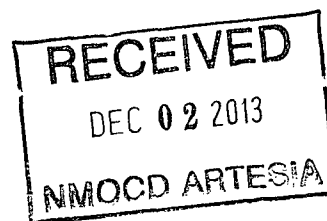




PHOENIX
TECHNOLOGY SERVICES

November 27, 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
Washington 33 State #68
Eddy County, NM
API #30-015-41681
Job No. 1311577

15-41681

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	
Brad Hill	68	615	4,468	11/22/13	11/24/13	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,

Sonya Thomas

Sonya Thomas
Operations Administrator

Certified mail receipt number: 7011 1570 0001 4365 0274

Phoenix Technology Services SURVEY DATA CERTIFICATION



PHOENIX
TECHNOLOGY SERVICES

PHOENIX JOB NUMBER

1311577

OPERATOR

Apache Corporation

WELL NAME

Washington, 33 State #68

COUNTY & STATE

Eddy Count, New Mexico

API WELL NUMBER

30-015-41681

PROPOSED DIRECTION

185.5

TIE-IN DATA						
MEASURED	VERTICAL			N-S	E-W	DATA
DEPTH	DEPTH	INCLIN	AZIMUTH	COORD	COORD	SOURCE
500 ft	499.92 ft	1.04	92.91	.76 ft	8.38 ft	Gryodata Gryo

FIRST SURVEY DATE	FIRST SURVEY DEPTH	INCLIN	AZIMUTH
22-Nov-13	615 ft	1.0	65.6

SURVEY INSTRUMENT
TYPE

Phoenix MWD

LAST SURVEY DATE	LAST SURVEY DEPTH	INCLIN	AZIMUTH
24-Nov-13	4,468 ft	0.8	44.6

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

RECEIVED
DEC 02 2013
NMOCD, ARTESIA

PROJECTED TD SURVEY DATE	PROJECTED TD SURVEY DEPTH	INCLIN	AZIMUTH
24-Nov-13	4,517 ft	0.8	41.3

Brad Hill

PRINT YOUR NAME ABOVE

Brad Hill

SIGN YOUR NAME ABOVE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	7.53
DECLINATION OR GRID	GRID

11/24/2013

TODAY'S DATE

MWD SUPERVISOR 1

Brad Hill

DIRECTIONAL DRILLER 1

Ken Smith

MWD SUPERVISOR 2

0

DIRECTIONAL DRILLER 2

Joe Paup

1805 Brittmore Road

Houston, Texas 77043

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

DISTRICT I

1625 N. French Dr., Hobbs, NM 88240
Phone (505) 393-0101 Fax: (505) 393-0720

DISTRICT II

611 S. First St., Artesia, NM 88210
Phone (505) 748-1283 Fax: (505) 748-9720

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone (505) 334-6170 Fax: (505) 334-6170

DISTRICT IV

1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 470-3400 Fax: (505) 470-3462

State of New Mexico
Energy, Minerals and 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

NMOC ARTESIA

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number 30-015-41681	Pool Code 96830	Pool Name Artesia; Glorieta - Yeso
Property Code 309175	Property Name WASHINGTON 33 STATE	Well Number 68
OGRID No. 873	Operator Name APACHE CORP	Elevation 3682'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	33	17 S	28 E		170	NORTH	2310	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
C	33	17 S	28 E		350	NORTH	2290	WEST	EDDY
Dedicated Acres 40	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

