

Phoenix Technology Services
SURVEY DATA CERTIFICATION



PHOENIX JOB NUMBER 1514335

OPERATOR Chevron

WELL NAME Salado Draw 29-26-33 Fed Com 3H

COUNTY & STATE Lea County, NM

API WELL NUMBER 30-025-42638

PROPOSED DIRECTION 176.91

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

FIRST	FIRST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
5-Oct-15	189 ft	0.24	161.98

SURVEY INSTRUMENT
TYPE
Phoenix MWD

LAST	LAST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
10-Nov-15	16,431 ft	88.04	179.17

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
10-Nov-15	16,489 ft	88.04	179.17

GREG HURST

PRINT YOUR NAME ABOVE

Greg Hurst

SIGN YOUR NAME ABOVE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	6.63
DECLINATION OR GRID	GRID

11/10/2015

TODAY'S DATE

MWD SUPERVISOR 1 Greg Hurst

DIRECTIONAL DRILLER 1

Keith Scheppler

MWD SUPERVISOR 2 Jeff Broussard

DIRECTIONAL DRILLER 2

Justin Jackson

12329 Cutten Road Houston, Texas 77066

(713)337-0609 (Voice), (713)337-0599 (Fax)



HOBBS OCD

SEP 06 2016

RECEIVED

Chevron

Lea County, NM (NAD27 NME)
Salado Draw 29 26 33 Fed Com
3H - Slot 3H

OH / Job 1514335

Survey: Phoenix MWD Surveys

Standard Survey Report

11 November, 2015





Phoenix Technology Services LP

Survey Report



Company:	Chevron	Local Co-ordinate Reference:	Well 3H - Slot 3H
Project:	Lea County, NM (NAD27 NME)	TVD Reference:	RKB @ 3242.00usft (Pace X30)
Site:	Salado Draw 29 26 33 Fed Com	MD Reference:	RKB @ 3242.00usft (Pace X30)
Well:	3H	North Reference:	Grid
Wellbore:	OH / Job 1514335	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (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 29 26 33 Fed Com		
Site Position:		Northing:	372,173.00 usft
From:	Map	Easting:	727,838.00 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 1' 15.91374 N
		Longitude:	103° 35' 53.52012 W
		Grid Convergence:	0.39 °

Well	3H - Slot 3H		
Well Position	+N/-S	0.00 usft	Northing: 372,173.00 usft
	+E/-W	0.00 usft	Easting: 727,888.00 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	32° 1' 15.91037 N
		Longitude:	103° 35' 52.93938 W
		Ground Level:	3,215.00 usft

Wellbore	OH / Job 1514335		
Magnetics	Model Name	Sample Date	Declination (°)
	HDGM	10/7/2015	7.02
		Dip Angle (°)	59.75
		Field Strength (nT)	48,070

Design	Surveys (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 (°)	176.91

Survey Program	Date 11/11/2015		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
189.00	16,489.00	Phoenix MWD Surveys (OH / Job 1514335)	PHX+MWD+HDGM
			Description
			PHX+OWSG MWD + HDGM

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	
189.00	0.24	161.98	189.00	-0.38	0.12	0.38	0.13	0.13	0.00	
First Phoenix Survey										
375.00	0.23	181.78	375.00	-1.12	0.23	1.13	0.04	-0.01	10.65	
560.00	0.23	204.17	560.00	-1.83	0.07	1.83	0.05	0.00	12.10	
731.00	0.36	232.48	730.99	-2.47	-0.50	2.44	0.11	0.08	16.56	
790.00	0.54	236.45	789.99	-2.74	-0.88	2.69	0.31	0.31	6.73	
952.00	0.62	236.94	951.98	-3.64	-2.25	3.51	0.05	0.05	0.30	
1,129.00	0.59	241.56	1,128.97	-4.59	-3.85	4.38	0.03	-0.02	2.61	
1,306.00	0.50	261.50	1,305.97	-5.14	-5.42	4.84	0.12	-0.05	11.27	
1,484.00	0.61	251.17	1,483.96	-5.56	-7.08	5.17	0.08	0.06	-5.80	



