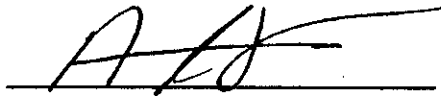


Apache Corporation
303 Veterans Airpark Lane, #3000
Midland, TX 79705
Cedar Lake
NFE Federal #037H 737H
Eddy County, New Mexico

API#: 30-015-40901

A.7 17-S 3IE 702 FNL 1000 FEL

257	2.57	1.00	1.75	4.50	4.50
449	1.92	3.20	5.60	10.75	15.25
613	1.64	2.40	4.20	6.89	22.14
824	2.11	1.70	2.98	6.28	28.41
997	1.73	0.90	1.58	2.72	31.14
1166	1.69	0.80	1.40	2.37	33.51
1295	1.29	1.00	1.75	2.26	35.76
1584	2.99	0.90	1.58	4.71	40.47
1804	2.10	0.40	0.70	1.47	41.94
2019	2.15	0.40	0.70	1.51	43.45
2190	1.71	0.40	0.70	1.20	44.64
2402	2.12	0.90	1.58	3.34	47.98
2617	2.15	0.60	1.05	2.26	50.24
2829	2.12	0.60	1.05	2.23	52.47
2999	1.70	0.50	0.88	1.49	53.95
3212	2.13	0.60	1.05	2.24	56.19
3455	2.43	0.30	0.53	1.28	57.47
3519	0.64	0.50	0.88	0.56	58.03
4042	5.23	1.30	2.28	11.90	69.92
4340	2.98	1.30	2.28	6.78	76.70


Archie Brown - General Manager

The attached instrument was acknowledged before me on the 13th day of May, 2015 by
Archie Brown - General Manager, CapStar Drilling, Inc.


Notary Public





Apache Corporation

Eddy County, NM (NAD27 NME)

NFE Federal

#37H

API# 30-015-40901

A7 17S-31E 702 FNL 1000 FEL

WB1 / Job #1513430

Design: Surveys (Capstar 119)

Standard Survey Report

08 May, 2015



Company:	Apache Corporation	Local Co-ordinate Reference:	Well #37H
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	KB @ 3756.00usft (Capstar 119)
Site:	NFE Federal	MD Reference:	KB @ 3756.00usft (Capstar 119)
Well:	#37H	North Reference:	Grid
Wellbore:	WB1 / Job #1513430	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Capstar 119)	Database:	Compass 5000 GCR

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	Latitude:	32° 51' 0.49036 N
From:	Map	Easting:	633,303.50 usft	Longitude:	103° 53' 57.34966 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.24 "

Well:	#37H					
Well Position	+N/-S	0.00 usft	Northing:	674,746.80 usft	Latitude:	32° 51' 15.20581 N
	+E/-W	0.00 usft	Easting:	632,075.30 usft	Longitude:	103° 54' 11.67614 W
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,745.00 usft	

Wellbore		WB1 / Job #1513430			
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	HDGM	4/22/2015	7.68	60.80	48,574

Design:	Surveys (Capstar 119)				
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	89.60	

Survey Program		Date	5/8/2015		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
69.55	4,244.61	Gyro Survey (WB1 / Job #1513430)	CB-GYRO-MS	Camera based gyro multishot	
4,340.00	10,670.00	Phoenix MWD Surveys (WB1 / Job #1513)	PHX+MWD+HDGM	PHX+MWD+HDGM	

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
69.55	0.13	8.51	69.55	0.08	0.01	0.01	0.19	0.19	0.00
154.75	0.07	274.00	154.75	0.18	-0.03	-0.02	0.18	-0.07	-110.93
239.96	0.57	300.42	239.96	0.40	-0.44	-0.44	0.60	0.59	31.01
325.16	2.45	215.38	325.13	-0.87	-1.86	-1.87	2.80	2.21	-99.81
410.37	2.86	218.99	410.25	-4.01	-4.26	-4.28	0.52	0.48	4.24
495.57	3.11	223.78	495.33	-7.33	-7.19	-7.24	0.41	0.29	5.62
580.78	2.73	223.53	580.43	-10.47	-10.19	-10.26	0.45	-0.45	-0.29
665.98	2.43	225.32	665.55	-13.21	-12.87	-12.96	0.36	-0.35	2.10
751.19	2.23	220.87	750.69	-15.74	-15.24	-15.35	0.32	-0.23	-5.22

Company:	Apache Corporation	Local Co-ordinate Reference:	Well #37H
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	KB @ 3756.00usft (Capstar 119)
Site:	NFE Federal	MD Reference:	KB @ 3756.00usft (Capstar 119)
Well:	#37H	North Reference:	Grid
Wellbore:	WB1 / Job #1513430	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Capstar 119)	Database:	Compass 5000 GCR