2310 2290 N: 654104.0 E: 585547.3 (NAD-83)		170 350 N: 654169.7 E: 588139.4 (NAD-83)		N: 654234.8 E: 590741.8 (NAD-83)	
SURFACE LOCATION Lat - N 32°47'51.95" Long - W 104°10'54.97" NMSPCE - N 653992.6 E: 587858.2 (NAD-83) Lat - N 32°47'51.54" Long - W 104°10'53.12" NMSPCE - N 653929.6 E: 546679.1 (NAD-27) N: 651507.1 E: 585577.8 (NAD-83)		PROPOSED BOTTOM HOLE LOCATION Lat - N 32°47'50.17" Long - W 104°10'55.17" NMSPCE - N 653811.9 E: 587840.8 (NAD-83) Lat - N 32°47'49.75" Long - W 104°10'53.33" NMSPCE - N 653748.9 E: 546661.7 (NAD-27)		N: 651625.1 E: 590777.5 (NAD-83)	
N: 648910.0 E: 585613.5 (NAD-83)		N: 648962.4 E: 588212.7 (NAD-83)		N: 649014.4 E: 590814.2 (NAD-83)	

OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unEDD'ed 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 a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

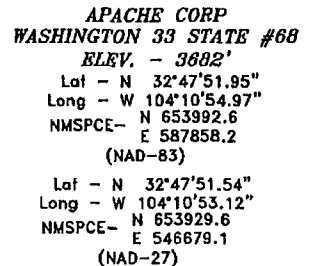
Michelle Cooper 10-28-13
Signature Date
Michelle Cooper
Printed Name
michelle.cooper@apachecorp.com
Email Address

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.

DATE SURVEYED: AUGUST 29, 2013
Signature: [Signature]
Professional Surveyor
Certificate No. Gary L. Jones 7977
BASIN SURVEYS 29269

EDDY COUNTY,

NEW MEXICO.



200 0 200 400 FEET

SCALE: 1" = 200'

FROM LOCO HILLS GO WEST ON US HWY 82 FOR 11.8 MILES AND TURN RIGHT ON CO RD 208 FOR 100 FEET AND TURN LEFT ONTO LEASE ROAD FOR 0.3 MILES TO LOCATION.

W.O. Number: 29269	Drawn By: K. NORRIS
--------------------	---------------------

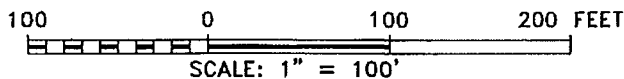
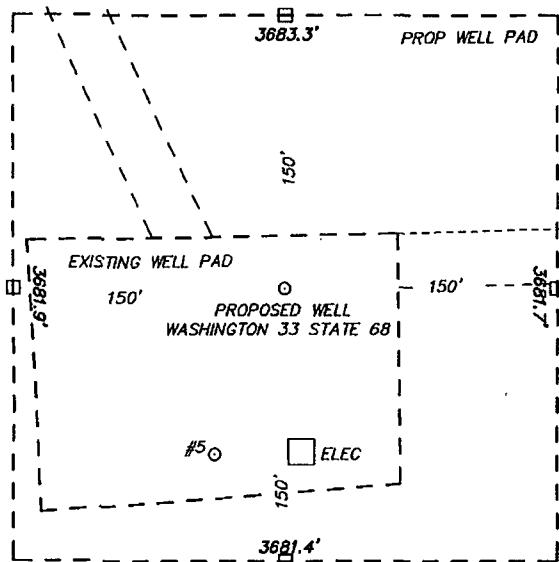
Date: 09-05-2013 Disk: KAN 29269

REF: WASHINGTON 33 STATE #68 / WELL PAD TOPO

THE WASHINGTON 33 STATE #68 LOCATED 170' FROM
THE NORTH LINE AND 2310' FROM THE WEST LINE OF
SECTION 33, TOWNSHIP 17 SOUTH, RANGE 28 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 08-30-2013	Sheet 1 of 1 Sheets
-------------------------	---------------------

SECTION 33, TOWNSHIP 17 SOUTH, RANGE 28 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