Phoenix Technology Services LP

Survey Report



Company:	Chevron	Local Co-ordinate Reference:	Well 3H - Slot 3H
Project:	Lea County, NM (NAD27 NME)	TVD Reference:	RKB @ 3242.00usft (Pace X30)
Site:	Salado Draw 29 26 33 Fed Com	MD Reference:	RKB @ 3242.00usft (Pace X30)
Well:	3H	North Reference:	Grid
Wellbore:	OH / Job 1514335	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Pace X30)	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)
1,661.00	0.71	266.24	1,660.95	-5.94	-9.07	5.44	0.11	0.06	8.51
1,839.00	0.97	266.42	1,838.93	-6.10	-11.67	5.47	0.15	0.15	0.10
2,016.00	1.13	265.10	2,015.90	-6.35	-14.91	5.53	0.09	0.09	-0.75
2,193.00	1.17	224.84	2,192.86	-7.78	-17.92	6.80	0.45	0.02	-22.75
2,370.00	0.08	88.16	2,369.85	-9.05	-19.07	8.01	0.69	-0.62	-77.22
2,547.00	0.31	83.82	2,546.85	-9.00	-18.47	7.99	0.13	0.13	-2.45
2,724.00	0.31	54.16	2,723.85	-8.67	-17.61	7.70	0.09	0.00	-16.76
2,901.00	0.31	10.83	2,900.85	-7.92	-17.13	6.98	0.13	0.00	-24.48
3,079.00	0.12	327.17	3,078.85	-7.29	-17.14	6.35	0.13	-0.11	-24.53
3,256.00	0.33	326.52	3,255.84	-6.71	-17.52	5.75	0.12	0.12	-0.37
3,434.00	0.28	254.89	3,433.84	-6.39	-18.22	5.40	0.20	-0.03	-40.24
3,611.00	0.82	123.68	3,610.84	-7.21	-17.59	6.25	0.58	0.31	-74.13
3,788.00	1.18	94.06	3,787.81	-8.04	-14.72	7.23	0.35	0.20	-16.73
3,966.00	1.57	80.69	3,965.76	-7.77	-10.48	7.20	0.28	0.22	-7.51
4,143.00	2.32	77.61	4,142.66	-6.61	-4.59	6.36	0.43	0.42	-1.74
4,321.00	2.55	79.18	4,320.50	-5.10	2.82	5.24	0.13	0.13	0.88
4,498.00	2.94	87.58	4,497.29	-4.17	11.22	4.77	0.32	0.22	4.75
4,675.00	3.19	92.30	4,674.04	-4.17	20.68	5.28	0.20	0.14	2.67
4,705.00	3.14	92.89	4,703.99	-4.25	22.33	5.45	0.20	-0.17	1.97
4,865.00	2.63	96.61	4,863.79	-4.89	30.36	6.52	0.34	-0.32	2.33
5,042.00	3.58	66.63	5,040.54	-3.17	39.46	5.29	1.04	0.54	-16.94
5,219.00	3.20	61.28	5,217.23	1.40	48.87	1.24	0.28	-0.21	-3.02
5,396.00	3.94	62.67	5,393.89	6.57	58.60	-3.39	0.42	0.42	0.79
5,574.00	5.60	59.48	5,571.26	13.78	71.52	-9.91	0.94	0.93	-1.79
5,751.00	5.44	75.58	5,747.45	20.26	87.08	-15.53	0.88	-0.09	9.10
5,929.00	4.52	74.99	5,924.78	24.18	102.03	-18.64	0.52	-0.52	-0.33
6,106.00	4.26	72.63	6,101.26	27.95	115.04	-21.70	0.18	-0.15	-1.33
6,283.00	5.09	70.75	6,277.67	32.50	128.73	-25.50	0.48	0.47	-1.06
6,460.00	4.69	69.45	6,454.03	37.63	142.92	-29.86	0.23	-0.23	-0.73
6,638.00	4.93	65.79	6,631.40	43.32	156.71	-34.80	0.22	0.13	-2.06
6,815.00	5.70	80.59	6,807.64	47.87	172.32	-38.51	0.88	0.44	8.36
6,992.00	5.31	87.43	6,983.83	49.68	189.17	-39.40	0.43	-0.22	3.86
7,170.00	4.60	84.89	7,161.16	50.68	204.51	-39.57	0.42	-0.40	-1.43
7,347.00	4.01	83.94	7,337.66	51.97	217.73	-40.14	0.34	-0.33	-0.54
7,524.00	3.30	90.22	7,514.30	52.60	228.98	-40.17	0.46	-0.40	3.55
7,702.00	4.07	73.98	7,691.94	54.33	240.18	-41.29	0.72	0.43	-9.12
7,880.00	3.48	68.56	7,869.55	58.05	251.28	-44.40	0.39	-0.33	-3.04
8,057.00	4.19	75.97	8,046.16	61.58	262.55	-47.32	0.49	0.40	4.19
8,235.00	3.41	82.38	8,223.76	63.85	274.11	-48.97	0.50	-0.44	3.60
8,412.00	4.24	77.72	8,400.37	65.94	285.72	-50.43	0.50	0.47	-2.63
8,589.00	4.78	73.55	8,576.82	69.42	299.18	-53.18	0.36	0.31	-2.36
8,649.00	4.44	75.98	8,636.63	70.70	303.83	-54.19	0.65	-0.57	4.05
8,740.00	8.02	135.35	8,727.15	67.03	311.72	-50.11	7.59	3.93	65.24



