLER 2

Danny Rieger

1805 Brittmore Road

Houston, Texas 77043

(713)3370609 (Voice), (713)337-0599 (Fax)

RECEIVED

JUL 22 2013

DISTRICT I
1625 N. Ficoch 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
INMOCD ARTESIA
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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
Property Code	Property Name CROW FEDERAL	Well Number 15H
OGRID No.	Operator Name APACHE CORPORATION	Elevation 3885'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	10	17-S	31-E		988	SOUTH	250	WEST	EDDY

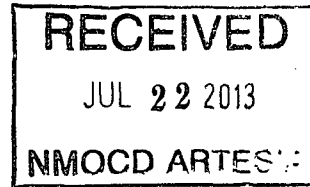
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	9	17-S	31-E		988	SOUTH	330	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

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. Signature _____ Date _____ Printed Name _____ E-mail Address _____
SCALE: 1" = 2000' CORNER COORDINATES TABLE ① - Y=671532.5 N, X=638373.2 E ② - Y=671576.8 N, X=644974.3 E ③ - Y=670212.4 N, X=638380.7 E ④ - Y=670256.5 N, X=644981.6 E DETAIL	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. MARCH 27, 2012 Date of Survey _____ Signature & Seal of Professional Surveyor: _____ <i>Gary G. Eidson</i> 3/29/12 Certificate Number: Gary G. Eidson 12641 Ronald J. Eidson 3239 DSS Rel. 11.11.0721 JWSC W.O. 12.11.0634



Apache Corporation

Eddy County, NM (NAD27 NME)

Crow Federal

#15H

OH/Job #1310461

Survey: Phoenix MWD Surveys

Phoenix Final Survey Report

16 July, 2013





Phoenix Technology Services

Phoenix Final Survey Report



Company:	Apache Corporation	Local Co-ordinate Reference:	Well #15H
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	KB @ 3895.00usft (Capstar 114)
Site:	Crow Federal	MD Reference:	KB @ 3895.00usft (Capstar 114)
Well:	#15H	North Reference:	Grid
Wellbore:	OH/Job #1310461	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Capstar 114)	Database:	GCR DB

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:	Crow Federal		
Site Position:		Northing:	671,130.90 usft
From:	Map	Easting:	643,906.80 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"
		Latitude:	32° 50' 38.927956 N
		Longitude:	103° 51' 53.166888 W
		Grid Convergence:	0.25 °

Well:	#15H		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
		Ground Level:	3,885.00 usft
		Latitude:	32° 50' 39.966968 N
		Longitude:	103° 51' 53.169634 W

Wellbore	OH/Job #1310461				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010_14	04/18/13	7.54	60.66	48,770

Design					Surveys (Capstar 114)						
Audit Notes:											
Version:		1.0		Phase:		ACTUAL		Tie On Depth:		0.00	
Vertical Section:		Depth From (TVD)			+N/-S		+E/-W		Direction		
		(usft)			(usft)		(usft)		(°)		
		0.00			-0.00		0.00		269.63		

Survey Program	Date	07/16/13		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.00	500.00	Gyro (OH/Job #1310461)	ISCWSA-GYRO-3	VES Gyro
604.00	11,084.00	Phoenix MWD Surveys (OH/Job #1310461)	MWD	MWD - Standard

Survey	MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
	500.00	0.64	176.61	499.98	-2.98	1.77	-1.75	0.00
Tie-on to Gyro	604.00	0.70	211.50	603.98	-4.10	1.47	-1.44	0.39
First Phoenix MWD Survey	693.00	0.60	206.20	692.97	-4.98	0.98	-0.95	0.13
	778.00	0.70	218.10	777.97	-5.79	0.46	-0.43	0.20
	864.00	0.70	236.00	863.96	-6.49	-0.30	0.34	0.25
	950.00	0.70	232.60	949.95	-7.11	-1.15	1.20	0.05
	1,035.00	1.20	224.60	1,034.94	-8.06	-2.19	2.24	0.61
	1,121.00	0.80	152.10	1,120.93	-9.23	-2.54	2.60	1.43
	1,206.00	1.80	70.70	1,205.91	-9.31	-1.00	1.06	2.18



Phoenix Technology Services

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Site:	Crow Federal	MD Reference:	KB @ 3895.00usft (Capstar 114)
Well:	#15H	North Reference:	Grid
Wellbore:	OH/Job #1310461	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Capstar 114)	Database:	GCR DB

