

Phoenix Technology Services SURVEY DATA CERTIFICATION



PHOENIX JOB NUMBER

1512720

ENERGY COMPANY Chevron

WELL NAME Salado Draw 19-26-33 Fed 3H

COUNTY & STATE

Lea County, NM

API WELL NUMBER

30-025-42280

PROPOSED DIRECTION

183.17°

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

FIRST	FIRST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
20-Jan-15	126.00 ft	0.58°	71.55°

SURVEY INSTRUMENT

TYPE

APS / QDT

LAST	LAST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
7-Feb-15	13,992.00 ft	88.38°	176.11°

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
7-Feb-15	14,055.00 ft	88.38°	176.11°

Zak Dawson

PRINT YOUR NAME ABOVE

Zak Dawson

SIGN YOUR NAME ABOVE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	6.94
DECLINATION OR GRID	GRID

2/7/2015

TODAY'S DATE

MWD SUPERVISOR 1

Zak Dawson

DIRECTIONAL DRILLER 1

Keith Scheppler

MWD SUPERVISOR 2

Brian Pina

DIRECTIONAL DRILLER 2

Brad Beck

12329 Cutten Rd.,

Houston, Texas 777066

(713)337-0600 (Voice), (713)337-0599 (Fax)

NOV 10 2015



Chevron

Lea County, NM (NAD27 NME)

Salado Draw 19 26 33 Fed

3H

Wellbore #1 Job #1512720

Survey: Phoenix MWD Surveys

Standard Survey Report

08 February, 2015



Survey Report

Company:	Chevron	Local Co-ordinate Reference:	Well 3H
Project:	Lea County, NM (NAD27 NME)	TVD Reference:	WELL @ 3216.00usft (Nabors Pace X30)
Site:	Salado Draw 19 26 33 Fed	MD Reference:	WELL @ 3216.00usft (Nabors Pace X30)
Well:	3H	North Reference:	Grid
Wellbore:	Wellbore #1 Job #1512720	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Nabors Pace X30)	Database:	Compass 5000 GCR

Project	Lea 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	Salado Draw 19 26 33 Fed		
Site Position:		Northing:	377,418.00 usft
From:	Map	Easting:	723,217.00 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 2' 8.12574 N
		Longitude:	103° 36' 46.78803 W
		Grid Convergence:	0.38 "

Well	3H		
Well Position	+N/-S	0.00 usft	Northing: 377,418.00 usft
	+E/-W	0.00 usft	Easting: 723,217.00 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
		Latitude:	32° 2' 8.12574 N
		Longitude:	103° 36' 46.78803 W
		Ground Level:	3,189.00 usft

Wellbore	Wellbore #1 Job #1512720		
Magnetics	Model Name	Sample Date	Declination (°)
	BGGM2014	1/9/2015	7.32
			Dip Angle (°)
			59.91
			Field Strength (nT)
			48,085

Design	Surveys (Nabors Pace X30)		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.00	0.00	0.00
			Direction (°)
			183.17

Survey Program	Date 2/8/2015		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
126.00	14,055.00	Phoenix MWD Surveys (Wellbore #1 Job #	PHX+MWD+BGGM
			Description
			PHX+MWD+BGGM v3:standard declination

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	
126.00	0.58	71.55	126.00	0.20	0.60	-0.23	0.46	0.46	0.00	
First Phoenix MWD Survey										
218.00	0.86	89.55	218.99	0.36	1.77	-0.45	0.40	0.32	19.35	
346.00	0.78	104.15	345.98	0.15	3.58	-0.35	0.18	-0.08	11.50	
412.00	1.04	104.71	411.97	-0.11	4.59	-0.15	0.39	0.39	0.85	
505.00	1.18	100.30	504.95	-0.49	6.35	0.14	0.18	0.15	-4.74	
598.00	1.15	94.49	597.93	-0.74	8.23	0.28	0.13	-0.03	-6.25	
690.00	1.20	98.30	689.91	-0.95	10.10	0.39	0.10	0.05	4.14	
786.00	1.38	100.80	785.89	-1.31	12.23	0.63	0.20	0.19	2.80	
877.00	1.47	97.21	876.86	-1.66	14.46	0.86	0.14	0.10	-3.95	