APACHE CORP

REF: WASHINGTON 33 STATE #68 / WELL PAD TOPO

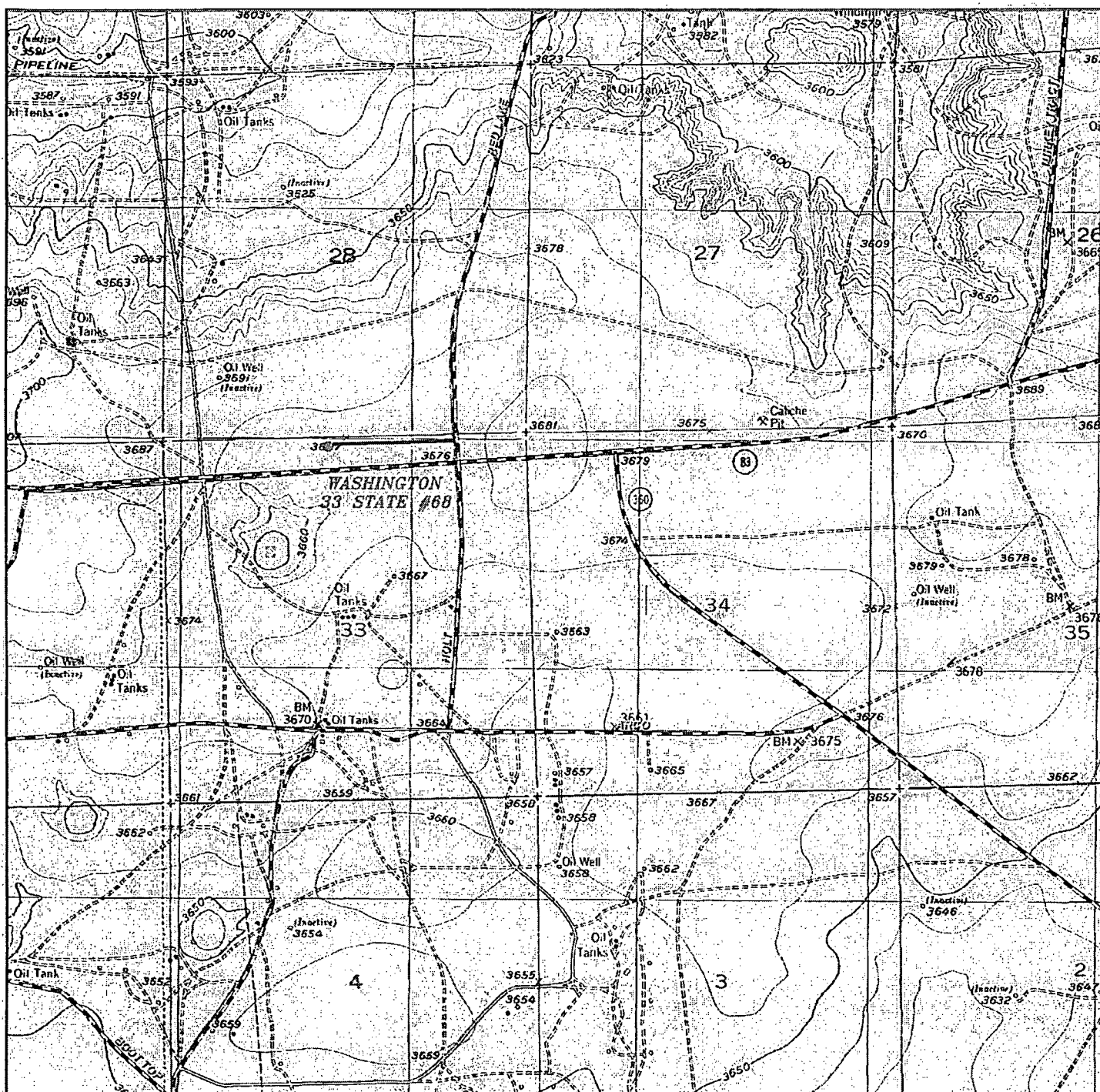
THE WASHINGTON 33 STATE #68 LOCATED 170' FROM
THE NORTH LINE AND 2310' FROM THE WEST LINE OF
SECTION 33, TOWNSHIP 17 SOUTH, RANGE 28 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