Phoenix Technology Services LP

Survey Report



Company:	Chevron	Local Co-ordinate Reference:	Well 3H - Slot 3H
Project:	Lea County, NM (NAD27 NME)	TVD Reference:	RKB @ 3242.00usft (Pace X30)
Site:	Salado Draw 29 26 33 Fed Com	MD Reference:	RKB @ 3242.00usft (Pace X30)
Well:	3H	North Reference:	Grid
Wellbore:	OH / Job 1514335	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Pace X30)	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)
8,784.00	15.41	154.86	8,770.22	59.54	316.37	-42.38	18.83	16.80	44.34
8,829.00	23.30	163.09	8,812.65	45.59	321.51	-28.17	18.51	17.53	18.29
8,873.00	29.17	165.47	8,852.11	26.86	326.74	-9.19	13.55	13.34	5.41
8,917.00	33.53	168.27	8,889.67	4.57	331.90	13.34	10.45	9.91	6.36
8,962.00	38.02	171.55	8,926.18	-21.32	336.46	39.45	10.85	9.98	7.29
9,006.00	42.44	175.05	8,959.77	-49.53	339.74	67.79	11.28	10.05	7.95
9,050.00	47.59	176.85	8,990.86	-80.56	341.91	98.90	12.06	11.70	4.09
9,095.00	51.42	177.23	9,020.08	-114.73	343.68	133.11	8.54	8.51	0.84
9,139.00	55.45	178.17	9,046.29	-150.03	345.09	168.44	9.32	9.16	2.14
9,184.00	57.86	179.37	9,071.02	-187.61	345.89	206.01	5.80	5.36	2.67
9,228.00	60.36	180.26	9,093.61	-225.37	346.01	243.71	5.94	5.68	2.02
9,272.00	64.29	181.23	9,114.04	-264.32	345.49	282.58	9.14	8.93	2.20
9,316.00	67.56	180.65	9,131.99	-304.49	344.84	322.65	7.53	7.43	-1.32
9,361.00	71.24	179.12	9,147.82	-346.60	344.93	364.71	8.77	8.18	-3.40
9,405.00	75.65	178.19	9,160.35	-388.75	345.92	406.85	10.23	10.02	-2.11
9,449.00	80.64	177.59	9,169.39	-431.77	347.51	449.90	11.42	11.34	-1.36
9,482.00	82.93	177.39	9,174.10	-464.40	348.94	482.55	6.97	6.94	-0.61
9,570.00	87.48	179.30	9,181.46	-552.03	351.47	570.19	5.60	5.17	2.17
9,659.00	91.99	180.40	9,181.87	-641.00	351.70	659.05	5.22	5.07	1.24
9,747.00	92.13	180.09	9,178.71	-728.94	351.32	746.84	0.39	0.16	-0.35
9,837.00	92.10	179.48	9,175.39	-818.88	351.66	836.67	0.68	-0.03	-0.68
9,926.00	91.18	179.55	9,172.84	-907.84	352.42	925.54	1.04	-1.03	0.08
10,014.00	87.98	177.22	9,173.48	-995.79	354.89	1,013.49	4.50	-3.64	-2.65
10,103.00	87.31	176.61	9,177.14	-1,084.58	359.68	1,102.41	1.02	-0.75	-0.69
10,192.00	86.86	177.24	9,181.67	-1,173.34	364.45	1,191.30	0.87	-0.51	0.71
10,281.00	86.33	177.29	9,186.95	-1,262.08	368.69	1,280.14	0.60	-0.60	0.06
10,369.00	87.59	177.42	9,191.62	-1,349.86	372.74	1,368.01	1.44	1.43	0.15
10,458.00	90.14	180.29	9,193.38	-1,438.81	374.52	1,456.92	4.31	2.87	3.22
10,547.00	90.45	180.70	9,192.92	-1,527.80	373.75	1,545.75	0.58	0.35	0.46
10,635.00	90.11	179.59	9,192.49	-1,615.80	373.53	1,633.60	1.32	-0.39	-1.26
10,724.00	90.76	179.85	9,191.82	-1,704.80	373.96	1,722.49	0.79	0.73	0.29
10,813.00	90.73	180.48	9,190.66	-1,793.79	373.71	1,811.34	0.71	-0.03	0.71
10,901.00	91.90	180.85	9,188.64	-1,881.76	372.69	1,899.13	1.39	1.33	0.42
10,990.00	89.91	178.57	9,187.24	-1,970.73	373.14	1,988.00	3.40	-2.24	-2.56
11,079.00	90.45	179.99	9,186.96	-2,059.72	374.25	2,076.92	1.71	0.61	1.60
11,168.00	89.58	179.27	9,186.93	-2,148.72	374.83	2,165.82	1.27	-0.98	-0.81
11,256.00	87.09	177.40	9,189.49	-2,236.64	377.38	2,253.74	3.54	-2.83	-2.13
11,345.00	86.67	176.53	9,194.33	-2,325.38	382.09	2,342.61	1.08	-0.47	-0.98
11,434.00	86.44	176.14	9,199.68	-2,414.04	387.77	2,431.44	0.51	-0.26	-0.44
11,522.00	86.67	177.52	9,204.97	-2,501.74	392.62	2,519.28	1.59	0.26	1.57
11,611.00	86.27	178.81	9,210.45	-2,590.52	395.47	2,608.09	1.51	-0.45	1.45
11,700.00	88.07	180.57	9,214.84	-2,679.41	395.95	2,696.87	2.83	2.02	1.98
11,788.00	90.61	182.28	9,215.86	-2,767.36	393.76	2,784.58	3.48	2.89	1.94