Survey									
Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
836.39	1.76	223.83	835.83	-17.94	-17.23	-17.36	0.56	-0.55	3.47
921.60	1.35	221.45	921.01	-19.63	-18.80	-18.94	0.49	-0.48	-2.79
1,006.81	1.22	218.67	1,006.20	-21.09	-20.03	-20.18	0.17	-0.15	-3.26
1,082.01	1.18	213.68	1,091.38	-22.53	-21.09	-21.24	0.13	-0.05	-5.86
1,177.22	0.75	207.39	1,176.58	-23.76	-21.83	-21.99	0.52	-0.50	-7.38
1,262.42	0.69	196.96	1,261.77	-24.74	-22.23	-22.41	0.17	-0.07	-12.24
1,347.63	0.94	154.04	1,346.98	-25.86	-22.08	-22.26	0.75	0.29	-50.37
1,432.83	1.19	144.25	1,432.16	-27.21	-21.26	-21.45	0.36	0.29	-11.49
1,518.04	1.21	147.37	1,517.35	-28.68	-20.25	-20.45	0.08	0.02	3.66
1,603.24	1.13	154.43	1,602.53	-30.20	-19.41	-19.62	0.19	-0.09	8.29
1,688.45	0.97	162.38	1,687.73	-31.64	-18.83	-19.05	0.25	-0.19	9.33
1,773.65	0.65	171.92	1,772.92	-32.81	-18.54	-18.77	0.41	-0.38	11.20
1,858.86	0.53	184.19	1,858.13	-33.68	-18.50	-18.73	0.20	-0.14	14.40
1,944.06	0.53	186.04	1,943.32	-34.47	-18.57	-18.81	0.02	0.00	2.17
2,029.27	0.56	214.54	2,028.53	-35.20	-18.85	-19.09	0.32	0.04	33.45
2,114.48	0.44	243.98	2,113.74	-35.69	-19.38	-19.63	0.33	-0.14	34.55
2,199.68	0.54	272.43	2,198.93	-35.81	-20.07	-20.32	0.30	0.12	33.39
2,284.89	0.58	273.05	2,284.14	-35.77	-20.90	-21.15	0.05	0.05	0.73
2,370.09	0.71	272.84	2,369.33	-35.72	-21.86	-22.11	0.15	0.15	-0.25
2,455.30	0.73	269.77	2,454.54	-35.70	-22.93	-23.18	0.05	0.02	-3.60
2,540.50	0.83	265.34	2,539.73	-35.75	-24.09	-24.34	0.14	0.12	-5.20
2,625.71	0.74	266.61	2,624.93	-35.84	-25.25	-25.50	0.11	-0.11	1.49
2,710.91	0.82	254.42	2,710.12	-36.03	-26.39	-26.64	0.22	0.09	-14.31
2,796.12	0.76	253.57	2,795.33	-36.36	-27.52	-27.77	0.07	-0.07	-1.00
2,881.32	0.73	257.01	2,880.52	-36.64	-28.59	-28.85	0.06	-0.04	4.04
2,966.53	0.52	255.66	2,965.72	-36.86	-29.49	-29.75	0.25	-0.25	-1.58
3,051.73	0.48	256.74	3,050.92	-37.03	-30.22	-30.47	0.05	-0.05	1.27
3,136.94	0.46	254.94	3,136.13	-37.20	-30.89	-31.15	0.03	-0.02	-2.11
3,222.15	0.40	254.92	3,221.33	-37.37	-31.51	-31.77	0.07	-0.07	-0.02
3,307.35	0.48	273.72	3,306.53	-37.42	-32.16	-32.42	0.19	0.09	22.07
3,392.56	0.42	293.63	3,391.74	-37.28	-32.80	-33.06	0.20	-0.07	23.37
3,477.76	0.62	287.46	3,476.94	-37.01	-33.52	-33.78	0.24	0.23	-7.24
3,562.97	0.72	280.91	3,562.14	-36.77	-34.49	-34.74	0.15	0.12	-7.69
3,648.17	0.67	281.07	3,647.33	-36.58	-35.50	-35.76	0.06	-0.06	0.19
3,733.38	0.63	275.23	3,732.54	-36.42	-36.61	-36.86	0.21	0.19	-6.85
3,818.58	1.01	271.85	3,817.73	-36.34	-37.97	-38.22	0.22	0.21	-3.97
3,903.79	1.13	268.88	3,902.92	-36.34	-39.56	-39.82	0.16	0.14	-3.49
3,988.99	1.23	273.47	3,988.10	-36.30	-41.32	-41.57	0.16	0.12	5.39
4,074.20	1.23	272.13	4,073.29	-36.21	-43.14	-43.39	0.03	0.00	-1.57
4,159.40	1.22	271.04	4,158.47	-36.16	-44.96	-45.21	0.03	-0.01	-1.28
4,244.61	1.26	264.41	4,243.66	-36.23	-46.80	-47.05	0.17	0.05	-7.78
Tie In to Phoenix Gyros									
4,340.00	1.30	278.70	4,338.03	-36.17	-48.92	-49.17	0.34	0.04	14.98