Survey Report

Company: Chevron
 Project: Lea County, NM (NAD27 NME)
 Site: Salado Draw 19 26 33 Fed
 Well: 3H
 Wellbore: Wellbore #1 Job #1512720
 Design: Surveys (Nabors Pace X30)

Local Co-ordinate Reference: Well 3H
 TVD Reference: WELL @ 3216.00usft (Nabors Pace X30)
 MD Reference: WELL @ 3216.00usft (Nabors Pace X30)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 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)
972.00	0.36	48.05	971.85	-1.62	15.89	0.74	1.33	-1.17	-51.75
1,067.00	0.92	326.70	1,066.84	-0.76	15.70	-0.09	0.99	0.59	-85.63
1,163.00	0.89	319.17	1,162.83	0.43	14.79	-1.25	0.13	-0.03	-7.84
1,258.00	0.95	314.64	1,257.82	1.54	13.74	-2.30	0.10	0.06	-4.77
1,353.00	1.11	311.99	1,352.80	2.71	12.50	-3.40	0.18	0.17	-2.79
1,448.00	1.12	303.22	1,447.79	3.83	11.04	-4.44	0.18	0.01	-9.23
1,543.00	1.28	290.99	1,542.76	4.72	9.27	-5.23	0.32	0.17	-12.87
1,638.00	1.28	290.93	1,637.74	5.48	7.29	-5.88	0.00	0.00	-0.06
1,734.00	1.38	285.17	1,733.71	6.17	5.17	-6.44	0.17	0.10	-6.00
1,829.00	1.36	280.35	1,828.69	6.67	2.96	-6.82	0.12	-0.02	-5.07
1,924.00	1.49	284.21	1,923.66	7.17	0.65	-7.20	0.17	0.14	4.06
2,020.00	1.41	284.84	2,019.63	7.78	-1.70	-7.68	0.08	-0.08	0.66
2,115.00	1.46	282.66	2,114.60	8.35	-4.01	-8.11	0.08	0.05	-2.29
2,211.00	1.54	279.57	2,210.56	8.83	-6.47	-8.46	0.12	0.08	-3.22
2,306.00	1.47	277.17	2,305.53	9.19	-8.94	-8.69	0.10	-0.07	-2.53
2,401.00	1.03	264.62	2,400.51	9.27	-11.00	-8.64	0.54	-0.46	-13.21
2,497.00	0.54	158.02	2,496.50	8.77	-11.69	-8.11	1.35	-0.51	-111.04
2,592.00	0.97	143.33	2,591.50	7.71	-11.04	-7.08	0.49	0.45	-15.46
2,687.00	1.46	128.99	2,686.47	6.30	-9.62	-5.76	0.60	0.52	-15.09
2,783.00	2.21	121.33	2,782.42	4.57	-7.09	-4.17	0.82	0.78	-7.98
2,878.00	1.47	112.98	2,877.37	3.14	-4.40	-2.89	0.83	-0.78	-8.79
2,973.00	1.01	99.88	2,972.35	2.52	-2.46	-2.38	0.57	-0.48	-13.79
3,068.00	0.85	94.39	3,067.34	2.32	-0.93	-2.27	0.19	-0.17	-5.78
3,163.00	1.00	98.29	3,162.33	2.15	0.59	-2.18	0.17	0.16	4.11
3,259.00	1.00	99.08	3,258.31	1.90	2.25	-2.02	0.01	0.00	0.82
3,354.00	1.72	104.56	3,353.29	1.41	4.45	-1.65	0.77	0.76	5.77
3,449.00	1.90	88.66	3,448.24	1.08	7.40	-1.49	0.56	0.19	-16.74
3,544.00	2.80	74.88	3,543.16	1.73	11.22	-2.34	1.11	0.95	-14.51
3,640.00	3.40	62.93	3,639.02	3.63	16.02	-4.51	0.92	0.63	-12.45
3,735.00	2.70	61.22	3,733.88	5.99	20.48	-7.12	0.74	-0.74	-1.80
3,831.00	1.01	66.46	3,829.83	7.39	23.25	-8.67	1.77	-1.76	7.56
3,826.00	0.23	214.36	3,824.83	7.54	23.93	-8.85	1.27	-0.82	153.56
4,021.00	0.36	189.34	4,019.82	7.09	23.87	-8.40	0.27	0.14	-47.39
4,116.00	0.52	143.15	4,114.82	6.45	24.19	-7.78	0.27	0.17	-27.57
4,212.00	0.46	129.07	4,210.82	5.86	24.75	-7.22	0.14	-0.06	-14.67
4,307.00	1.04	116.42	4,305.81	5.24	25.82	-6.66	0.83	0.81	-13.32
4,402.00	1.22	138.28	4,400.79	4.10	27.26	-5.60	0.49	0.19	23.01
4,498.00	1.04	151.54	4,496.77	2.57	28.36	-4.13	0.33	-0.19	13.81
4,593.00	0.71	232.98	4,591.76	1.46	28.30	-3.02	1.23	-0.35	85.73
4,688.00	0.71	238.02	4,686.76	0.79	27.33	-2.30	0.07	0.00	5.31
4,730.00	0.58	233.25	4,728.75	0.53	26.94	-2.02	0.33	-0.31	-11.36
4,898.00	0.95	223.41	4,896.74	-0.99	25.30	-0.41	0.23	0.22	-5.86
4,993.00	1.55	283.51	4,991.72	-1.27	23.51	-0.04	1.43	0.63	63.28