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	
1,292.00	2.00	69.60	1,291.87	-8.34	1.68	-1.63	0.24	
1,377.00	1.60	67.80	1,376.82	-7.38	4.17	-4.12	0.48	
1,463.00	1.90	67.60	1,462.78	-6.38	6.60	-6.56	0.35	
1,549.00	1.20	81.70	1,548.75	-5.71	8.81	-8.77	0.92	
1,634.00	1.30	92.50	1,633.73	-5.62	10.65	-10.62	0.30	
1,720.00	1.60	91.70	1,719.70	-5.70	12.83	-12.79	0.35	
1,805.00	0.40	136.30	1,804.69	-5.95	14.22	-14.18	1.58	
1,891.00	0.00	89.80	1,890.69	-6.16	14.43	-14.39	0.47	
1,976.00	0.10	6.10	1,975.69	-6.09	14.43	-14.39	0.12	
2,062.00	0.30	8.50	2,061.69	-5.79	14.48	-14.44	0.23	
2,148.00	0.40	351.00	2,147.69	-5.27	14.46	-14.43	0.17	
2,233.00	0.60	357.50	2,232.68	-4.54	14.40	-14.37	0.24	
2,319.00	0.70	4.30	2,318.68	-3.56	14.42	-14.39	0.15	
2,405.00	0.90	350.90	2,404.67	-2.37	14.35	-14.33	0.32	
2,490.00	1.00	359.60	2,489.66	-0.97	14.24	-14.23	0.21	
2,576.00	1.30	346.80	2,575.64	0.73	14.01	-14.01	0.46	
2,662.00	1.00	338.30	2,661.62	2.38	13.51	-13.52	0.40	
2,746.00	1.10	340.10	2,745.61	3.82	12.96	-12.99	0.13	
2,832.00	1.20	338.40	2,831.59	5.43	12.35	-12.39	0.12	
2,918.00	0.90	318.90	2,917.58	6.78	11.58	-11.62	0.54	
3,003.00	0.60	237.70	3,002.57	7.04	10.76	-10.81	1.18	
3,089.00	0.60	220.20	3,088.57	6.46	10.09	-10.13	0.21	
3,175.00	0.70	231.10	3,174.56	5.78	9.39	-9.43	0.18	
3,260.00	0.80	236.90	3,259.56	5.13	8.49	-8.52	0.15	
3,346.00	0.60	244.20	3,345.55	4.61	7.58	-7.61	0.25	
3,448.00	0.70	243.60	3,447.54	4.10	6.54	-6.57	0.10	
3,518.00	1.00	256.10	3,517.53	3.76	5.57	-5.59	0.50	
3,603.00	0.90	259.20	3,602.52	3.46	4.19	-4.21	0.13	
3,689.00	1.00	256.40	3,688.51	3.16	2.80	-2.82	0.13	
3,774.00	0.90	258.00	3,773.50	2.84	1.42	-1.44	0.12	
3,860.00	0.90	246.20	3,859.49	2.43	0.14	-0.16	0.22	
3,945.00	0.80	245.50	3,944.48	1.91	-1.01	0.99	0.12	
4,031.00	0.80	240.10	4,030.47	1.37	-2.07	2.06	0.09	
4,117.00	0.90	239.10	4,116.46	0.72	-3.17	3.17	0.12	
4,202.00	1.10	240.70	4,201.45	-0.02	-4.46	4.46	0.24	
4,288.00	1.30	241.30	4,287.43	-0.89	-6.03	6.04	0.23	
4,373.00	2.00	186.70	4,372.40	-2.83	-7.05	7.07	1.92	
4,459.00	0.40	76.50	4,458.38	-4.25	-6.94	6.96	2.52	
4,544.00	1.90	34.60	4,543.36	-3.02	-5.85	5.87	1.91	
4,630.00	1.70	41.30	4,629.32	-0.89	-4.20	4.20	0.34	
4,715.00	1.50	42.30	4,714.29	0.88	-2.61	2.61	0.24	
4,801.00	1.60	38.60	4,800.26	2.65	-1.11	1.09	0.16	
4,887.00	1.70	45.00	4,886.22	4.49	0.54	-0.57	0.24	
4,972.00	1.60	45.80	4,971.18	6.21	2.29	-2.33	0.12	



Phoenix Technology Services
Phoenix Final Survey Report



Company:	Apache Corporation	Local Co-ordinate Reference:	Well #15H
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	KB @ 3895.00usft (Capstar 114)
Site:	Crow Federal	MD Reference:	KB @ 3895.00usft (Capstar 114)
Well:	#15H	North Reference:	Grid
Wellbore:	OH/Job #1310461	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Capstar 114)	Database:	GCR-DB