BASIN SURVEYS P.O. BOX 1786—HOBBS, NEW MEXICO

W.O. Number: 29269 Drawn By: K. NORRIS

Date: 09-05-2013 Disk: KAN 29269

Survey Date: 08-30-2013 Sheet 1 of 1 Sheets



WASHINGTON 33 STATE #68
 Located 170' FNL and 2310' FWL
 Section 33, Township 17 South, Range 28 East,
 N.M.P.M., EDDY County, New Mexico.

basin
surveys

focused on excellence
 in the oilfield

P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (575) 393-7316 - Office
 (575) 392-2206 - Fax
 basin-surveys.com

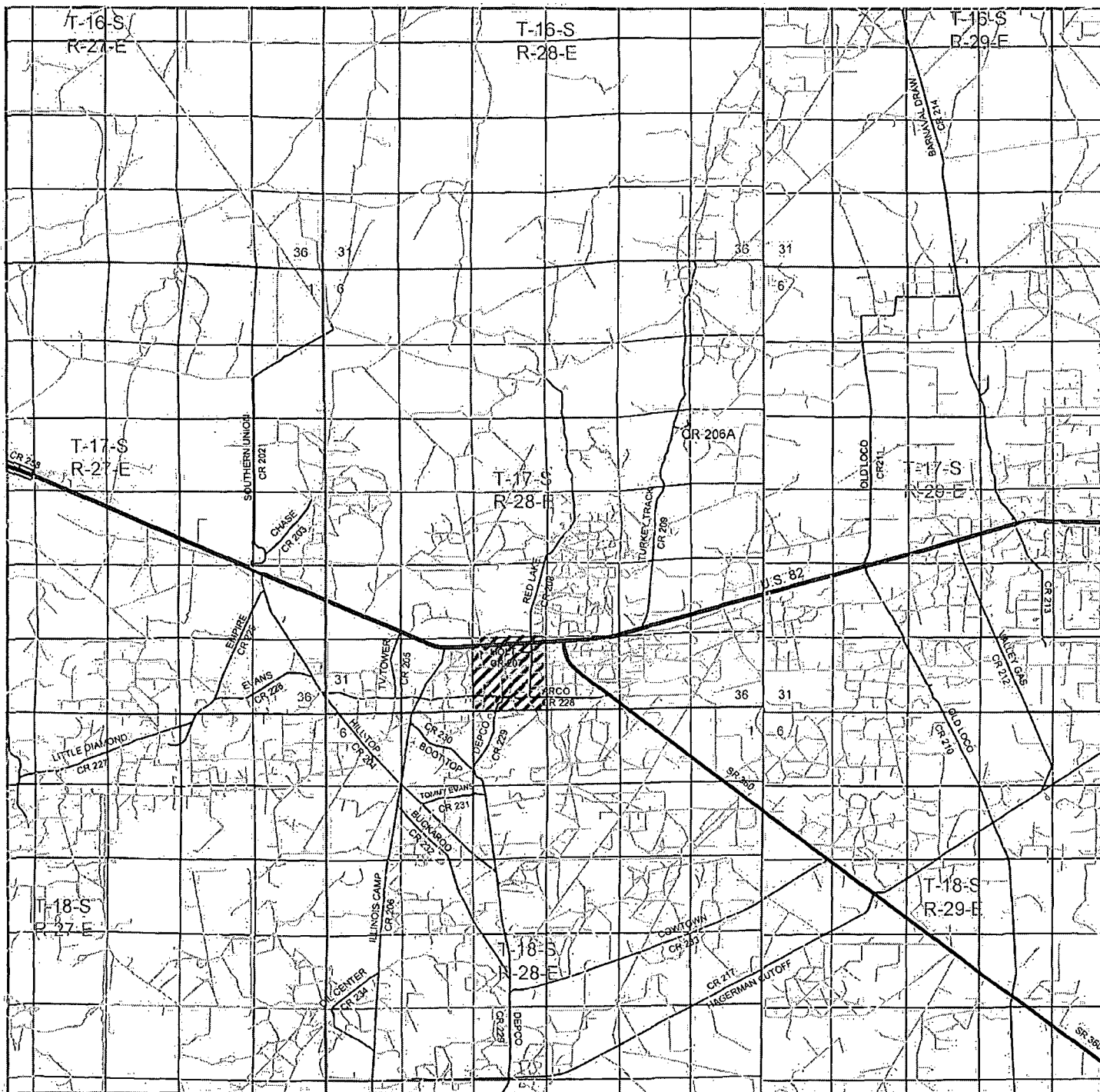
W.O. Number: KAN 29269

Survey Date: 08-30-2013

Scale: 1" = 2000'

Date: 09-05-2013

APACHE CORP



WASHINGTON 33 STATE #68

Located 170' FNL and 2310' FWL

Section 33, Township 17 South, Range 28 East,
N.M.P.M., EDDY County, New Mexico.

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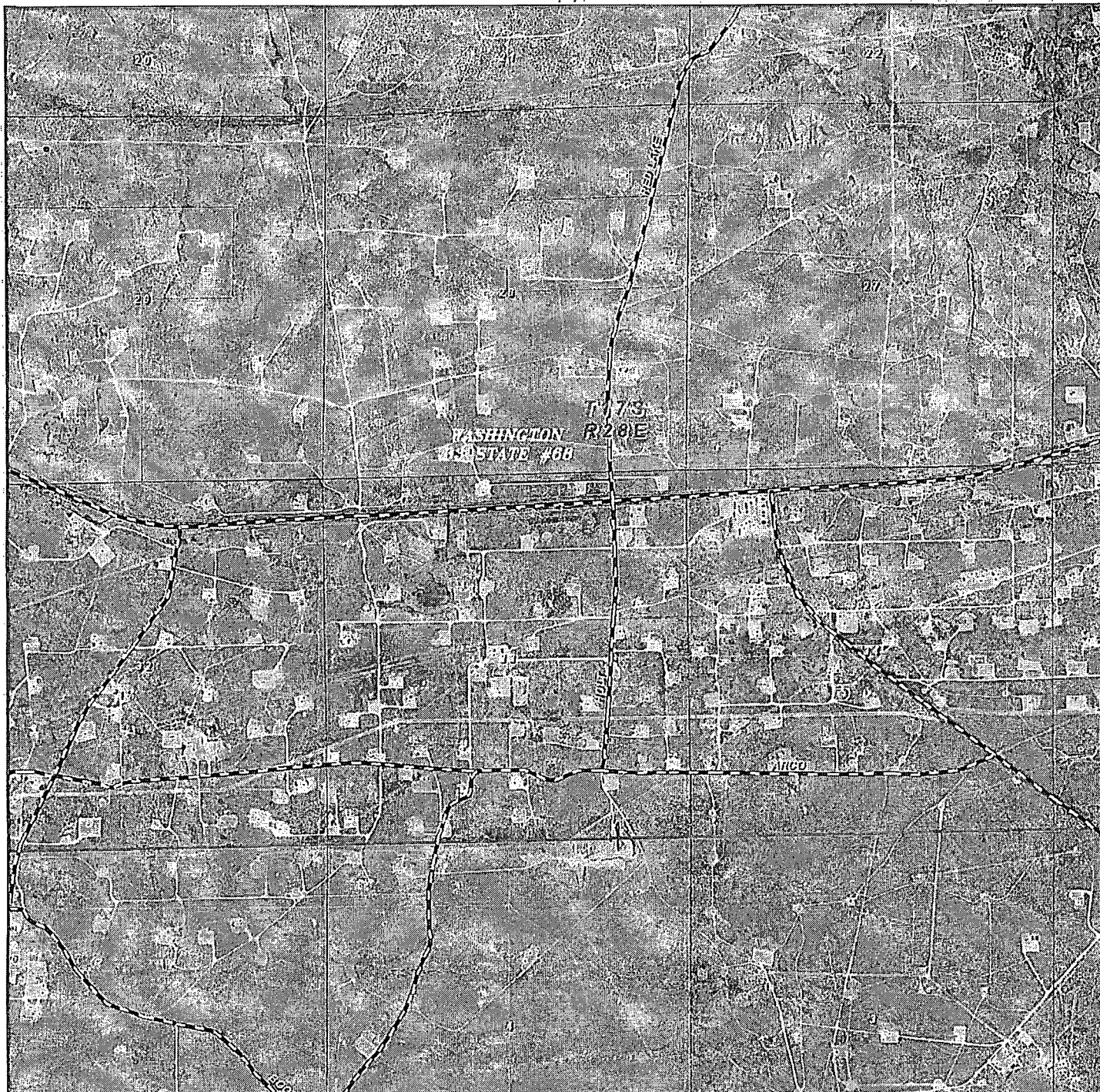
W.O. Number: KAN. 29269

