BLACK VIPER
ENERGY SERVICES, LTD.

Phone: 432.561.8801
Fax: 432.561.8870
P. O. Box 2552
Midland, Texas 79702

Well Completion Report

Pogo Producing
University 20-11A, #4H
University Land, Section 11, Block 20
Winkler County, Texas
API Number 42-495-33162

August 22, 2006

BLACK VIPER
ENERGY SERVICES, LTD.

Phone: 432.561.8801
Fax: 432.561.8870
P. O. Box 2552
Midland, Texas 79702

August 22, 2006

Railroad Commission of Texas
Oil & Gas Division
Attention: Cathy Garrison
P.O. Box 12967
Capital Station
Austin, Texas 78711

Re: Customer: Pogo Producing
Well Name: University 20-11 #4H
Survey Type: University Land
County: Winkler County, Texas
API No.: 42-495-33162

Ms. Garrison,

Enclosed, please find the original and two copies of the survey performed on the referenced well by Black Viper Energy Services, LTD. Other information required by your office is as follows:

Name & Title of Surveyor	Drainhole Number	Surveyed Depths	Dates Performed	Type of Survey
Art Seligman MWD Engineer	Drain Hole #1	11,458' –13,129'	05/11/06-05/30/06	MWD

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (or unit line 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.

Tim LeMoine
Well Plan Engineer
Black Viper Energy Services, LTD.
Midland, Texas

Enclosures
CC: Pogo Producing

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ENERGY SERVICES, LTD.

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Midland, Texas 79702

SURVEY CERTIFICATION SHEET

STATE OF TEXAS
COUNTY OF MIDLAND

I, Art Seligman, certify that; I am employed by Black Viper Energy Services, LTD.; that I did on the day(s) of 05/11/06 to 05/30/06 conduct or supervise the taking of a MWD survey from a depth of 11,458 feet to a depth of 13,129 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Black Viper Energy Services, LTD.; that I am authorized and qualified to make this report; that this survey was conducted at the request of Pogo Producing for the University 20-11A, #4H , API # 42-495-33162 in Winkler County, Texas; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Black Viper Energy Services, LTD.

Art Seligman
Surveyor

Pogo Producing Company

Winkler County, TX
University 20-11A #4H
University 20-11A #4H
Lateral #1

Survey: MWD Survey #1

Standard Survey Report

22 August, 2006

BLACK VIPER
ENERGY SERVICES, LTD.

Black Viper Energy

Survey Report

Company:	Pogo Producing Company	**Local Co-ordinate Reference:**	Well University 20-11A #4H
Project:	Winkler County, TX	**TVD Reference:**	WELL @ 0.00ft (Original Well Elev)
Site:	University 20-11A #4H	**MD Reference:**	WELL @ 0.00ft (Original Well Elev)
Well:	University 20-11A #4H	**North Reference:**	Grid
Wellbore:	Lateral #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Lateral #1	**Database:**	EDM 2003.14 Server Db

Project	Winkler County, TX		
Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Texas Central 4203		

Site	University 20-11A #4H				
Site Position:		**Northing:**	762,951.28 ft	**Latitude:**	31° 43' 50.669 N
From:	Map	**Easting:**	1,079,435.61 ft	**Longitude:**	103° 17' 40.291 W
Position Uncertainty:	0 00 ft	**Slot Radius:**	"	**Grid Convergence:**	-1.53 °

Well	University 20-11A #4H					
Well Position	**+N/-S**	0.00 ft	**Northing:**	762,951.28 ft	**Latitude:**	31° 43' 50.669 N
	+E/-W	0.00 ft	**Easting:**	1,079,435.61 ft	**Longitude:**	103° 17' 40.291 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	0.00 ft

Wellbore	Lateral #1			
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF200510	4/28/2006	8.02	59.90	48,903

Design	Lateral #1				
Audit Notes:					
Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	11,375.00
Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**	
	0.00	0 00	0.00	81.89	