Phoenix Technology Services LP

Survey Report



Company:	Chevron	Local Co-ordinate Reference:	Well 3H - Slot 3H
Project:	Lea County, NM (NAD27 NME)	TVD Reference:	RKB @ 3242.00usft (Pace X30)
Site:	Salado Draw 29 26 33 Fed Com	MD Reference:	RKB @ 3242.00usft (Pace X30)
Well:	3H	North Reference:	Grid
Wellbore:	OH / Job 1514335	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Pace X30)	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)
11,877.00	90.48	181.08	9,215.01	-2,856.32	391.15	2,873.27	1.36	-0.15	-1.35
11,965.00	91.74	181.25	9,213.31	-2,944.28	389.36	2,961.00	1.44	1.43	0.19
12,054.00	90.03	179.07	9,211.93	-3,033.26	389.12	3,049.84	3.11	-1.92	-2.45
12,143.00	92.04	181.59	9,210.32	-3,122.23	388.60	3,138.66	3.62	2.26	2.83
12,231.00	91.82	180.95	9,207.36	-3,210.16	386.65	3,226.35	0.77	-0.25	-0.73
12,320.00	85.46	175.41	9,209.47	-3,299.01	389.47	3,315.22	9.47	-7.15	-6.22
12,409.00	84.73	175.10	9,217.08	-3,387.38	396.81	3,403.86	0.89	-0.82	-0.35
12,497.00	88.01	178.03	9,222.66	-3,475.03	402.06	3,491.66	4.99	3.73	3.33
12,586.00	87.34	176.97	9,226.27	-3,563.87	405.94	3,580.58	1.41	-0.75	-1.19
12,675.00	88.15	179.72	9,229.77	-3,652.75	408.51	3,669.47	3.22	0.91	3.09
12,764.00	90.09	180.52	9,231.14	-3,741.74	408.32	3,758.32	2.36	2.18	0.90
12,852.00	91.51	180.45	9,229.91	-3,829.72	407.58	3,846.14	1.62	1.61	-0.08
12,941.00	89.89	179.38	9,228.82	-3,918.71	407.71	3,935.00	2.18	-1.82	-1.20
13,030.00	89.72	178.36	9,229.12	-4,007.69	409.47	4,023.95	1.16	-0.19	-1.15
13,118.00	90.95	178.28	9,228.61	-4,095.65	412.05	4,111.92	1.40	1.40	-0.09
13,207.00	89.08	178.95	9,228.58	-4,184.62	414.20	4,200.88	2.23	-2.10	0.75
13,295.00	88.04	178.86	9,230.80	-4,272.58	415.88	4,288.79	1.19	-1.18	-0.10
13,384.00	88.63	182.48	9,233.38	-4,361.52	414.84	4,377.55	4.12	0.66	4.07
13,473.00	87.31	181.84	9,236.54	-4,450.39	411.48	4,466.12	1.65	-1.48	-0.72
13,561.00	88.66	182.65	9,239.63	-4,538.27	408.04	4,553.68	1.79	1.53	0.92
13,650.00	88.77	182.70	9,241.63	-4,627.15	403.89	4,642.20	0.14	0.12	0.06
13,739.00	88.54	183.51	9,243.71	-4,715.99	399.07	4,730.66	0.95	-0.26	0.91
13,827.00	88.85	181.90	9,245.72	-4,803.87	394.92	4,818.18	1.86	0.35	-1.83
13,916.00	90.11	179.52	9,246.53	-4,892.85	393.81	4,906.98	3.03	1.42	-2.67
14,005.00	90.64	178.84	9,245.94	-4,981.84	395.09	4,995.90	0.97	0.60	-0.76
14,093.00	89.75	177.88	9,245.64	-5,069.80	397.61	5,083.87	1.49	-1.01	-1.09
14,182.00	89.55	177.43	9,246.19	-5,158.73	401.25	5,172.86	0.55	-0.22	-0.51
14,271.00	89.33	177.36	9,247.06	-5,247.63	405.29	5,261.85	0.26	-0.25	-0.08
14,359.00	89.72	178.55	9,247.79	-5,335.57	408.43	5,349.83	1.42	0.44	1.35
14,448.00	90.95	180.28	9,247.27	-5,424.56	409.34	5,438.74	2.38	1.38	1.94
14,537.00	91.18	180.22	9,245.61	-5,513.54	408.95	5,527.58	0.27	0.26	-0.07
14,626.00	91.65	179.30	9,243.42	-5,602.51	409.32	5,616.44	1.16	0.53	-1.03
14,715.00	90.19	179.68	9,241.99	-5,691.49	410.12	5,705.33	1.70	-1.64	0.43
14,804.00	88.82	178.65	9,242.76	-5,780.48	411.41	5,794.26	1.93	-1.54	-1.16
14,892.00	88.82	178.59	9,244.57	-5,868.43	413.53	5,882.20	0.07	0.00	-0.07
14,981.00	87.81	178.84	9,247.18	-5,957.37	415.53	5,971.12	1.17	-1.13	0.28
15,070.00	89.02	180.55	9,249.65	-6,046.33	416.00	6,059.97	2.35	1.36	1.92
15,158.00	92.21	181.91	9,248.70	-6,134.29	414.11	6,147.70	3.94	3.63	1.55
15,247.00	91.51	181.19	9,245.81	-6,223.21	411.71	6,236.36	1.13	-0.79	-0.81
15,336.00	90.28	179.26	9,244.42	-6,312.19	411.36	6,325.20	2.57	-1.38	-2.17
15,424.00	91.37	179.50	9,243.16	-6,400.18	412.31	6,413.10	1.27	1.24	0.27
15,513.00	91.18	179.15	9,241.18	-6,489.15	413.36	6,502.00	0.45	-0.21	-0.39
15,602.00	89.58	178.46	9,240.59	-6,578.13	415.21	6,590.95	1.96	-1.80	-0.78
15,690.00	89.19	177.75	9,241.53	-6,666.07	418.12	6,678.92	0.92	-0.44	-0.81