Survey Date: 08-30-2013

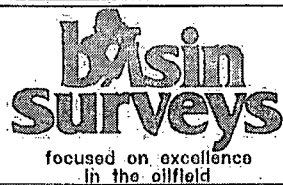
Scale: 1" = 2 Miles

Date: 09-05-2013

APACHE CORP



WASHINGTON 33 STATE #68
 Located 170' FNL and 2310' FWL
 Section 33, Township 17 South, Range 28 East,
 N.M.P.M., EDDY County, New Mexico.



P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (575) 393-7316 - Office
 (575) 392-2206 - Fax
 basinsurveys.com

W.O. Number: KAN 29269

Scale: 1" = 2000'

YELLOW TINT - USA LAND
 BLUE TINT - STATE LAND
 NATURAL COLOR - FEE LAND

APACHE CORP



Apache Corporation

Eddy County, NM (NAD27 NME)

Washington 33 State

#68

WB1/Job #1311577

Survey: Phoenix MWD Survey

Apache Corporation

24 November, 2013





Apache Corporation



Company:	Apache Corporation	Local Co-ordinate Reference:	Well #68
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	KB @ 3693.00usft (Capstar 114)
Site:	Washington 33 State	MD Reference:	KB @ 3693.00usft (Capstar 114)
Well:	#68	North Reference:	Grid
Wellbore:	WB1/Job #1311577	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Capstar 114)	Database:	Compass 5000 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:	Washington 33 State		
Site Position:		Northing:	653,591.90 usft
From:	Map	Easting:	549,165.70 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 47' 48.16208 N
		Longitude:	104° 10' 23.99797 W
		Grid Convergence:	0.09 °

Well	#68					
Well Position	+N-S	0.00 usft	Northing:	653,929.60 usft	Latitude:	32° 47' 51.54004 N
	+E-W	0.00 usft	Easting:	546,679.10 usft	Longitude:	104° 10' 53.12402 W
Position Uncertainty	0.00 usft		Wellhead Elevation:	usft	Ground Level:	3,682.00 usft

Wellbore		WB1/Job #1311577			
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2013	11/05/13	7.74	60.54	48,632

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	185.50



Apache Corporation



Company:	Apache Corporation	Local Co-ordinate Reference:	Well #68
Project:	Eddy County NM (NAD27 NME)	TVD Reference:	KB @ 3693.00usft (Capstar 114)
Site:	Washington 33 State	MD Reference:	KB @ 3693.00usft (Capstar 114)
Well:	#68	North Reference:	Grid
Wellbore:	WB1/Job #1311577	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Capstar 114)	Database:	Compass 5000 GCR DB

Survey Program		Date	11/24/13		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.00	500.00	Gyrodatta Survey (WB1/Job #1311577)	CB-GYRO-MS	Camera based gyro multishot	
615.00	4,517.00	Phoenix MWD Survey (WB1/Job #131157)	MWD	MWD - Standard	