Survey Program **Date** 5/31/2006

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
100.00	11,375 00	Gyro Survey #1 (OH)	GM	Gyro MultiShot
11,458.00	13,129 00	MWD Survey #1 (Lateral #1)	MWD	Standard MWD

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
11,375.00	1.49	227.05	11,372.48	4.03	93 07	92.71	0.00	0.00	0.00 OK
11,458 00	6 70	338.80	11,455.30	7.81	90 53	90.73	8.89	6.28	134.64
First MWD Survey									
11,490.00	12 60	328.80	11,486.84	12.54	88.04	88 93	19.10	18.44	-31.25
11,522.00	19.00	328.70	11,517.61	19.99	83.52	85.51	20.00	20.00	-0.31
11,543.00	21 70	329.30	11,537.30	26.25	79.76	82.67	12.90	12.86	2.86
11,558.00	25 70	328.80	11,551.03	31.42	76 66	80.33	26 70	26.67	-3.33
11,575.00	28 90	326.30	11,566.14	37.99	72 47	77.11	19.99	18 82	-14.71
11,607 00	34 70	327.90	11,593.32	52.15	63 33	70.06	18 31	18.13	5 00
11,638.00	40.60	329.90	11,617.86	68.37	53 58	62.69	19 43	19.03	6.45
11,670.00	49.40	327.80	11,640.46	87.70	41.86	53.81	27.89	27 50	-6.56
11,702.00	57 40	329.90	11,659.53	109.67	28 60	43.79	25 55	25.00	6.56