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	
5,058.00	0.50	2.50	5,057.17	7.42	3.16	-3.21	1.49	
5,143.00	0.30	11.20	5,142.17	8.01	3.22	-3.27	0.25	
5,229.00	1.80	171.00	5,228.16	6.90	3.48	-3.52	2.42	
5,315.00	1.90	171.60	5,314.11	4.15	3.90	-3.92	0.12	
5,400.00	1.90	170.90	5,399.06	1.37	4.33	-4.33	0.03	
5,486.00	2.30	216.20	5,485.01	-1.43	3.53	-3.52	1.93	
5,573.00	1.70	213.60	5,571.96	-3.92	1.79	-1.76	0.70	
5,617.00	2.00	224.40	5,615.94	-5.01	0.89	-0.86	1.04	
5,660.00	6.20	258.80	5,658.82	-6.00	-1.92	1.95	10.90	
5,703.00	12.20	267.80	5,701.25	-6.62	-8.74	8.78	14.31	
5,746.00	18.30	274.60	5,742.72	-6.26	-20.02	20.06	14.76	
5,788.00	23.60	276.20	5,781.93	-4.82	-34.96	34.99	12.69	
5,831.00	29.00	274.80	5,820.46	-3.01	-53.92	53.94	12.64	
5,874.00	34.20	272.20	5,857.08	-1.68	-76.40	76.41	12.50	
5,917.00	38.80	270.00	5,891.64	-1.21	-101.96	101.97	11.12	
5,960.00	42.40	269.10	5,924.28	-1.44	-129.94	129.95	8.48	
6,002.00	46.30	269.10	5,954.31	-1.90	-159.29	159.30	9.29	
6,045.00	50.50	269.10	5,982.85	-2.41	-191.43	191.45	9.77	
6,088.00	55.30	269.20	6,008.78	-2.91	-225.72	225.73	11.16	
6,131.00	59.50	270.20	6,031.94	-3.10	-261.93	261.95	9.96	
6,173.00	63.90	270.80	6,051.85	-2.77	-298.90	298.91	10.55	
6,216.00	68.90	271.50	6,069.06	-1.97	-338.29	338.29	11.72	
6,259.00	73.80	271.20	6,082.81	-1.02	-379.00	379.00	11.41	
6,302.00	79.40	270.50	6,092.77	-0.40	-420.81	420.81	13.12	
6,340.00	84.60	269.80	6,098.05	-0.30	-458.43	458.42	13.81	
6,404.00	91.50	269.80	6,100.23	-0.53	-522.35	522.34	10.78	
6,489.00	91.20	269.40	6,098.23	-1.12	-607.33	607.32	0.59	
6,575.00	91.00	269.10	6,096.58	-2.24	-693.30	693.30	0.42	
6,661.00	90.50	269.50	6,095.45	-3.30	-779.29	779.29	0.74	
6,746.00	90.00	270.20	6,095.08	-3.52	-864.29	864.29	1.01	
6,832.00	93.00	269.30	6,092.83	-3.89	-950.25	950.25	3.64	
6,917.00	92.70	269.50	6,088.60	-4.78	-1,035.14	1,035.15	0.42	
7,003.00	92.70	269.40	6,084.55	-5.61	-1,121.04	1,121.05	0.12	
7,089.00	92.20	269.40	6,080.88	-6.51	-1,206.95	1,206.97	0.58	
7,174.00	91.70	269.20	6,077.98	-7.54	-1,291.90	1,291.92	0.63	
7,260.00	91.50	269.00	6,075.58	-8.89	-1,377.85	1,377.88	0.33	
7,346.00	91.30	268.70	6,073.48	-10.62	-1,463.81	1,463.85	0.42	
7,431.00	91.30	268.70	6,071.55	-12.55	-1,548.77	1,548.81	0.00	
7,516.00	91.00	268.00	6,069.85	-14.99	-1,633.71	1,633.78	0.90	
7,602.00	92.60	268.30	6,067.14	-17.77	-1,719.62	1,719.70	1.89	
7,688.00	92.40	268.40	6,063.39	-20.24	-1,805.51	1,805.60	0.26	
7,773.00	92.20	270.50	6,059.98	-21.06	-1,890.43	1,890.52	2.48	
7,859.00	92.30	270.60	6,056.61	-20.23	-1,976.36	1,976.45	0.16	
7,944.00	92.20	270.50	6,053.27	-19.42	-2,061.29	2,061.37	0.17	



Phoenix Technology Services

Phoenix Final Survey Report



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Project:	Eddy County, NM (NAD27-NME)	TVD Reference:	KB @ 3895.00usft (Capstar 114)
Site:	Crow Federal	MD Reference:	KB @ 3895.00usft (Capstar 114)
Well:	#15H	North Reference:	Grid
Wellbore:	OH/Job #1310461	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Capstar 114)	Database:	GCR DB