Company:	Apache Corporation	Local Co-ordinate Reference:	Well #37H
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	KB @ 3756.00usft (Capstar 119)
Site:	NFE Federal	MD Reference:	KB @ 3756.00usft (Capstar 119)
Well:	#37H	North Reference:	Grid
Wellbore:	WB1 / Job #1513430	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Capstar 119)	Database:	Compass 5000 GCR

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)
First Phoenix MWD Survey									
4,382.00	0.50	278.70	4,381.02	-36.07	-49.57	-49.82	1.90	-1.90	0.00
4,425.00	4.30	90.50	4,423.99	-36.06	-48.14	-48.39	11.15	8.84	399.53
4,467.00	9.90	89.70	4,465.65	-36.05	-42.95	-43.20	13.34	13.33	-1.90
4,510.00	15.30	85.20	4,507.60	-35.56	-33.59	-33.84	12.75	12.56	-10.47
4,553.00	20.40	84.80	4,548.52	-34.40	-20.47	-20.71	11.86	11.86	-0.93
4,595.00	24.50	86.60	4,587.33	-33.22	-4.48	-4.71	9.90	9.76	4.29
4,638.00	29.70	88.10	4,625.59	-32.34	15.08	14.86	12.20	12.09	3.49
4,680.00	34.90	89.60	4,661.08	-31.91	37.51	37.29	12.53	12.38	3.57
4,723.00	40.40	90.00	4,695.11	-31.82	63.77	63.54	12.80	12.79	0.93
4,765.00	45.80	87.90	4,725.77	-31.27	92.44	92.22	13.30	12.86	-5.00
4,808.00	48.60	86.80	4,754.98	-29.81	123.96	123.75	6.78	6.51	-2.56
4,851.00	51.10	84.90	4,782.71	-27.42	156.73	156.54	6.72	5.81	-4.42
4,893.00	54.60	85.70	4,808.07	-24.68	190.09	189.91	8.47	8.33	1.90
4,936.00	60.30	85.20	4,831.20	-21.80	226.21	226.05	13.29	13.26	-1.16
4,978.00	66.50	85.40	4,849.99	-18.73	263.62	263.48	14.77	14.76	0.48
5,021.00	73.10	85.20	4,864.83	-15.42	303.81	303.70	15.36	15.35	-0.47
5,063.00	79.70	85.20	4,874.70	-12.01	344.47	344.38	15.71	15.71	0.00
5,106.00	84.70	85.10	4,880.54	-8.41	386.91	386.84	11.63	11.63	-0.23
5,134.00	84.60	85.60	4,883.15	-6.15	414.69	414.64	1.81	-0.36	1.79
5,176.00	86.60	86.30	4,886.37	-3.19	456.46	456.43	5.04	4.76	1.87
5,304.00	89.60	87.90	4,890.61	3.28	584.21	584.22	2.66	2.34	1.25
5,431.00	91.00	87.70	4,889.95	8.16	711.11	711.15	1.11	1.10	-0.16
5,559.00	89.30	89.10	4,889.61	11.73	839.05	839.11	1.72	-1.33	1.09
5,686.00	89.60	90.70	4,890.83	11.95	966.04	966.10	1.28	0.24	1.26
5,814.00	88.40	91.00	4,893.07	10.05	1,094.01	1,094.05	0.97	-0.94	0.23
5,941.00	89.70	90.80	4,895.17	8.06	1,220.97	1,221.00	1.04	1.02	-0.16
6,069.00	88.40	90.00	4,897.29	7.16	1,348.95	1,348.98	1.19	-1.02	-0.63
6,197.00	89.40	89.90	4,899.75	7.28	1,476.92	1,476.94	0.79	0.78	-0.08
6,324.00	88.80	89.70	4,903.96	7.72	1,603.84	1,603.85	2.05	-2.05	-0.16
6,451.00	87.60	88.80	4,910.17	9.38	1,730.67	1,730.70	0.95	0.63	-0.71
6,579.00	88.20	89.00	4,914.86	11.84	1,858.56	1,858.60	0.49	0.47	0.16
6,707.00	88.80	88.90	4,918.21	14.18	1,986.50	1,986.55	0.48	0.47	-0.08
6,835.00	89.10	88.90	4,920.55	16.64	2,114.45	2,114.52	0.23	0.23	0.00
6,962.00	89.40	88.60	4,922.21	19.41	2,241.41	2,241.49	0.33	0.24	-0.24
7,090.00	89.70	88.00	4,923.22	23.20	2,369.35	2,369.45	0.52	0.23	-0.47
7,218.00	88.00	90.00	4,925.79	25.44	2,497.28	2,497.41	2.05	-1.33	1.56
7,345.00	88.30	89.20	4,929.89	28.32	2,624.22	2,624.34	0.67	0.24	-0.63
7,473.00	88.80	88.60	4,933.13	28.78	2,752.16	2,752.29	0.61	0.39	-0.47
7,600.00	88.30	90.20	4,936.34	30.11	2,879.11	2,879.25	1.32	-0.39	1.26
7,728.00	89.10	89.70	4,939.25	30.22	3,007.07	3,007.21	0.74	0.63	-0.39
7,855.00	90.10	90.00	4,940.13	30.55	3,134.07	3,134.20	0.82	0.79	0.24
7,983.00	89.40	90.40	4,940.69	30.11	3,262.06	3,262.19	0.63	-0.55	0.31
8,110.00	89.90	89.70	4,941.47	30.00	3,389.06	3,389.19	0.68	0.39	-0.55