Phoenix Technology Services LP

Survey Report



Company:	Chevron	Local Co-ordinate Reference:	Well 3H - Slot 3H
Project:	Lea County, NM (NAD27 NME)	TVD Reference:	RKB @ 3242.00usft (Pace X30)
Site:	Salado Draw 29 26 33 Fed Com	MD Reference:	RKB @ 3242.00usft (Pace X30)
Well:	3H	North Reference:	Grid
Wellbore:	OH / Job 1514335	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Pace X30)	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)
15,779.00	88.99	178.72	9,242.94	-6,755.02	420.86	6,767.89	1.11	-0.22	1.09
15,867.00	89.44	180.19	9,244.15	-6,843.00	421.70	6,855.79	1.75	0.51	1.67
15,956.00	89.47	180.63	9,245.00	-6,932.00	421.06	6,944.62	0.50	0.03	0.49
16,045.00	90.53	180.20	9,245.00	-7,020.99	420.42	7,033.45	1.29	1.19	-0.48
16,133.00	90.14	178.62	9,244.48	-7,108.98	421.33	7,121.36	1.85	-0.44	-1.80
16,222.00	90.06	179.17	9,244.33	-7,197.97	423.04	7,210.31	0.62	-0.09	0.62
16,310.00	89.72	180.38	9,244.49	-7,285.96	423.39	7,298.19	1.43	-0.39	1.38
16,399.00	88.57	179.72	9,245.82	-7,374.95	423.31	7,387.05	1.49	-1.29	-0.74
16,431.00	88.04	179.17	9,246.77	-7,406.94	423.62	7,419.00	2.39	-1.66	-1.72
Final Phoenix Survey									
16,489.00	88.04	179.17	9,248.75	-7,464.90	424.46	7,476.92	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)	
189.00	189.00	-0.38	0.12	First Phoenix Survey
16,431.00	9,246.77	-7,406.94	423.62	Final Phoenix Survey
16,489.00	9,248.75	-7,464.90	424.46	Projection to TD

Checked By: _____ Approved By: _____ Date: _____



Tubing Summary

Well Name SALADO DRAW 29-26-33 FED COM 003H	Lease Salado Draw 29-26-33 Fed	Field Name WILDCAT (HOBBS)	Business Unit Mid-Continent	
Ground Elevation (ft) 3,215.00	Original RKB Elevation (ft) 3,247.60	Current RKB Elevation 3,247.60, 9/18/2015	Mud Line Elevation (ft)	Water Depth (ft)
Current KB to Ground (ft) 32.60	Current KB to Mud Line (ft)	Current KB to Csg Flange (ft)	Current KB to Tubing Head (ft)	

Land - Original Hole, 4/11/2016 8:10:00 AM				Vertical schematic (actual)
MD (ftK B)	TVD (ftK B)	Incl (°)		
-1.7	-3.7	0.0		1-1; Tubing Hanger, 2 7/8; 2.441; 32; 0.80
