



PHOENIX
TECHNOLOGY SERVICES

March 28, 2019

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

RECEIVED

Dear District 2 - Artesia

MAY 01 2019

Re: Solaris Water Midstream
Trove Energy SWD #1
Eddy County, New Mexico
API #30-015-44422
Job No. 64135

DISTRICT II-ARTESIA O.C.D.

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	Drain Hole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
August Holt	1	601	15,281	1/28/19	3/7/19	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,

Brittany Carley

Brittany Carley
Operations Administrator

SURVEY DATA CERTIFICATION



PHOENIX
TECHNOLOGY SERVICES

Job #: 64135

Client: Solaris Water Midstream

County & State: Eddy Co., NM

Well: Trove Energy SWD #1

API No: 30-015-44422

Proposed Direction:

TIE-IN DATA

MD	TVD	INC	AZM	N/-S	E/-W	DATA SOURCE
540.00 ft	539.920 ft	1.5	140	-6.07	4.75	Gyro
Data Source Company:						Teledrift

SURVEY DATA

First Survey Date	First Survey Depth	INC	AZM
28-Jan-19	601 ft	1.20°	124.00°

Last Survey Date	Last Survey Depth	INC	AZM
7-Mar-19	15,281 ft	5.99°	8.90°

Projected TD Survey Date	Projected TD Survey Depth	INC	AZM
7-Mar-19	15,335 ft	5.99°	8.90°

Survey Instrument Type

P360 Tensor

CORRECTION INFORMATION

Magnetic Declination Used	7.05 degrees
Grid Convergence Used	0.16 degrees
Total Correction	6.90 degrees

Corrected to True/Grid North

Grid

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

August Holt 3/7/2019

Field Engineer Signature

Date

RECEIVED

MAY 01 2019

DISTRICT II-ARTESIA O.C.D.

Solaris MidStream

Eddy County, New Mexico (NAD 83)

Trove Energy SWD

1

OH / 64135

Survey: Phoenix MWD Surveys

Standard Survey Report

08 March, 2019

RECEIVED

MAY 01 2019

DISTRICT II-ARTESIA O.C.D.

Survey Report

Company:	Solaris MidStream	Local Co-ordinate Reference:	Well 1
Project:	Eddy County, New Mexico (NAD 83)	TVD Reference:	RKB @ 2998.00usft (Latshaw 21)
Site:	Trove Energy SWD	MD Reference:	RKB @ 2998.00usft (Latshaw 21)
Well:	1	North Reference:	Grid
Wellbore:	OH / 64135	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Latshaw 21)	Database:	USA Compass

Project	Eddy County, New Mexico (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Trove Energy SWD		
-------------	------------------	--	--

Site Position:		Northing:	441,361.90 usft	Latitude:	32° 12' 46.95523 N
From:	Map	Easting:	631,685.10 usft	Longitude:	104° 2' 28.32465 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.16 °

Well	1				
Well Position	+N/-S	0.00 usft	Northing:	441,361.90 usft	Latitude: 32° 12' 46.95523 N
	+E/-W	0.00 usft	Easting:	631,685.10 usft	Longitude: 104° 2' 28.32465 W
Position Uncertainty	0.00 usft		Wellhead Elevation:	usft	Ground Level: 2,966.00 usft

Wellbore	OH / 64135				
-----------------	------------	--	--	--	--

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	MVHD	1/31/2019	7.05	59.96	47,932.63559249

Design	Surveys (Latshaw 21)				
---------------	----------------------	--	--	--	--

Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	0.00

Survey Program	Date 3/8/2019				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
601.00	15,335.00	Phoenix MWD Surveys (OH / 64135)	MWD+HDGM	OWSG Rev.2 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)
540.00	1.50	140.00	539.92	-6.07	4.75	-6.07	0.00	0.00	0.00
Tie On									
601.00	1.20	124.00	600.90	-7.04	5.79	-7.04	0.79	-0.49	-26.23
First Phoenix MWD Survey									
696.00	1.40	134.50	695.88	-8.41	7.45	-8.41	0.33	0.21	11.05
791.00	1.40	133.10	790.85	-10.01	9.12	-10.01	0.04	0.00	-1.47
885.00	1.55	117.58	884.82	-11.39	11.09	-11.39	0.45	0.16	-16.51
980.00	0.24	214.51	979.81	-12.15	12.11	-12.15	1.68	-1.38	102.03
1,074.00	0.15	259.18	1,073.81	-12.33	11.88	-12.33	0.18	-0.10	47.52
1,169.00	0.37	256.63	1,168.81	-12.43	11.46	-12.43	0.23	0.23	-2.68

Survey Report

Company:	Solaris MidStream	Local Co-ordinate Reference:	Well 1
Project:	Eddy County, New Mexico (NAD 83)	TVD Reference:	RKB @ 2998.00usft (Latshaw 21)
Site:	Trove Energy SWD	MD Reference:	RKB @ 2998.00usft (Latshaw 21)
Well:	1	North Reference:	Grid
Wellbore:	OH / 64135	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Latshaw 21)	Database:	USA Compass

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)
1,263.00	0.26	241.22	1,262.81	-12.60	10.98	-12.60	0.15	-0.12	-16.39
1,358.00	0.63	246.03	1,357.80	-12.92	10.31	-12.92	0.39	0.39	5.06
1,454.00	0.51	241.82	1,453.80	-13.33	9.45	-13.33	0.13	-0.13	-4.39
1,549.00	0.30	326.10	1,548.80	-13.32	8.94	-13.32	0.60	-0.22	88.72
1,644.00	0.30	14.80	1,643.79	-12.88	8.87	-12.88	0.26	0.00	51.26
1,738.00	0.37	61.38	1,737.79	-12.49	9.19	-12.49	0.29	0.07	49.55
1,832.00	0.46	15.78	1,831.79	-11.99	9.56	-11.99	0.35	0.10	-48.51
1,927.00	0.37	41.31	1,926.79	-11.39	9.87	-11.39	0.21	-0.09	26.87
2,022.00	0.59	79.20	2,021.79	-11.07	10.55	-11.07	0.39	0.23	39.88
2,116.00	1.42	95.50	2,115.77	-11.09	12.19	-11.09	0.93	0.88	17.34
2,209.00	0.64	69.63	2,208.75	-11.02	13.82	-11.02	0.96	-0.84	-27.82
2,304.00	1.25	102.51	2,303.74	-11.06	15.33	-11.06	0.83	0.64	34.61