Survey Report

Company: Chevron
Project: Lea County, NM (NAD27 NME)
Site: Salado Draw 19 28 33 Fed
Well: 3H
Wellbore: Wellbore #1 Job #1512720
Design: Surveys (Nabors Pace X30)

Local Co-ordinate Reference: Well 3H
TVD Reference: WELL @ 3216.00usft (Nabors Pace X30)
MD Reference: WELL @ 3216.00usft (Nabors Pace X30)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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)
5,088.00	1.86	282.83	5,086.88	-0.63	20.75	-0.52	0.33	0.33	-0.93
5,183.00	1.75	285.88	5,181.63	0.11	17.85	-1.09	0.16	-0.12	3.40
5,279.00	1.91	287.00	5,277.58	0.97	14.91	-1.80	0.17	0.17	1.19
5,374.00	1.83	286.92	5,372.53	1.88	11.95	-2.54	0.08	-0.08	-0.08
5,469.00	1.96	287.72	5,467.48	2.81	8.95	-3.30	0.14	0.14	0.84
5,564.00	2.70	307.11	5,562.40	4.66	5.62	-4.96	1.13	0.78	20.41
5,660.00	3.68	315.71	5,658.25	8.23	1.66	-8.31	1.13	1.02	8.96
5,755.00	3.75	316.37	5,753.05	12.66	-2.61	-12.50	0.09	0.07	0.69
5,850.00	3.32	313.76	5,847.87	16.81	-8.74	-16.41	0.48	-0.45	-2.75
5,945.00	3.36	314.85	5,942.71	20.68	-10.70	-20.05	0.08	0.04	1.15
6,041.00	3.22	313.92	6,038.55	24.53	-14.64	-23.68	0.16	-0.15	-0.97
6,136.00	4.92	320.18	6,133.31	29.51	-19.17	-28.41	1.85	1.79	6.59
6,231.00	5.20	320.30	6,227.94	35.95	-24.53	-34.54	0.29	0.29	0.13
6,326.00	5.65	317.39	6,322.51	42.71	-30.44	-40.96	0.56	0.47	-3.06
6,421.00	6.85	315.29	6,416.95	50.17	-37.59	-48.02	1.29	1.26	-2.21
6,516.00	7.97	313.69	6,511.15	58.75	-46.34	-56.10	1.20	1.18	-1.68
6,611.00	7.82	313.98	6,605.25	67.79	-55.76	-64.60	0.16	-0.16	0.31
6,707.00	7.66	312.18	6,700.38	76.82	-65.20	-72.90	0.30	-0.17	-1.88
6,802.00	7.44	312.26	6,794.55	85.01	-74.44	-80.76	0.23	-0.23	0.08
6,897.00	7.25	313.01	6,888.77	93.23	-83.38	-88.48	0.22	-0.20	0.79
6,993.00	8.14	316.74	6,983.91	102.31	-92.46	-97.04	1.06	0.93	3.89