-3.3	-3.3	0.0		1-2; Tubing, 2 7/8, 2.441; 33; 31.56
-5.0	-3.0	0.0		1-3; Tubing, 2 7/8, 2.441; 64; 16.31
-6.8	-2.8	0.0		1-4; Tubing, 2 7/8, 2.441; 81; 2,472.62
-8.2	-2.2	0.0		1-5; Gas Lift Mandrel, 4.34; 2.331; 2,553; 4.10
-10.0	-1.8	0.0		1-6; Tubing, 2 7/8, 2.441; 2,557; 651.03
-11.4	-1.4	0.0		1-7; Gas Lift Mandrel, 4.34; 2.331; 3,208; 4.10
-13.0	-1.0	0.0		1-8; Tubing, 2 7/8, 2.441; 3,213; 557.95
-15.0	-0.8	0.0		1-9; Gas Lift Mandrel, 4.34; 2.331; 3,771; 4.10
-17.2	-0.2	0.0		1-10; Tubing, 2 7/8, 2.441; 3,775; 527.41
-19.4	0.6	0.0		1-11; Gas Lift Mandrel, 4.34; 2.331; 4,302; 4.10
-21.6	1.2	0.0		1-12; Tubing, 2 7/8, 2.441; 4,306; 555.06
-23.8	1.8	0.0		1-13; Gas Lift Mandrel, 4.34; 2.331; 4,861; 4.10
-26.0	2.4	0.0		1-14; Tubing, 2 7/8, 2.441; 4,865; 558.49
-28.2	3.0	0.0		1-15; Gas Lift Mandrel, 4.34; 2.331; 5,424; 4.10
-30.4	3.6	0.0		1-16; Tubing, 2 7/8, 2.441; 5,428; 528.83
-32.6	4.2	0.0		1-17; Gas Lift Mandrel, 4.34; 2.331; 5,957; 4.10
-34.8	4.8	0.0		1-18; Tubing, 2 7/8, 2.441; 5,961; 556.64
-37.0	5.4	0.0		1-19; Gas Lift Mandrel, 4.34; 2.331; 6,517; 4.10
-39.2	6.0	0.0		1-20; Tubing, 2 7/8, 2.441; 6,522; 557.74
-41.4	6.6	0.0		1-21; Gas Lift Mandrel, 4.34; 2.331; 7,079; 4.10
-43.6	7.2	0.0		1-22; Tubing, 2 7/8, 2.441; 7,083; 527.61
-45.8	7.8	0.0		1-23; Gas Lift Mandrel, 4.34; 2.331; 7,611; 4.10
-48.0	8.4	0.0		1-24; Tubing, 2 7/8, 2.441; 7,615; 557.39
-50.2	9.0	0.0		1-25; Gas Lift Mandrel, 4.34; 2.331; 8,172; 4.10
-52.4	9.6	0.0		1-26; Tubing, 2 7/8, 2.441; 8,177; 462.80
-54.6	10.2	0.0		1-27; Gas Lift Mandrel, 4.34; 2.331; 8,639; 4.10
-56.8	10.8	0.0		1-28; Tubing, 2 7/8, 2.441; 8,643; 29.92
-59.0	11.4	0.0		1-29; On-Off Tool w/ 2.313" BX Profile; 4 1/2; 2.313; 8,673; 1.80
-61.2	12.0	0.0		1-30; Baker Hornet Packer - 450-237; 4 1/2; 2.380; 8,675; 7.78
-63.4	12.6	0.0		1-31; Pup Joint, 2 7/8, 2.441; 8,683; 6.33
-65.6	13.2	0.0		1-32; 'BX'N - 2.313 Seat Nipple w/ 2.205 NG; 3 11/16; 2.313; 8,689; 1.16
-67.8	13.8	0.0		1-33; Pup Joint, 2 7/8, 2.441; 8,690; 4.10
-70.0	14.4	0.0		1-34; Shear Disc Sub; 3.70; 2.440; 8,695; 2.13