2,399.00	1.91	107.91	2,398.71	-11.77	17.85	-11.77	0.71	0.69	5.68
2,493.00	2.39	101.42	2,492.64	-12.64	21.26	-12.64	0.57	0.51	-6.90
2,586.00	1.81	83.74	2,585.58	-12.86	24.62	-12.86	0.93	-0.62	-19.01
2,765.00	1.47	72.23	2,764.50	-11.85	29.62	-11.85	0.26	-0.19	-6.43
2,859.00	0.79	37.15	2,858.49	-10.97	31.16	-10.97	1.00	-0.72	-37.32
2,952.00	0.76	13.94	2,951.48	-9.86	31.69	-9.86	0.34	-0.03	-24.96
3,046.00	0.98	334.34	3,045.47	-8.53	31.49	-8.53	0.66	0.23	-42.13
3,141.00	1.23	324.70	3,140.45	-6.96	30.55	-6.96	0.33	0.26	-10.15
3,237.00	1.09	304.77	3,236.43	-5.60	29.21	-5.60	0.44	-0.15	-20.76
3,332.00	0.92	301.25	3,331.42	-4.69	27.81	-4.69	0.19	-0.18	-3.71
3,427.00	0.90	302.73	3,426.40	-3.89	26.53	-3.89	0.03	-0.02	1.56
3,521.00	0.94	299.20	3,520.39	-3.12	25.24	-3.12	0.07	0.04	-3.76
3,615.00	0.79	297.52	3,614.38	-2.44	23.99	-2.44	0.16	-0.16	-1.79
3,711.00	0.77	296.12	3,710.37	-1.85	22.83	-1.85	0.03	-0.02	-1.46
3,806.00	0.82	298.25	3,805.36	-1.25	21.65	-1.25	0.06	0.05	2.24
3,901.00	0.83	301.81	3,900.35	-0.57	20.47	-0.57	0.05	0.01	3.75
3,995.00	0.76	303.69	3,994.34	0.14	19.37	0.14	0.08	-0.07	2.00
4,090.00	0.75	302.97	4,089.34	0.83	18.33	0.83	0.01	-0.01	-0.76
4,185.00	0.71	302.90	4,184.33	1.49	17.31	1.49	0.04	-0.04	-0.07
4,279.00	0.71	305.05	4,278.32	2.14	16.35	2.14	0.03	0.00	2.29
4,373.00	0.72	298.67	4,372.31	2.75	15.35	2.75	0.09	0.01	-6.79
4,468.00	0.68	294.64	4,467.31	3.28	14.32	3.28	0.07	-0.04	-4.24
4,563.00	0.67	290.14	4,562.30	3.70	13.28	3.70	0.06	-0.01	-4.74
4,658.00	0.75	296.89	4,657.29	4.17	12.21	4.17	0.12	0.08	7.11
4,753.00	0.73	285.57	4,752.29	4.62	11.07	4.62	0.16	-0.02	-11.92
4,847.00	0.78	283.66	4,846.28	4.93	9.87	4.93	0.06	0.05	-2.03
4,942.00	0.85	279.34	4,941.27	5.20	8.55	5.20	0.10	0.07	-4.55
5,037.00	0.90	272.82	5,036.26	5.35	7.10	5.35	0.12	0.05	-6.86
5,131.00	0.98	259.06	5,130.24	5.23	5.58	5.23	0.25	0.09	-14.64
5,226.00	1.07	263.39	5,225.23	4.98	3.90	4.98	0.12	0.09	4.56
5,321.00	0.98	260.82	5,320.21	4.74	2.22	4.74	0.11	-0.09	-2.71