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Site:	NFE Federal	MD Reference:	KB @ 3756.00usft (Capstar 119)
Well:	#37H	North Reference:	Grid
Wellbore:	WB1 / Job #1513430	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Capstar 119)	Database:	Compass 5000 GCR

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)	
8,238.00	89.30	92.10	4,942.36	27.99	3,517.03	3,517.14	1.93	-0.47	1.88	
8,366.00	90.40	92.30	4,942.70	23.07	3,644.93	3,645.01	0.87	0.86	0.16	
8,493.00	89.70	92.40	4,942.58	17.87	3,771.83	3,771.86	0.56	-0.55	0.08	
8,621.00	88.20	91.50	4,944.93	13.51	3,899.73	3,899.72	1.37	-1.17	-0.70	
8,748.00	87.20	89.20	4,950.03	12.74	4,026.61	4,026.60	1.97	-0.79	-1.81	
8,875.00	87.60	88.60	4,955.79	15.17	4,153.46	4,153.46	0.57	0.31	-0.47	
9,003.00	88.30	89.10	4,960.37	17.74	4,281.35	4,281.37	0.67	0.55	0.39	
9,130.00	89.20	88.70	4,963.14	20.18	4,408.29	4,408.33	0.78	0.71	-0.31	
9,258.00	90.00	88.20	4,964.03	23.64	4,536.24	4,536.29	0.74	0.63	-0.39	
9,386.00	90.40	88.10	4,963.58	27.77	4,664.17	4,664.25	0.32	0.31	-0.08	
9,513.00	88.10	87.90	4,965.25	32.20	4,791.08	4,791.18	1.82	-1.81	-0.16	
9,641.00	88.40	88.80	4,969.16	35.89	4,918.96	4,919.09	0.74	0.23	0.70	
9,769.00	89.60	88.40	4,971.39	39.01	5,046.90	5,047.05	0.99	0.94	-0.31	
9,896.00	88.80	89.80	4,973.05	41.01	5,173.87	5,174.03	1.23	-0.55	1.10	
10,024.00	89.00	90.40	4,975.40	40.78	5,301.85	5,302.00	0.48	0.08	0.47	
10,152.00	88.80	90.80	4,977.86	39.44	5,429.82	5,429.96	0.35	-0.16	0.31	
10,280.00	89.40	90.40	4,979.87	38.10	5,557.79	5,557.92	0.56	0.47	-0.31	
10,407.00	90.20	90.00	4,980.31	37.66	5,684.79	5,684.92	0.70	0.63	-0.31	
10,535.00	90.50	88.80	4,979.53	39.00	5,812.78	5,812.91	0.97	0.23	-0.94	
10,600.00	90.50	88.50	4,978.96	40.53	5,877.76	5,877.90	0.46	0.00	-0.46	
Last Phoenix MWD Survey										
10,670.00	90.50	88.50	4,978.35	42.36	5,947.73	5,947.88	0.00	0.00	0.00	
Projection to TD										

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
4,244.61	4,243.68	-36.23	-46.80	Tie In to Phoenix Gyros
4,340.00	4,339.03	-36.17	-48.92	First Phoenix MWD Survey
10,600.00	4,978.96	40.53	5,877.76	Last Phoenix MWD Survey
10,670.00	4,978.35	42.36	5,947.73	Projection to TD