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	
8,030.00	92.00	270.10	6,050.12	-18.97	-2,147.23	2,147.31	0.52	
8,116.00	91.60	269.60	6,047.42	-19.19	-2,233.19	2,233.26	0.74	
8,201.00	91.40	269.40	6,045.19	-19.93	-2,318.15	2,318.23	0.33	
8,287.00	92.00	270.80	6,042.64	-19.78	-2,404.11	2,404.19	1.77	
8,372.00	91.80	270.30	6,039.82	-18.97	-2,489.06	2,489.13	0.63	
8,458.00	91.60	270.20	6,037.27	-18.59	-2,575.02	2,575.09	0.26	
8,543.00	91.60	270.10	6,034.90	-18.37	-2,659.99	2,660.05	0.12	
8,629.00	91.30	269.40	6,032.72	-18.75	-2,745.96	2,746.02	0.89	
8,715.00	91.10	269.20	6,030.92	-19.80	-2,831.94	2,832.00	0.33	
8,800.00	90.90	268.70	6,029.44	-21.35	-2,916.91	2,916.99	0.63	
8,886.00	90.70	268.70	6,028.24	-23.31	-3,002.88	3,002.97	0.23	
8,971.00	90.30	270.80	6,027.49	-23.68	-3,087.87	3,087.96	2.51	
9,056.00	90.20	270.40	6,027.12	-22.79	-3,172.86	3,172.94	0.49	
9,141.00	91.30	270.00	6,026.01	-22.49	-3,257.85	3,257.93	1.38	
9,227.00	90.90	269.50	6,024.36	-22.86	-3,343.84	3,343.91	0.74	
9,312.00	90.30	268.70	6,023.47	-24.20	-3,428.82	3,428.90	1.18	
9,398.00	89.90	269.10	6,023.32	-25.85	-3,514.80	3,514.90	0.66	
9,484.00	89.60	269.50	6,023.69	-26.90	-3,600.80	3,600.89	0.58	
9,569.00	88.80	269.50	6,024.88	-27.64	-3,685.78	3,685.89	0.94	
9,655.00	88.80	269.90	6,026.68	-28.09	-3,771.76	3,771.87	0.47	
9,740.00	90.40	271.30	6,027.28	-27.20	-3,856.75	3,856.85	2.50	
9,826.00	91.30	271.60	6,026.00	-25.03	-3,942.71	3,942.79	1.10	
9,911.00	90.90	271.10	6,024.37	-23.03	-4,027.67	4,027.74	0.75	
9,997.00	90.70	270.80	6,023.17	-21.60	-4,113.65	4,113.71	0.42	
10,084.00	89.70	270.70	6,022.86	-20.46	-4,200.65	4,200.69	1.16	
10,169.00	90.50	270.90	6,022.71	-19.27	-4,285.64	4,285.67	0.97	
10,255.00	90.00	270.90	6,022.34	-17.92	-4,371.62	4,371.65	0.58	
10,343.00	92.10	270.80	6,020.73	-16.62	-4,459.59	4,459.61	2.39	
10,429.00	92.20	270.90	6,017.50	-15.34	-4,545.52	4,545.53	0.16	
10,520.00	91.80	269.40	6,014.32	-15.11	-4,636.47	4,636.47	1.70	
10,607.00	91.50	269.40	6,011.82	-16.02	-4,723.43	4,723.43	0.34	
10,697.00	91.10	269.30	6,009.78	-17.04	-4,813.40	4,813.41	0.46	
10,787.00	90.90	269.40	6,008.21	-18.06	-4,903.38	4,903.39	0.25	
10,879.00	90.50	269.20	6,007.08	-19.18	-4,995.36	4,995.38	0.49	
10,970.00	90.10	269.10	6,006.61	-20.53	-5,086.35	5,086.38	0.45	
11,029.00	90.00	269.20	6,006.56	-21.41	-5,145.34	5,145.38	0.24	
Last Phoenix MWD Survey:								
11,084.00	90.00	269.20	6,006.56	-22.17	-5,200.34	5,200.37	0.00	
Projection to TD:								



Phoenix Technology Services
Phoenix Final Survey Report



Company:	Apache Corporation	Local Co-ordinate Reference:	Well #15H
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	KB @ 3895.00usft (Capstar 114)
Site:	Crow Federal	MD Reference:	KB @ 3895.00usft (Capstar 114)
Well:	#15H	North Reference:	Grid
Wellbore:	OH/Job #1310461	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Capstar 114)	Database:	GCR DB

Survey Annotations:				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
500.00	499.98	-2.98	1.77	Tie-on to Gyro
604.00	603.98	-4.10	1.47	First Phoenix MWD Survey
11,029.00	6,006.56	-21.41	-5,145.34	Last Phoenix MWD Survey
11,084.00	6,006.56	-22.17	-5,200.34	Projection to TD

Checked By: _____	Approved By: _____	Date: _____
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