Survey Report

Company:	Solaris MidStream	Local Co-ordinate Reference:	Well 1
Project:	Eddy County, New Mexico (NAD 83)	TVD Reference:	RKB @ 2998.00usft (Latshaw 21)
Site:	Trove Energy SWD	MD Reference:	RKB @ 2998.00usft (Latshaw 21)
Well:	1	North Reference:	Grid
Wellbore:	OH / 64135	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Latshaw 21)	Database:	USA Compass

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)	
5,415.00	1.01	254.97	5,414.20	4.40	0.62	4.40	0.11	0.03	-6.22	
5,511.00	1.05	248.49	5,510.18	3.86	-1.01	3.86	0.13	0.04	-6.75	
5,605.00	1.08	247.92	5,604.17	3.21	-2.63	3.21	0.03	0.03	-0.61	
5,701.00	1.05	241.84	5,700.15	2.45	-4.25	2.45	0.12	-0.03	-6.33	
5,795.00	1.08	242.77	5,794.13	1.64	-5.80	1.64	0.04	0.03	0.99	
5,885.00	1.08	241.59	5,884.12	0.85	-7.30	0.85	0.02	0.00	-1.31	
5,948.00	1.12	237.03	5,947.11	0.23	-8.33	0.23	0.15	0.06	-7.24	
6,044.00	1.15	234.12	6,043.09	-0.84	-9.90	-0.84	0.07	0.03	-3.03	
6,139.00	1.26	228.42	6,138.07	-2.09	-11.46	-2.09	0.17	0.12	-6.00	
6,234.00	1.24	234.19	6,233.04	-3.39	-13.07	-3.39	0.13	-0.02	6.07	
6,330.00	1.26	236.41	6,329.02	-4.58	-14.79	-4.58	0.05	0.02	2.31	
6,424.00	1.08	263.78	6,423.00	-5.25	-16.53	-5.25	0.62	-0.19	29.12	
6,518.00	1.45	307.51	6,516.98	-4.62	-18.36	-4.62	1.07	0.39	46.52	
6,614.00	1.78	302.89	6,612.94	-3.07	-20.57	-3.07	0.37	0.34	-4.81	
6,709.00	2.10	307.10	6,707.89	-1.22	-23.20	-1.22	0.37	0.34	4.43	
6,804.00	3.30	310.60	6,802.78	1.61	-26.67	1.61	1.27	1.26	3.68	
6,898.00	4.85	309.21	6,896.54	5.88	-31.80	5.88	1.65	1.65	-1.48	
6,991.00	4.57	324.24	6,989.23	11.38	-37.01	11.38	1.36	-0.30	16.16	
7,086.00	4.54	332.24	7,083.93	17.77	-40.97	17.77	0.67	-0.03	8.42	
7,180.00	4.71	336.29	7,177.63	24.60	-44.26	24.60	0.39	0.18	4.31	
7,276.00	4.56	337.43	7,273.31	31.73	-47.31	31.73	0.18	-0.16	1.19	
7,371.00	4.49	338.21	7,368.02	38.67	-50.14	38.67	0.10	-0.07	0.82	
7,466.00	4.11	337.24	7,462.75	45.26	-52.84	45.26	0.41	-0.40	-1.02	
7,560.00	2.77	339.68	7,556.58	50.50	-54.93	50.50	1.43	-1.43	2.60	
7,653.00	3.03	340.46	7,649.46	54.92	-56.53	54.92	0.28	0.28	0.84	
7,748.00	1.89	353.01	7,744.37	58.85	-57.56	58.85	1.32	-1.20	13.21	
7,844.00	1.04	5.49	7,840.34	61.28	-57.67	61.28	0.94	-0.89	13.00	
7,939.00	0.52	58.15	7,935.33	62.37	-57.22	62.37	0.88	-0.55	55.43	
8,034.00	0.60	69.84	8,030.32	62.77	-56.39	62.77	0.15	0.08	12.31	
8,129.00	0.63	76.94	8,125.32	63.06	-55.41	63.06	0.09	0.03	7.47	
8,223.00	0.56	77.81	8,219.31	63.27	-54.46	63.27	0.08	-0.07	0.93	
8,318.00	0.40	46.62	8,314.31	63.60	-53.76	63.60	0.32	-0.17	-32.83	
8,413.00	0.41	20.84	8,409.31	64.14	-53.40	64.14	0.19	0.01	-27.14	
8,508.00	0.40	7.88	8,504.31	64.79	-53.24	64.79	0.10	-0.01	-13.64	
8,603.00	0.51	355.40	8,599.30	65.54	-53.22	65.54	0.16	0.12	-13.14	
8,698.00	0.26	340.56	8,694.30	66.16	-53.33	66.16	0.28	-0.26	-15.62	
8,792.00	0.34	254.69	8,788.30	66.29	-53.67	66.29	0.44	0.09	-91.35	
8,885.00	0.48	196.99	8,881.30	65.85	-54.05	65.85	0.45	0.15	-62.04	
8,977.00	0.59	197.38	8,973.29	65.03	-54.30	65.03	0.12	0.12	0.42	
9,072.00	0.68	214.97	9,068.29	64.10	-54.77	64.10	0.22	0.09	18.52	
9,165.00	0.74	210.92	9,161.28	63.13	-55.40	63.13	0.08	0.06	-4.35	
9,260.00	0.72	197.79	9,256.27	62.03	-55.90	62.03	0.18	-0.02	-13.82	
9,352.00	0.75	207.73	9,348.27	60.95	-56.35	60.95	0.14	0.03	10.80	
9,447.00	0.83	202.84	9,443.26	59.77	-56.91	59.77	0.11	0.08	-5.15	

Survey Report

Company:	Solaris MidStream	Local Co-ordinate Reference:	Well 1
Project:	Eddy County, New Mexico (NAD 83)	TVD Reference:	RKB @ 2998.00usft (Latshaw 21)
Site:	Trove Energy SWD	MD Reference:	RKB @ 2998.00usft (Latshaw 21)
Well:	1	North Reference:	Grid
Wellbore:	OH / 64135	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Latshaw 21)	Database:	USA Compass