7,088.00	7.81	317.17	7,077.99	111.95	-101.46	-106.16	0.35	-0.35	0.45
7,183.00	7.88	317.59	7,172.10	121.49	-110.24	-115.20	0.10	0.07	0.44
7,278.00	7.80	318.29	7,268.21	131.11	-118.92	-124.33	0.13	-0.06	0.74
7,373.00	7.54	317.65	7,360.36	140.53	-127.41	-133.27	0.29	-0.27	-0.67
7,468.00	7.35	318.48	7,454.56	149.68	-135.64	-141.95	0.23	-0.20	0.67
7,564.00	7.04	318.98	7,549.81	158.72	-143.57	-150.54	0.33	-0.32	0.52
7,659.00	7.88	316.59	7,644.00	167.84	-151.86	-158.19	0.94	0.88	-2.52
7,754.00	7.44	314.60	7,738.15	176.89	-160.72	-167.73	0.54	-0.46	-2.09
7,843.00	6.85	313.76	7,828.46	184.61	-168.66	-175.00	0.67	-0.66	-0.94
7,938.00	8.72	311.02	7,920.56	193.25	-178.18	-183.11	2.01	1.97	-2.88
8,034.00	8.08	308.39	8,015.55	202.22	-188.96	-191.46	0.78	-0.67	-2.74
8,129.00	7.61	307.56	8,109.66	210.20	-199.18	-198.86	0.51	-0.49	-0.67
8,225.00	7.92	312.69	8,204.78	218.56	-209.08	-206.66	0.79	0.32	5.34
8,320.00	7.48	311.75	8,298.93	227.12	-218.50	-214.69	0.48	-0.46	-0.99
8,415.00	7.04	310.98	8,393.17	235.05	-227.51	-222.11	0.47	-0.46	-0.81
8,510.00	6.46	309.71	8,487.51	242.28	-236.02	-228.86	0.63	-0.61	-1.34
8,605.00	5.83	307.97	8,581.96	249.67	-243.93	-234.80	0.69	-0.66	-1.83
8,618.00	5.13	302.87	8,594.90	249.39	-244.94	-235.46	6.55	-5.38	-39.23
8,663.00	4.33	259.02	8,639.76	260.16	-248.30	-236.04	8.01	-1.78	-97.44
8,696.00	6.99	229.67	8,672.80	248.62	-251.06	-234.36	11.67	8.08	-88.94
8,728.00	11.58	219.53	8,704.18	244.88	-254.59	-230.43	15.17	14.34	-31.69
8,760.00	16.14	213.41	8,735.24	238.69	-259.08	-223.99	14.95	14.25	-19.13



Survey Report

Company: Chevron
 Project: Lea County, NM (NAD27 NME)
 Site: Salado Draw 19 28 33 Fed
 Well: 3H
 Wellbore: Wellbore #1 Job #1512720
 Design: Surveys (Nabors Pace X30)