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVDSS (usft)	TVD (usft)	N/S (usft)	EW (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
500.00	1.04	92.91	-3,193.08	499.92	-0.76	8.38	-0.04	0.00	653,928.84	546,687.48
615.00	1.00	65.60	-3,078.10	614.90	-0.40	10.34	-0.59	0.42	653,929.20	546,689.44
First Phoenix MWD Survey										
701.00	1.00	58.50	-2,992.11	700.89	0.30	11.66	-1.42	0.14	653,929.90	546,690.76
786.00	1.80	103.90	-2,907.14	785.86	0.37	13.59	-1.67	1.54	653,929.97	546,692.69
872.00	1.30	105.90	-2,821.17	871.83	-0.22	15.84	-1.29	0.58	653,929.38	546,694.94
957.00	2.60	102.30	-2,736.22	956.78	-0.90	18.65	-0.89	1.54	653,928.70	546,697.75
1,043.00	3.60	116.70	-2,650.35	1,042.65	-2.53	22.97	0.31	1.47	653,927.07	546,702.07
1,129.00	4.90	130.00	-2,564.58	1,128.42	-6.10	28.19	3.37	1.89	653,923.50	546,707.29
1,214.00	5.30	143.50	-2,479.92	1,213.08	-11.59	33.31	8.35	1.48	653,918.01	546,712.41
1,300.00	5.20	165.80	-2,394.27	1,298.73	-18.56	36.63	14.97	2.36	653,911.04	546,715.73
1,385.00	5.30	186.30	-2,309.62	1,383.38	-26.20	37.14	22.52	2.20	653,903.40	546,716.24
1,471.00	5.50	191.10	-2,224.00	1,469.00	-34.19	35.91	30.59	0.57	653,895.41	546,715.01
1,557.00	6.50	189.60	-2,138.47	1,554.53	-43.04	34.31	39.55	1.18	653,886.56	546,713.41
1,642.00	5.70	189.40	-2,053.95	1,639.05	-51.94	32.82	48.56	0.94	653,877.66	546,711.92
1,728.00	6.50	192.10	-1,968.44	1,724.56	-60.92	31.10	57.66	0.99	653,868.68	546,710.20
1,814.00	6.30	192.60	-1,882.98	1,810.02	-70.28	29.05	67.17	0.24	653,859.32	546,708.15
1,899.00	7.30	202.20	-1,798.57	1,894.43	-79.83	25.99	76.98	1.78	653,849.77	546,705.09
1,985.00	6.90	200.20	-1,713.23	1,979.77	-89.74	22.14	87.21	0.55	653,839.86	546,701.24
2,070.00	6.60	198.60	-1,628.82	2,064.18	-99.16	18.82	96.90	0.42	653,830.44	546,697.92
2,156.00	6.50	199.60	-1,543.38	2,149.62	-108.43	15.61	106.44	0.18	653,821.17	546,694.71



Apache Corporation



Company:	Apache Corporation	Local Co-ordinate Reference:	Well #68
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	KB @ 3693.00usft (Capstar 114)
Site:	Washington 33 State	MD Reference:	KB @ 3693.00usft (Capstar 114)
Well:	#68	North Reference:	Gnd
Wellbore:	WB1/Job #1311577	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Capstar 114)	Database:	Compass 5000 GCR DB