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)
9,542.00	1.00	200.59	9,538.25	58.36	-57.47	58.36	0.18	0.18	-2.37
9,637.00	1.05	196.69	9,633.23	56.75	-58.01	56.75	0.09	0.05	-4.11
9,733.00	1.18	187.33	9,729.21	54.92	-58.39	54.92	0.23	0.14	-9.75
9,829.00	1.31	188.34	9,825.19	52.86	-58.67	52.86	0.14	0.14	1.05
9,924.00	1.43	174.10	9,920.16	50.60	-58.71	50.60	0.38	0.13	-14.99
10,036.00	1.86	154.51	10,032.12	47.57	-57.78	47.57	0.63	0.38	-17.49
10,130.00	1.96	151.45	10,126.06	44.78	-56.36	44.78	0.15	0.11	-3.26
10,225.00	1.47	195.91	10,221.03	42.19	-55.92	42.19	1.45	-0.52	46.80
10,319.00	0.94	209.91	10,315.00	40.36	-56.63	40.36	0.64	-0.56	14.89
10,415.00	0.81	231.38	10,410.99	39.25	-57.55	39.25	0.36	-0.14	22.36
10,508.00	1.15	215.00	10,503.98	38.08	-58.60	38.08	0.47	0.37	-17.61
10,603.00	1.09	206.50	10,598.96	36.49	-59.55	36.49	0.19	-0.06	-8.95
10,697.00	1.21	213.26	10,692.94	34.86	-60.50	34.86	0.19	0.13	7.19
10,791.00	1.18	199.49	10,786.92	33.11	-61.36	33.11	0.31	-0.03	-14.65
10,885.00	1.06	201.13	10,880.91	31.39	-62.00	31.39	0.13	-0.13	1.74
10,980.00	0.94	214.30	10,975.89	29.93	-62.76	29.93	0.27	-0.13	13.86
11,076.00	1.03	224.00	11,071.88	28.66	-63.80	28.66	0.20	0.09	10.10
11,169.00	1.07	237.23	11,164.86	27.59	-65.11	27.59	0.26	0.04	14.23
11,263.00	1.16	242.62	11,258.84	26.67	-66.69	26.67	0.15	0.10	5.73
11,358.00	1.12	248.62	11,353.82	25.89	-68.41	25.89	0.13	-0.04	6.32
11,451.00	0.88	255.57	11,446.81	25.38	-69.95	25.38	0.29	-0.26	7.47
11,545.00	0.60	270.78	11,540.80	25.21	-71.14	25.21	0.36	-0.30	16.18
11,640.00	0.75	342.64	11,635.80	25.81	-71.82	25.81	0.84	0.16	75.64
11,736.00	0.70	327.46	11,731.79	26.90	-72.33	26.90	0.21	-0.05	-15.81
11,831.00	0.66	329.89	11,826.78	27.87	-72.91	27.87	0.05	-0.04	2.56
11,925.00	0.83	322.71	11,920.78	28.88	-73.60	28.88	0.21	0.18	-7.64
12,021.00	0.85	330.97	12,016.76	30.05	-74.36	30.05	0.13	0.02	8.60
12,115.00	0.83	328.38	12,110.75	31.24	-75.06	31.24	0.05	-0.02	-2.76
12,208.00	0.90	331.10	12,203.74	32.45	-75.76	32.45	0.09	0.08	2.92
12,303.00	0.99	324.78	12,298.73	33.78	-76.60	33.78	0.14	0.09	-6.65
12,398.00	1.11	330.98	12,393.72	35.25	-77.52	35.25	0.17	0.13	6.53
12,492.00	1.18	333.19	12,487.70	36.91	-78.40	36.91	0.09	0.07	2.35
12,588.00	1.12	325.09	12,583.68	38.56	-79.38	38.56	0.18	-0.06	-8.44
12,682.00	1.04	308.67	12,677.66	39.85	-80.57	39.85	0.34	-0.09	-17.47
12,770.00	1.00	303.39	12,765.65	40.77	-81.84	40.77	0.12	-0.05	-6.00
12,864.00	0.99	309.99	12,859.63	41.75	-83.14	41.75	0.12	-0.01	7.02
12,960.00	1.00	306.99	12,955.62	42.78	-84.45	42.78	0.06	0.01	-3.13
13,056.00	1.19	303.33	13,051.60	43.83	-85.95	43.83	0.21	0.20	-3.81
13,151.00	1.28	306.32	13,146.58	45.01	-87.63	45.01	0.12	0.09	3.15
13,246.00	1.40	307.46	13,241.55	46.34	-89.40	46.34	0.13	0.13	1.20
13,340.00	1.55	309.09	13,335.52	47.84	-91.30	47.84	0.17	0.16	1.73
13,435.00	1.68	310.58	13,430.48	49.56	-93.36	49.56	0.14	0.14	1.57
13,530.00	1.99	313.30	13,525.43	51.59	-95.62	51.59	0.34	0.33	2.86