Local Co-ordinate Reference: Well 3H
 TVD Reference: WELL @ 3216.00usft (Nabors Pace X30)
 MD Reference: WELL @ 3216.00usft (Nabors Pace X30)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 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)
8,792.00	20.00	208.52	8,765.66	230.07	-263.98	-215.12	13.77	12.06	-21.53
8,824.00	22.54	205.29	8,795.48	219.63	-269.04	-204.42	8.06	7.94	-3.84
8,855.00	25.96	200.89	8,823.74	207.90	-273.98	-192.44	12.60	11.03	-14.84
8,887.00	29.46	197.80	8,852.07	193.86	-278.86	-178.14	11.71	10.94	-9.03
8,919.00	32.93	195.56	8,879.44	177.98	-283.80	-162.02	11.43	10.84	-7.00
8,951.00	34.47	191.35	8,908.08	160.72	-287.72	-144.56	8.74	4.81	-13.16
8,982.00	36.62	189.60	8,931.28	143.00	-290.99	-126.69	7.67	6.94	-5.65
9,014.00	38.68	182.89	8,958.97	124.03	-293.06	-107.64	12.51	0.19	-20.97
9,046.00	37.98	181.00	8,982.42	104.65	-293.71	-88.24	5.37	4.00	-5.91
9,078.00	37.30	177.70	9,007.76	85.12	-293.50	-68.76	6.62	-2.08	-10.31
9,110.00	39.23	180.21	9,032.89	65.31	-293.15	-49.00	7.74	6.03	7.84
9,141.00	40.68	182.87	9,058.65	45.41	-293.69	-29.10	7.23	4.68	8.58
9,173.00	43.64	180.33	9,080.37	23.95	-294.27	-7.64	10.67	9.25	-7.94
9,205.00	46.81	181.76	9,102.91	1.24	-294.89	15.06	10.40	9.91	4.47
9,237.00	49.41	181.54	9,124.27	-22.57	-295.38	38.87	8.14	8.13	-0.69
9,268.00	52.23	181.58	9,143.86	-46.59	-296.03	62.89	9.10	9.10	0.06
9,300.00	56.66	180.24	9,162.46	-72.61	-296.43	88.90	14.24	13.84	-4.13
9,332.00	60.98	179.07	9,179.02	-99.98	-296.26	116.21	13.86	13.50	-3.66
9,363.00	65.49	177.74	9,192.98	-127.64	-295.48	143.79	15.04	14.55	-4.29
9,395.00	70.49	176.38	9,204.97	-157.28	-293.96	173.28	16.11	15.63	-4.25
9,427.00	75.88	176.56	9,214.22	-187.82	-292.07	203.69	16.85	16.84	0.56
9,458.00	80.55	177.63	9,220.55	-218.12	-290.54	233.86	15.44	15.06	3.45
9,472.00	82.57	178.90	9,222.61	-231.96	-290.12	247.65	16.99	14.43	9.07
9,595.00	90.17	181.75	9,228.49	-324.70	-290.65	340.27	8.72	8.17	3.06
9,660.00	91.71	181.90	9,226.94	-419.63	-293.68	435.23	1.63	1.62	0.16
9,755.00	94.95	182.23	9,221.42	-514.40	-297.09	530.04	3.43	3.41	0.35
9,851.00	93.75	183.09	9,214.14	-610.02	-301.54	625.76	1.54	-1.25	0.90
9,946.00	91.78	182.62	9,209.57	-704.78	-306.26	720.64	2.15	-2.09	-0.49
10,041.00	91.68	181.24	9,206.72	-799.69	-309.48	815.57	1.45	-0.08	-1.45
10,136.00	92.41	181.19	9,203.33	-894.80	-311.47	910.48	0.77	0.77	-0.05
10,231.00	92.02	180.32	9,199.66	-989.52	-312.72	1,005.30	1.00	-0.41	-0.92
10,326.00	89.41	179.81	9,198.47	-1,084.51	-312.83	1,100.15	2.80	-2.75	-0.54
10,422.00	90.50	179.58	9,198.55	-1,180.50	-312.32	1,195.97	1.16	1.14	-0.24
10,517.00	88.83	179.78	9,199.10	-1,275.50	-311.79	1,290.79	1.77	-1.76	0.21
10,612.00	89.50	179.39	9,200.49	-1,370.48	-311.10	1,385.59	0.82	0.71	-0.41
10,708.00	89.69	180.04	9,201.17	-1,466.48	-310.62	1,481.41	0.71	0.20	0.68
10,803.00	90.58	178.68	9,200.96	-1,561.47	-309.58	1,578.20	1.70	0.92	-1.43
10,898.00	90.76	178.92	9,199.86	-1,656.44	-307.57	1,670.92	0.33	0.21	0.25
10,993.00	88.63	178.64	9,200.37	-1,751.41	-305.55	1,765.63	2.26	-2.24	-0.29
11,088.00	88.38	179.52	9,202.85	-1,846.37	-304.03	1,860.36	0.96	-0.26	0.93
11,184.00	87.82	179.65	9,206.20	-1,942.31	-303.33	1,956.11	0.80	-0.79	0.14
11,279.00	87.68	180.23	9,210.09	-2,037.23	-303.23	2,050.88	0.61	0.06	0.61
11,374.00	88.21	181.27	9,213.50	-2,132.16	-304.48	2,145.73	1.23	0.56	1.09
11,469.00	88.35	180.27	9,216.35	-2,227.10	-305.75	2,240.60	1.06	0.15	-1.05