Tubing Strings										
Tubing Description Tubing - Production			Planned Run? N		Set Depth (MD) (ftKB) 8,696.7			Set Depth (TVD) (ftKB) 8,684.2		
Run Date 4/11/2016			Run Job Complete, 1/30/2016 10:00			Pull Date			Pull Job	
Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Len (ft)	Top (ftKB)	Btm (ftKB)	
1	Tubing Hanger	2 7/8	2.441				0.80	32.0	32.8	
1	Tubing	2 7/8	2.441	6.50	L-80		31.56	32.8	64.4	
2	Tubing	2 7/8	2.441	6.50	L-80		16.31	64.4	80.7	
80	Tubing	2 7/8	2.441	6.50	L-80		2,472.62	80.7	2,553.3	
1	Gas Lift Mandrel	4.335	2.331		L-80		4.10	2,553.3	2,557.4	
21	Tubing	2 7/8	2.441	6.50	L-80		651.03	2,557.4	3,208.5	
1	Gas Lift Mandrel	4.335	2.331		L-80		4.10	3,208.5	3,212.6	
18	Tubing	2 7/8	2.441	6.50	L-80		557.95	3,212.6	3,770.5	
1	Gas Lift Mandrel	4.335	2.331		L-80		4.10	3,770.5	3,774.6	
17	Tubing	2 7/8	2.441	6.50	L-80		527.41	3,774.6	4,302.0	
1	Gas Lift Mandrel	4.335	2.331		L-80		4.10	4,302.0	4,306.1	
18	Tubing	2 7/8	2.441	6.50	L-80		555.06	4,306.1	4,861.2	
1	Gas Lift Mandrel	4.335	2.331		L-80		4.10	4,861.2	4,865.3	
18	Tubing	2 7/8	2.441	6.50	L-80		558.49	4,865.3	5,423.8	
1	Gas Lift Mandrel	4.335	2.331		L-80		4.10	5,423.8	5,427.9	
17	Tubing	2 7/8	2.441	6.50	L-80		528.83	5,427.9	5,956.7	
1	Gas Lift Mandrel	4.335	2.331		L-80		4.10	5,956.7	5,960.8	
18	Tubing	2 7/8	2.441	6.50	L-80		556.64	5,960.8	6,517.4	
1	Gas Lift Mandrel	4.335	2.331		L-80		4.10	6,517.4	6,521.5	
18	Tubing	2 7/8	2.441	6.50	L-80		557.74	6,521.5	7,079.3	
1	Gas Lift Mandrel	4.335	2.331		L-80		4.10	7,079.3	7,083.4	
17	Tubing	2 7/8	2.441	6.50	L-80		527.61	7,083.4	7,611.0	
1	Gas Lift Mandrel	4.335	2.331		L-80		4.10	7,611.0	7,615.1	
18	Tubing	2 7/8	2.441	6.50	L-80		557.39	7,615.1	8,172.5	
1	Gas Lift Mandrel	4.335	2.331		L-80		4.10	8,172.5	8,176.6	
15	Tubing	2 7/8	2.441	6.50	L-80		462.80	8,176.6	8,639.4	
1	Gas Lift Mandrel	4.335	2.331		L-80		4.10	8,639.4	8,643.5	
1	Tubing	2 7/8	2.441	6.50	L-80		29.92	8,643.5	8,673.4	
1	On-Off Tool w/ 2.313" BX Profile	4 1/2	2.313				1.80	8,673.4	8,675.2	
1	Baker Hornet Packer - 450-237	4 1/2	2.380				7.78	8,675.2	8,683.0	
1	Pup Joint	2 7/8	2.441	6.50	L-80		6.33	8,683.0	8,689.3	
1	'BX'N - 2.313 Seat Nipple w/ 2.205 NG	3 11/16	2.313				1.16	8,689.3	8,690.5	
1	Pup Joint	2 7/8	2.441	6.50	L-80		4.10	8,690.5	8,694.6	