Survey Report

Company:	Solaris MidStream	Local Co-ordinate Reference:	Well 1
Project:	Eddy County, New Mexico (NAD 83)	TVD Reference:	RKB @ 2998.00usft (Latshaw 21)
Site:	Trove Energy SWD	MD Reference:	RKB @ 2998.00usft (Latshaw 21)
Well:	1	North Reference:	Grid
Wellbore:	OH / 64135	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Latshaw 21)	Database:	USA Compass

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)
13,625.00	2.49	317.20	13,620.36	54.24	-98.22	54.24	0.55	0.53	4.11
13,720.00	3.16	317.39	13,715.25	57.68	-101.39	57.68	0.71	0.71	0.20
13,814.00	2.35	329.60	13,809.14	61.25	-104.12	61.25	1.06	-0.86	12.99
13,909.00	2.88	328.13	13,904.04	64.96	-106.37	64.96	0.56	0.56	-1.55
14,003.00	3.28	328.93	13,997.90	69.26	-109.00	69.26	0.43	0.43	0.85
14,097.00	3.53	327.19	14,091.74	74.00	-111.96	74.00	0.29	0.27	-1.85
14,192.00	3.72	331.63	14,186.55	79.17	-115.01	79.17	0.36	0.20	4.67
14,314.00	4.72	335.35	14,308.21	87.21	-118.98	87.21	0.85	0.82	3.05
14,409.00	4.73	322.83	14,402.89	93.89	-122.98	93.89	1.08	0.01	-13.18
14,504.00	5.53	325.30	14,497.51	100.77	-127.95	100.77	0.87	0.84	2.60
14,599.00	6.65	332.68	14,591.98	109.42	-133.08	109.42	1.44	1.18	7.77
14,693.00	5.58	342.95	14,685.44	118.63	-136.92	118.63	1.62	-1.14	10.93
14,788.00	4.54	354.25	14,780.07	126.79	-138.65	126.79	1.51	-1.09	11.89
14,882.00	4.82	1.61	14,873.76	134.44	-138.91	134.44	0.70	0.30	7.83
14,977.00	4.89	4.15	14,968.42	142.46	-138.51	142.46	0.24	0.07	2.67
15,072.00	5.22	6.46	15,063.05	150.80	-137.73	150.80	0.41	0.35	2.43
15,167.00	5.12	10.18	15,157.66	159.26	-136.49	159.26	0.37	-0.11	3.92
15,262.00	5.87	8.65	15,252.23	168.24	-135.01	168.24	0.80	0.79	-1.61
15,281.00	5.99	8.90	15,271.13	170.18	-134.71	170.18	0.65	0.63	1.32
Final Phoenix MWD Survey									
15,335.00	5.99	8.90	15,324.83	175.74	-133.84	175.74	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)	
540.00	539.92	-6.07	4.75	Tie On
601.00	600.90	-7.04	5.79	First Phoenix MWD Survey
15,281.00	15,271.13	170.18	-134.71	Final Phoenix MWD Survey
15,335.00	15,324.83	175.74	-133.84	Projection to TD