Survey Report

Company: Chevron
Project: Lea County, NM (NAD27 NME)
Site: Salado Draw 19 28 33 Fed
Well: 3H
Wellbore: Wellbore #1 Job #1512720
Design: Surveys (Nabors Pace X30)

Local Co-ordinate Reference: Well 3H
TVD Reference: WELL @ 3216.00usft (Nabors Pace X30)
MD Reference: WELL @ 3216.00usft (Nabors Pace X30)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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)
11,565.00	90.28	179.43	9,217.50	-2,323.09	-305.50	2,336.43	2.19	2.01	-0.88
11,660.00	89.39	179.24	9,217.77	-2,418.08	-304.40	2,431.22	0.98	-0.94	-0.20
11,755.00	89.08	178.68	9,218.04	-2,513.08	-302.87	2,525.95	0.87	-0.33	-0.59
11,850.00	89.05	178.70	9,220.59	-2,608.02	-300.50	2,620.65	0.04	-0.03	0.02
11,946.00	89.27	178.63	9,222.00	-2,703.98	-298.27	2,716.34	0.24	0.23	-0.07
12,041.00	89.72	179.18	9,222.84	-2,798.98	-298.45	2,811.07	0.75	0.47	0.58
12,137.00	90.25	179.57	9,222.86	-2,894.98	-295.40	2,906.86	0.89	0.55	0.41
12,232.00	90.25	179.72	9,222.45	-2,989.95	-294.81	3,001.68	0.16	0.00	0.16
12,327.00	90.22	179.54	9,222.08	-3,084.95	-294.20	3,096.50	0.19	-0.03	-0.19
12,422.00	90.53	179.61	9,221.44	-3,179.95	-293.50	3,191.31	0.33	0.33	0.07
12,518.00	90.45	178.92	9,220.81	-3,275.93	-292.26	3,287.08	0.72	-0.08	-0.72
12,613.00	90.56	178.84	9,219.78	-3,370.91	-290.41	3,381.81	0.14	0.12	-0.08
12,708.00	91.26	179.11	9,218.27	-3,465.89	-288.71	3,476.55	0.79	0.74	0.28
12,804.00	91.43	179.34	9,216.02	-3,561.85	-287.41	3,572.29	0.30	0.18	0.24
12,899.00	92.41	179.88	9,212.83	-3,656.79	-286.76	3,667.05	1.18	1.03	0.57
12,994.00	90.03	179.72	9,210.81	-3,751.76	-286.43	3,761.86	2.51	-2.51	-0.17
13,089.00	89.69	179.89	9,211.04	-3,846.76	-286.11	3,856.70	0.40	-0.36	0.18
13,184.00	91.04	180.76	9,210.44	-3,941.76	-286.65	3,951.58	1.89	1.42	0.92
13,280.00	91.87	181.27	9,208.00	-4,037.71	-288.35	4,047.48	1.01	0.86	0.53
13,375.00	91.76	180.56	9,204.99	-4,132.65	-289.86	4,142.35	0.76	-0.12	-0.75
13,470.00	92.71	180.91	9,201.29	-4,227.57	-291.08	4,237.19	1.07	1.00	0.37
13,566.00	94.78	181.28	9,195.02	-4,323.34	-292.91	4,332.92	2.19	2.16	0.39
13,661.00	92.35	179.45	9,189.11	-4,418.14	-293.51	4,427.61	3.20	-2.56	-1.93
13,756.00	90.59	178.91	9,186.67	-4,513.05	-290.50	4,522.21	3.25	-1.85	-2.67
13,851.00	89.94	178.19	9,186.23	-4,607.88	-284.78	4,616.57	1.02	-0.68	-0.76
13,947.00	88.32	176.21	9,187.69	-4,703.65	-278.42	4,711.85	1.69	-1.69	0.02
13,992.00	88.38	176.11	9,188.98	-4,748.53	-275.41	4,756.50	0.26	0.13	-0.22
Final Phoenix MWD Survey									
14,055.00	88.38	176.11	9,190.77	-4,811.36	-271.13	4,816.99	0.00	0.00	0.00
Projection to TD									