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVDSS (usft)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
2,242.00	6.40	199.80	-1,457.93	2,235.07	-117.53	12.36	115.80	0.12	653,812.07	546,691.46	
2,327.00	6.20	199.10	-1,373.44	2,319.56	-126.32	9.25	124.85	0.25	653,803.28	546,688.35	
2,413.00	6.20	199.20	-1,287.94	2,405.06	-135.10	6.20	133.88	0.01	653,794.50	546,685.30	
2,499.00	6.20	200.10	-1,202.45	2,490.55	-143.84	3.08	142.89	0.11	653,785.76	546,682.18	
2,584.00	6.20	200.00	-1,117.94	2,575.06	-152.47	-0.07	151.77	0.01	653,777.13	546,679.03	
2,670.00	5.20	208.50	-1,032.37	2,660.63	-160.26	-3.52	159.86	1.52	653,769.34	546,675.58	
2,755.00	3.40	206.80	-947.61	2,745.39	-165.89	-6.49	165.75	2.12	653,763.71	546,672.61	
2,840.00	3.30	210.70	-862.75	2,830.25	-170.25	-8.88	170.31	0.29	653,759.35	546,670.22	
2,926.00	3.00	206.90	-776.88	2,916.12	-174.38	-11.16	174.65	0.42	653,755.22	546,667.94	
3,012.00	3.10	206.40	-691.01	3,001.99	-178.47	-13.21	178.91	0.12	653,751.13	546,665.89	
3,097.00	1.60	219.90	-606.08	3,086.92	-181.44	-14.99	182.04	1.87	653,748.16	546,664.11	
3,183.00	1.10	223.70	-520.10	3,172.90	-182.96	-16.33	183.68	0.59	653,746.64	546,662.77	
3,268.00	1.20	230.90	-435.12	3,257.88	-184.11	-17.59	184.95	0.21	653,745.49	546,661.51	
3,354.00	0.20	40.60	-349.13	3,343.87	-184.56	-18.19	185.46	1.62	653,745.04	546,660.91	
3,439.00	0.50	32.00	-264.13	3,428.87	-184.14	-17.90	185.00	0.36	653,745.46	546,661.20	
3,525.00	0.40	43.80	-178.13	3,514.87	-183.60	-17.49	184.43	0.16	653,746.00	546,661.61	
3,610.00	0.30	19.80	-93.13	3,599.87	-183.18	-17.21	183.98	0.21	653,746.42	546,661.89	
3,696.00	0.40	45.20	-7.13	3,685.87	-182.75	-16.92	183.53	0.21	653,746.85	546,662.18	
3,782.00	0.50	65.60	78.86	3,771.86	-182.39	-16.37	183.12	0.22	653,747.21	546,662.73	
3,867.00	0.60	73.00	163.86	3,856.86	-182.10	-15.60	182.76	0.14	653,747.50	546,663.50	
3,953.00	0.60	62.20	249.85	3,942.85	-181.76	-14.77	182.34	0.13	653,747.84	546,664.33	
4,039.00	0.60	51.00	335.85	4,028.85	-181.27	-14.02	181.78	0.14	653,748.33	546,665.08	
4,127.00	0.60	37.90	423.85	4,116.85	-180.62	-13.38	181.07	0.16	653,748.98	546,665.72	
4,213.00	0.60	46.70	509.84	4,202.84	-179.95	-12.78	180.35	0.11	653,749.65	546,666.32	
4,298.00	0.70	42.40	594.84	4,287.84	-179.26	-12.11	179.60	0.13	653,750.34	546,666.99	
4,384.00	0.70	41.30	680.83	4,373.83	-178.48	-11.40	178.75	0.02	653,751.12	546,667.70	



Apache Corporation



Company:	Apache Corporation	Local Co-ordinate Reference:	Well #68
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	KB @ 3693.00usft (Capstar 114)
Site:	Washington 33 State	MD Reference:	KB @ 3693.00usft (Capstar 114)
Well:	#68	North Reference:	Grid
Wellbore:	WB1/Job #1311577	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Capstar 114)	Database:	Compass 5000 GCR DB

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVDSS (usft)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (*/100usft)	Northing (usft)	Easting (usft)
4,468.00	0.80	44.60	764.82	4,457.82	-177.68	-10.65	177.88	0.13	653,751.92	546,668.45
Last Phoenix MWD Survey										
4,517.00	0.80	41.30	813.82	4,506.82	-177.18	-10.19	177.34	0.09	653,752.42	546,668.91
Projection to TD										

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
615.00	614.90	-0.40	10.34	First Phoenix MWD Survey
4,468.00	4,457.82	-177.68	-10.65	Last Phoenix MWD Survey
4,517.00	4,506.82	-177.18	-10.19	Projection to TD

Checked By: _____ Approved By: _____ Date: _____