Checked By: _____ Approved By: _____ Date: _____

DISTRICT I
1123 N. French Dr., Hobbs, NM 88240
Phone: (505) 393-6161 Fax: (505) 393-0720

DISTRICT II
811 S. First St., Artesia, NM 88210
Phone: (505) 746-1267 Fax: (505) 746-9720

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-40901	Pool Code 96831	Pool Name CEDAR LAKE; Glorieta - YESO
Property Code 314.794	Property Name NFE FEDERAL	Well Number 37H
OGRID No. 873	Operator Name APACHE CORPORATION	Elevation 3745'

Surface Location

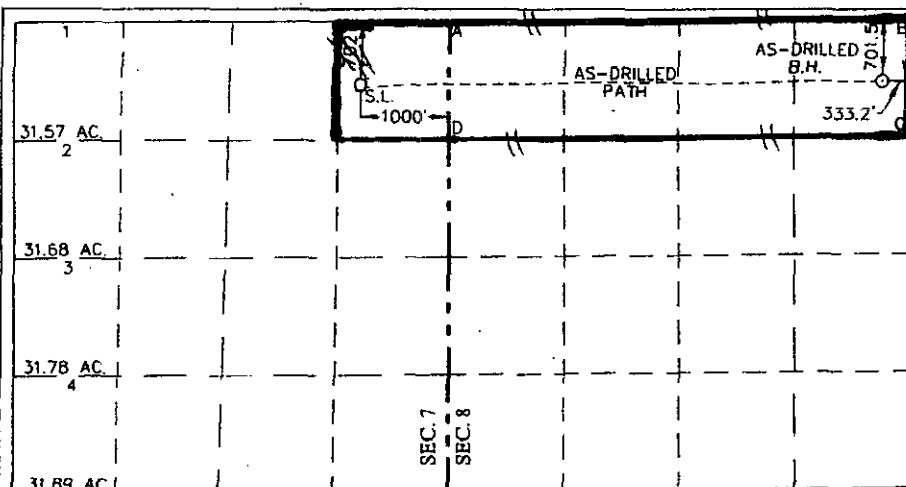
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	7	17-S	31-E		702	NORTH	1000	EAST	EDDY

As-Drilled 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
A	8	17-S	31-E		701.5	NORTH	333.2	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
200			

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: **Isabel Hudson** Date: **1/20/2015**
Printed Name: **ISABEL HUDSON**
E-mail Address: **isabel.hudson@apachecorp.com**

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 of Survey: **APRIL 26, 2012**
Signature & Seal of Professional Surveyor:

RONALD J. EIDSON
3239
3239

Certificate Number: **Gary G. Eidson 12641**
Ronald J. Eidson 3239

LSL REL W.O.: 12.11.0465 JWSC W.O.: 15.13.0581

SURFACE LOCATION
NAD 27 NME
Y= 674746.8 N
X= 632075.3 E
LAT.=32.854224° N
LONG.=103.903244° W
LAT.=32°51'15" N
LONG.=103°54'12" W

SCALE: 1"=2000'

CORNER COORDINATES TABLE

NAD 27 NME
A - Y= 675455.2 N, X= 633070.9 E
B - Y= 675492.7 N, X= 638350.7 E
C - Y= 674172.6 N, X= 638358.2 E
D - Y= 674135.1 N, X= 633078.6 E

CORNER COORDINATES TABLE

NAD 83 NME
A - Y= 675519.2 N, X= 674249.5 E
B - Y= 675556.7 N, X= 679529.3 E
C - Y= 674236.7 N, X= 679536.8 E
D - Y= 674199.1 N, X= 674257.3 E

NOTE: AS-DRILLED
PATH & B.H. PLOTTED FROM
PHOENIX TECHNOLOGY SERVICES
SURVEY REPORT, MAY 8, 2015

BOTTOM HOLE LOCATION

NAD 27 NME
Y= 674789.0 N
X= 638021.6 E
LAT.=32.854272° N
LONG.=103.883880° W
LAT.=32°51'15" N
LONG.=103°53'02" W

BOTTOM HOLE LOCATION

NAD 83 NME
Y= 674853.1 N
X= 679200.2 E
LAT.=32.854389° N
LONG.=103.884387° W
LAT.=32°51'16" N
LONG.=103°53'04" W

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., 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 & Natural Resources

Form C-104
Revised August 1, 2011

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit one copy to appropriate District Office