Tubing Summary

Well Name SALADO DRAW 29-26-33 FED COM 003H	Lease Salado Draw 29-26-33 Fed	Field Name WILDCAT (HOBBS)	Business Unit Mid-Continent	
Ground Elevation (ft) 3,215.00	Original RKB Elevation (ft) 3,247.60	Current RKB Elevation 3,247.60, 9/18/2015	Mud Line Elevation (ft)	Water Depth (ft)
Current KB to Ground (ft) 32.60	Current KB to Mud Line (ft)	Current KB to Csg Flange (ft)	Current KB to Tubing Head (ft)	

Land - Original Hole, 4/11/2016 8:10:00 AM			
MD (ftKB)	TVD (ftKB)	Incl (°)	Vertical schematic (actual)
-1.1	-3.7	0.0	
-1.3	-3.3	0.0	
-1.6	-3.0	0.0	
-1.8	-2.8	0.0	
-2.2	-2.2	0.0	
-1.8	-1.8	0.0	
-1.4	-1.4	0.0	
-1.8	-1.0	0.0	
-0.8	-0.8	0.0	
-0.2	-0.2	0.0	
35.4	35.4	0.0	
861.9	841.5	0.6	
3,776.9	3,774.4	1.2	
4,765.1	4,764.0	2.9	
6,821.7	6,810.5	4.8	
8,865.4	8,851.0	4.5	
9,896.8	9,881.8	6.2	
9,792.1	9,180.5	92.1	
9,961.9	9,175.1	90.6	
10,188.1	9,181.2	86.9	
10,422.9	9,192.9	89.1	
10,660.1	9,192.4	90.3	
10,899.0	9,188.8	91.9	
11,140.1	9,187.1	89.9	
11,379.9	9,198.6	86.6	
11,626.1	9,211.0	86.5	
11,869.9	9,216.3	90.5	
12,108.1	9,211.2	91.1	
12,339.9	9,211.3	85.3	
12,586.1	9,220.2	87.4	
12,821.9	9,230.5	91.0	
13,064.9	9,228.1	90.2	
13,287.9	9,231.0	88.1	
13,536.1	9,238.9	88.3	
13,775.9	9,244.7	88.7	
14,020.9	9,248.0	90.5	
14,269.9	9,247.1	89.4	
14,509.9	9,248.2	91.5	
14,749.2	9,241.4	89.8	
14,989.9	9,240.3	87.8	
15,228.1	9,240.9	91.7	
15,469.9	9,241.5	91.3	
15,709.1	9,240.9	89.2	
15,949.9	9,244.0	89.5	
16,189.1	9,243.6	90.1	
16,429.9	9,243.8	89.9	
16,670.9	9,244.7	88.9	
16,909.9	9,247.9		

Jts	Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Top Thread	Len (ft)	Top (ftKB)	Btm (ftKB)
1	Shear Disc Sub	3.7	2.440				2.13	8,694.6	8,696.7
Rod Strings									
Rod Description		Planned Run?			Set Depth (ftKB)			Set Depth (TVD) (ftKB)	
Run Date		Run Job			Pull Date			Pull Job	
Rod Components									
Jts	Item Des	OD (in)	Grade	Model	Len (ft)	Top (ftKB)	Btm (ftKB)		