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
126.00	126.00	0.20	0.60	First Phoenix MWD Survey
13,992.00	9,188.98	-4,748.53	-275.41	Final Phoenix MWD Survey
14,055.00	9,190.77	-4,811.36	-271.13	Projection to TD

Checked By: _____

Approved By: _____

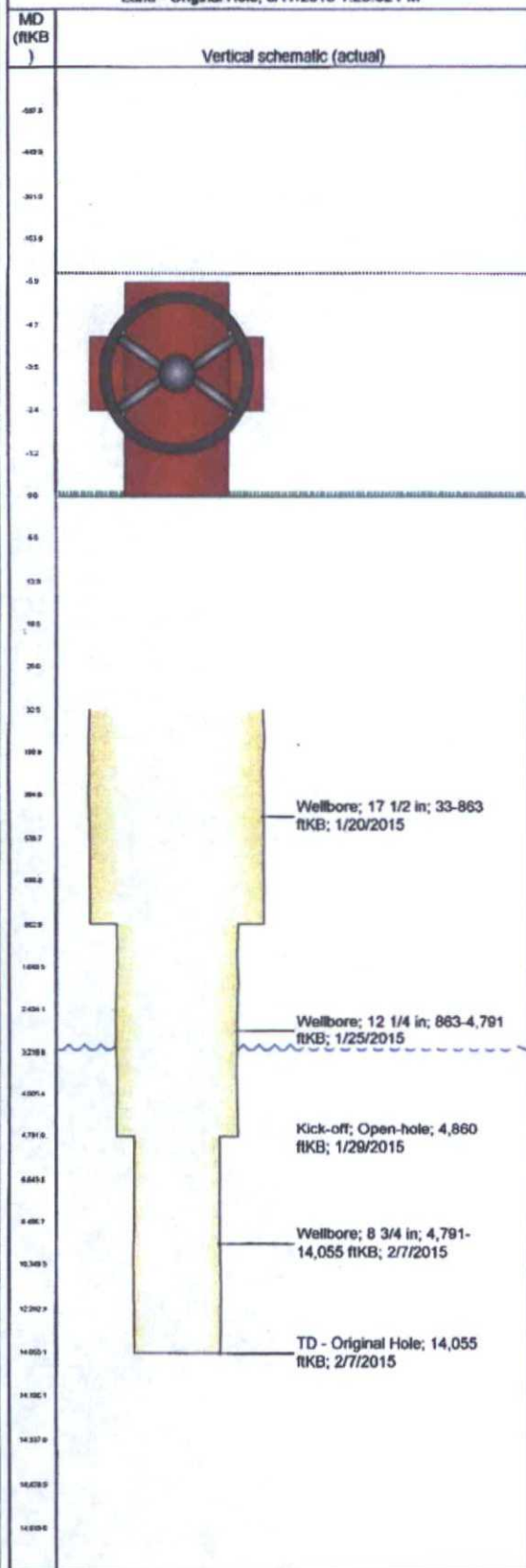
Date: _____



QC Wellbore Rpt

Well Name SALADO DRAW 19-26-33 FED 003H	Field Name WILDCAT (HOBBS)	Area Delaware Basin	Business Unit Mid-Continent	Location Type Land	Well Class Development	Surface UWI 3002542280
Original RKB (ft) 3,189.00	Current RKB 3,221.60, 1/19/2015	Mud Line Elevation (ft)	Water Depth (ft)	Ground Elevation (ft) 3,189.00	CF Elev (ft)	Total Depth (ftKB) 14,055.0

Land - Original Hole, 8/17/2015 1:29:02 PM



Original Hole

Wellbore Name Original Hole	Parent Wellbore Original Hole	Kick Off Depth (ftKB) 4,860
Wellbore UWI 300254228000	Wellbore ChevNo PD1919-00	Casing Configuration Class 3

Wellbore Sections

Start Date	End Date	Hole Size (in)	Act Top (ftKB)	Act Btm (ftKB)
1/20/2015 03:30	1/20/2015 22:30	17 1/2	32.6	863.0
1/23/2015 11:00	1/25/2015 23:30	12 1/4	863.0	4,791.0
1/28/2015 10:00	2/7/2015 14:30	8 3/4	4,791.0	14,055.0