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address Apache Corporation 303 Veterans Airpark Lane Suite 1000 Midland TX 79705		² OGRID Number 873
		³ Reason for Filing Code/ Effective Date NW / 12-17-2015
⁴ API Number 30-015-40901	⁵ Pool Name Cedar Lake; Glorieta - Yeso	⁶ Pool Code 96831
⁷ Property Code 314794	⁸ Property Name NFE FEDERAL COM	⁹ Well Number 37H

II. ¹⁰ Surface Location

Ul or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West line	County
A	7	17-S	31-E		702	NORTH	1000	EAST	EDDY

¹¹ Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	8	17-S	31-E		701.5	NORTH	333.2	EAST	EDDY

¹² Lse Code F	¹³ Producing Method Code P	¹⁴ Gas Connection Date 12/17/2015	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date
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III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
221115	Frontier Field Services LLC 4200 East Skelly Drive Suite 700 Tulsa, OK 74135	G
252293	Holly Energy Pipeline 311 W Quay / PO Box 1360 Artesia, NM 88210	O

IV. Well Completion Data

²¹ Spud Date 04/25/2015	²² Ready Date 12/17/2015	²³ TD 10,670'	²⁴ PBDT 10,670	²⁵ Perforations 5337' - 10,639'	²⁶ DHC, MC
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
17.5"	13.375"	416'	470 sx Class C		
12.25"	9.625"	3500'	1450 sx Class C		
8.50"	7" / 5.5	4340' / 10,650'	500 sx Class C		
Tubing	2.875	4601			

V. Well Test Data

³¹ Date New Oil 12/17/2015	³² Gas Delivery Date 12/17/2015	³³ Test Date 01/11/2016	³⁴ Test Length 24 hrs	³⁵ Tbg. Pressure	³⁶ Csg. Pressure
³⁷ Choke Size	³⁸ Oil 865	³⁹ Water 2103	⁴⁰ Gas 611		⁴¹ Test Method P

⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Isabel Hudson*

Printed name:
Isabel Hudson

Title:
Reg Analyst

E-mail Address:
Isabel.Hudson@apachecorp.com

Date:
01/21/2016

Phone:
432-818-1142

Approved by:

Title:

Approval Date:

OIL CONSERVATION DIVISION

Submit within 45 days of well completion	State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505		Revised November 6, 2013			
			1. WELL API NO. 30-015-40901			
			2. Well Name: NFE FEDERAL COM #037H			
			3. Well Number: 037H			
HYDRAULIC FRACTURING FLUID DISCLOSURE ☒ Original ☐ Amendment		4. Surface Hole Location: Unit:A Lot:A Section:7 Township:17S Range:31E Feet from:702 N/S Line:N Feet from:1000 E/W Line:E				
		5. Bottom Hole Location: Unit:A Lot:A Section:8 Township:17S Range:31E Feet from:702 N/S Line:N Feet from:333 E/W Line:E				
		6. latitude: longitude: 32.8543243 -103.9039078				
		7. County: Eddy				
		8. Operator Name and Address: APACHE CORP 303 Veterans Airpark Lane Suite 3000 Midland 79705				
9. OGRID: 873		10. Phone Number: 432-818-1062				
11. Last Fracture Date: 9/23/2015 Frac Performed by: Elite		12. Production Type: O				
13. Pool Code(s): 96831		14. Gross Fractured Interval: 5,232 ft to 10,641 ft				
15. True Vertical Depth (TVD): 10,639 ft		16. Total Volume of Fluid Pumped: 3,562,902 gals				
17. Total Volume of Re-Use Water Pumped: N/A		18. Percent of Re-Use Water in Fluid Pumped: Not Disclosed				
19. HYDRAULIC FLUID COMPOSITION AND CONCENTRATION:						
Trade Name	Supplier	Purpose	Ingredients	(CAS #) Chemical Abstract Service #	Maximum Ingredient Concentration in Additive (% by mass)	Maximum Ingredient Concentration in HF Fluid (% by mass)
Water	Customer	Carrier/Base Fluid	Water	7732-18-5	100%	85.16682%
Sand (Proppant)	US Silica	Proppant	Silica Substrate	14808-60-7	100%	8.09062%
RCS (Proppant)	Momentive	Proppant	Silica Substrate	14808-60-7	100%	2.72403%
Hydrochloric Acid (15%)	CNR	Acidizing	Hydrochloric Acid	7647-01-0	38.8%	1.4695%
Claymax	Chemplex	Clay Stabilizer	Choline Chloride	67-48-1	62%	0%
4-N-1 Plus	Chemplex	Iron Control, Corr	Acetic Acid	64-19-7	80%	0%
		Inhib, Surfactant	Methanol	67-56-1	10%	0%
Plexcide 24L	Chemplex	Biocide	Tetrahydro-3,Dimethyl-2H	533-74-4	24%	0%
Plexset 730	Chemplex	Activator	Secondary Alcohol Ethoxylate	84133-50-6	50%	0%
Plexsurf 240 E	Chemplex	Surfactant	Methyl Alcohol	67-56-1	10%	0.00829%
			Alcohol Alkoxylate	Proprietary	50%	0.04145%
Plexslick 953	Chemplex	Friction Reducer	Alcohol Ethoxylate Surfactants	Proprietary	8%	0.00599%
			Hydrotreated Petroleum Distillate	64742-47-8	30%	0.02245%
			Polyacrylamide-co-Acrylic Acid	9003-06-9	31%	0.0232%
AMA 398	Chemplex	Biocide	Tetrahydro-3,Dimethyl-2H	533-74-4	98%	0%
Plexgel 907 LE	Chemplex	Polymer	Guar Gum	9000-30-0	50%	0%
			Mineral Oil	64742-47-8	55%	0%
			Bentonite Clay	14808-60-7	2%	0%
			Surfactant	68439-51-0	2%	0%
Plexbor 101	Chemplex	Crosslinker	Ethylene Glycol	107-21-1	9.99%	0%
			Potassium Metaborate	13709-94-9	30%	0%
			Potassium Hydroxide	1310-58-3	5%	0%
Plexgel Breaker 10L	Chemplex	Gel Breaker	Mannanase Enzymes	Proprietary	2%	0%
			Sodium Chloride	7647-14-5	15%	0%
Sodium Persulfate	Chemplex	Gel Breaker	Sodium Persulfate	7775-27-1	98%	0%

Buffer 11	Chemplex	PH Control	Potassium Hydroxide	1310-58-3	23%	0%
Greenhib 679	Chemplex	Scale Inhibitor	Glycerine	56-81-5	35%	0.01724%
			Proprietary	Proprietary	35%	0.01724%
			Water	7732-18-5	30%	0.01478%
Clayplex 650	Chemplex	Clay Stabilizer	Water	7732-18-5	60%	0.00071%
			Ethanaminium, 2-hydroxy-N,N,N-trimethyl-chloride	67-48-1	35%	0.00041%
Plexcide 15G	Chemplex, LC	Biocide	Glutaraldehyde	111-30-8	14%	0.00308%
			Didecyl dimethyl ammonium chloride	7173-51-5	3%	0.00066%
			Alkyl dimethyl benzyl ammonium chloride	68424-85-1	3%	0.00066%
			Ethanol	64-17-5	3%	0.00066%

20. I, as Operator, hereby certify that the information shown on this disclosure form is true and complete to the best of my knowledge and belief.

Signature: Signed Electronically Printed Name: Isabel Hudson Title: Regulatory
 Date: 1/21/2016
 E-mail Address: isabel.hudson@apachecorp.com

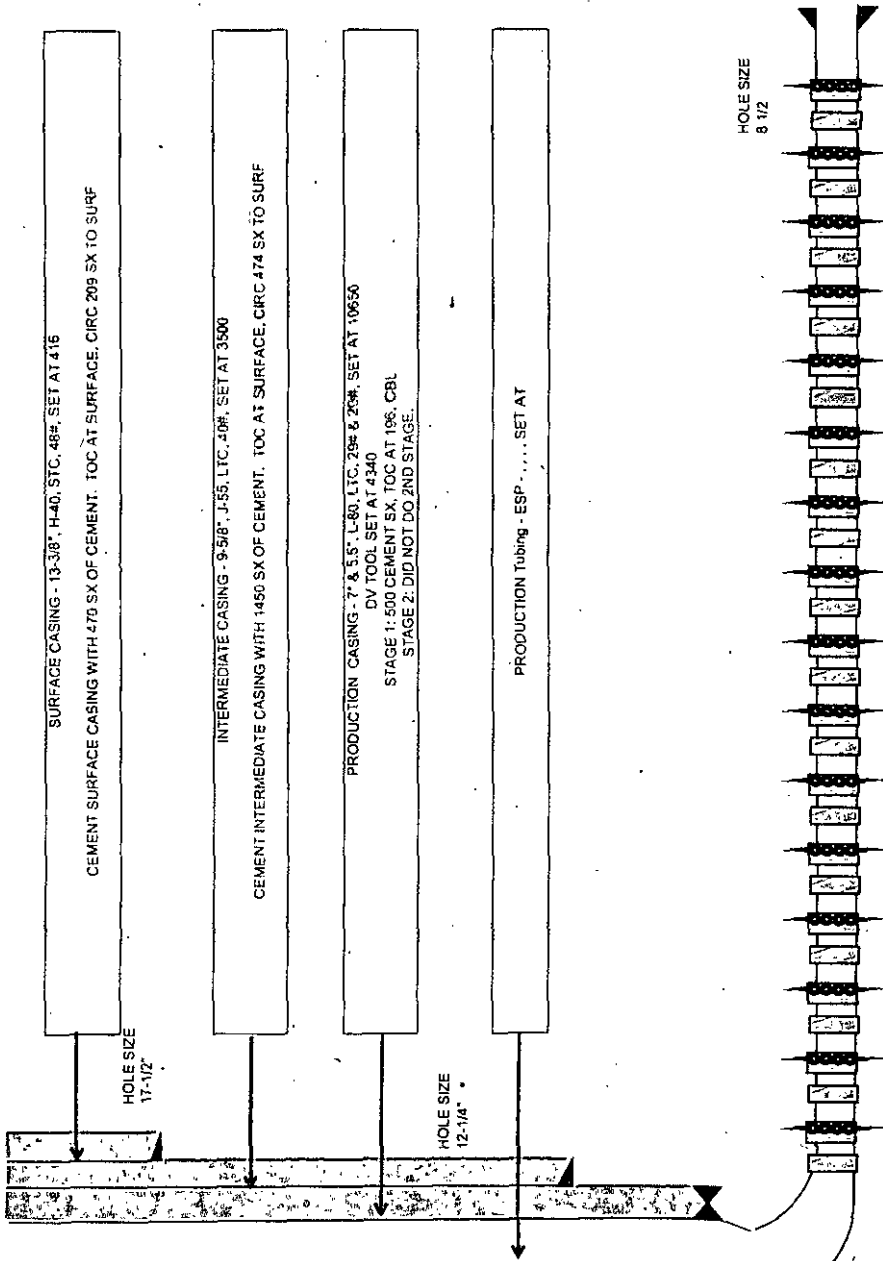
NMOC does not require the reporting of information beyond MSDS data as described in 29 CFR 1810.1200. NMOC does not require the reporting or disclosure of proprietary, trade secret or confidential business information.

WELL NAME: NFE FEDERAL COM 37H
 API: 30-015-40901
 SPUD DATE: 4/25/2015
 PRODUCING FORMATION: YESO PADDOCK
 FIELD: CEDAR LAKE (BP)
 COUNTY: EDDY
 STATE: NEW MEXICO
 WORKING INTEREST: 60.00%

SURFACE LOC: 702' FNL & 1000' FEL
 SECTION: 7
 TOWNSHIP: 17-S
 RANGE: 31-E
 SURVEY: JOHN WEST SURVEYING CO
 BOTTOM-HOLE LOC: 701' FNL & 333' FEL
 SECTION: 8
 TOWNSHIP: 17-S
 RANGE: 31-E
 SURVEY: JOHN WEST SURVEYING CO
 DRILL RIG: CAPSTAR 119
 RIG RELEASE: 5/10/2015

KB (ft): 3.756.00
 GL (ft): 3.745.00
 KB/GL DIFF (ft): 11.00
 TMD (ft): 10.670.00
 TD OF PILOT HOLE (ft): N/A
 FC DEPTH (ft): 10.641.00
 PBMD (ft): 10.670.00
 RDV DEPTH (ft): N/A
 ORIO VALVE (ft): N/A
 DEEPEST TVD (ft): 4.980.00

TAPERED CASING STRING:
 7" 29# L-80 TO X-OVER @ 4.342'
 TAPERING TO 5.5" 20# L-80 SET @ 10.650'



KOP (ft):
 LATERAL LENGTH (ft):
 TD OF PILOT HOLE (ft):

PACKERS & SLEEVES
 TOP PERF (MD):
 BOTTOM PERF (MD):

TMD (ft): 10.670
 FC DEPTH (ft): 10.641
 PBMD (ft): 10.670
 RDV DEPTH (ft): N/A
 ORIO VALVE (ft): N/A

COMPLETION:
 STIMULATION:
 STATUS:
 COMMENTS:

PACKERS & SLEEVES - 20 STAGES			
TOTAL ACID (gal)	3.914	TOTAL LTR (bbl)	88.439
TOTAL PROPPANT (lbs)	3,786,490	MAX WH RATE (bpm)	81.00
MAX WH PRESSURE (psi)	6,550		
PRODUCTION METHOD	Pumping	LIFT TYPE	ESP
		SETTING DEPTH	0
CROSSOVER SUB @ 4.342'			

LAST UPDATED BY: HILLARI GOULD
 LAST UPDATED: 10/23/2015