Company:	Pogo Producing Company	**Local Co-ordinate Reference:**	Well University 20-11A #4H
Project:	Winkler County, TX	**TVD Reference:**	WELL @ 0.00ft (Original Well Elev)
Site:	University 20-11A #4H	**MD Reference:**	WELL @ 0.00ft (Original Well Elev)
Well:	University 20-11A #4H	**North Reference:**	Grid
Wellbore:	Lateral #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Lateral #1	**Database:**	EDM 2003.14 Server Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
11,734.00	66 40	329.80	11,674.58	134.06	14.44	33.20	28 13	28 13	-0.31
11,765.00	73 90	330.70	11,685 10	159.36	-0.02	22 46	24.35	24.19	2.90
11,775.00	76.70	330.20	11,687.64	167.77	-4.79	18.93	28.41	28.00	-5.00
11,797.00	83 30	330.90	11,691.46	186.63	-15.43	11.05	30 16	30.00	3.18
11,829.00	89 60	333.90	11,693.44	214.92	-30.22	0.40	21.80	19 69	9.38
11,861.00	89 60	334.10	11,693.66	243 68	-44 24	-9.43	0.62	0 00	0.63
11,892.00	89 80	334 80	11,693.83	271.64	-57.61	-18.72	2 35	0.65	2.26
11,924 00	90.60	335.50	11,693.71	300.68	-71.06	-27.94	3.32	2.50	2.19
11,956.00	91 80	336.60	11,693.04	329.92	-84.05	-36.67	5.09	3 75	3.44
11,988 00	93 00	337.00	11,691.70	359.30	-96.64	-44.99	3 95	3.75	1.25
12,019.00	93 00	337.20	11,690.08	387.82	-108.69	-52.90	0.64	0.00	0.65
12,051.00	92 50	337.40	11,688.55	417 31	-121.02	-60.95	1.68	-1.56	0 63
12,083.00	92 60	338.00	11,687 12	446.89	-133.15	-68.78	1.90	0 31	1.88
12,115.00	92.40	337.90	11,685.73	476.52	-145.16	-76.49	0 70	-0.63	-0.31
12,147.00	92 00	339.40	11,684.50	506.30	-156.80	-83.81	4 85	-1.25	4.69
12,178.00	91 60	340.00	11,683.52	535.36	-167.55	-90.35	2.33	-1.29	1.94
12,209.00	91 70	340.70	11,682 63	564.54	-177.97	-96.55	2.28	0.32	2.26
12,241 00	92 00	341.50	11,681.60	594 80	-188.33	-102.54	2 67	0.94	2.50
12,273.00	92.10	342.30	11,680.45	625 20	-198 26	-108.09	2.52	0.31	2 50
12,305 00	91.90	342.90	11,679.34	655.71	-207 83	-113.25	1.98	-0.63	1.88
12,337.00	91.50	342.90	11,678.39	686.28	-217.23	-118.25	1.25	-1 25	0.00
12,368.00	91.30	342.60	11,677.63	715.88	-226.42	-123.17	1.16	-0.65	-0.97
12,400 00	91 10	342.60	11,676.96	746.41	-235 99	-128.34	0 63	-0 63	0.00
12,432.00	91.10	342.60	11,676.35	776.94	-245 56	-133.50	0.00	0.00	0.00
12,463.00	90 90	343.00	11,675.80	806.55	-254 72	-138.40	1 44	-0.65	1.29
12,495.00	90 90	342.80	11,675.30	837.13	-264 13	-143.40	0.62	0.00	-0.63
12,526 00	90.90	343.00	11,674.82	866 76	-273 24	-148.24	0 65	0.00	0.65
12,559.00	91 00	343.40	11,674.27	898.34	-282.78	-153.23	1.25	0.30	1.21
12,591.00	90.70	343.20	11,673.79	928.99	-291.97	-158.01	1.13	-0 94	-0.63
12,622.00	90 40	343.10	11,673.50	958.66	-300.96	-162.72	1 02	-0.97	-0.32
12,686.00	89.30	341.20	11,673.66	1,019.57	-320.58	-173.55	3.43	-1 72	-2.97
12,748.00	90 00	342.50	11,674.04	1,078.49	-339.89	-184.36	2 38	1.13	2 10
12,780.00	90 30	343.00	11,673.96	1,109.05	-349 38	-189.44	1 82	0.94	1.56
12,811.00	90.30	343.00	11,673.80	1,138.69	-358.44	-194.23	0.00	0.00	0.00
12,843.00	89.80	341.80	11,673.77	1,169.19	-368.12	-199.51	4 06	-1.56	-3.75
12,875.00	89 10	340.50	11,674.08	1,199.47	-378.45	-205.47	4 61	-2.19	-4.06
12,906 00	88 90	340.10	11,674.62	1,228.66	-388.90	-211.70	1.44	-0.65	-1 29
12,938 00	89 30	341.60	11,675.12	1,258.88	-399.40	-217.83	4.85	1.25	4 69
12,970.00	89.80	341.80	11,675.37	1,289 26	-409.45	-223.49	1.68	1 56	0.63
13,002 00	89 00	342.00	11,675.71	1,319.68	-419.39	-229.04	2.58	-2.50	0.63
13,033.00	88 90	342.60	11,676.27	1,349.20	-428.81	-234.20	1.96	-0.32	1.94
13,065 00	88 80	342.90	11,676.92	1,379.76	-438.30	-239.28	0.99	-0 31	0.94
13,097.00	88 70	343.00	11,677.61	1,410.34	-447.68	-244.26	0 44	-0.31	0.31
13,129.00	88 80	343.10	11,678.31	1,440.95	-457.01	-249.17	0 44	0.31	0 31

Last MWD Survey

Company:	Pogo Producing Company	**Local Co-ordinate Reference:**	Well University 20-11A #4H
Project:	Winkler County, TX	**TVD Reference:**	WELL @ 0.00ft (Original Well Elev)
Site:	University 20-11A #4H	**MD Reference:**	WELL @ 0.00ft (Original Well Elev)
Well:	University 20-11A #4H	**North Reference:**	Grid
Wellbore:	Lateral #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Lateral #1	**Database:**	EDM 2003.14 Server Db

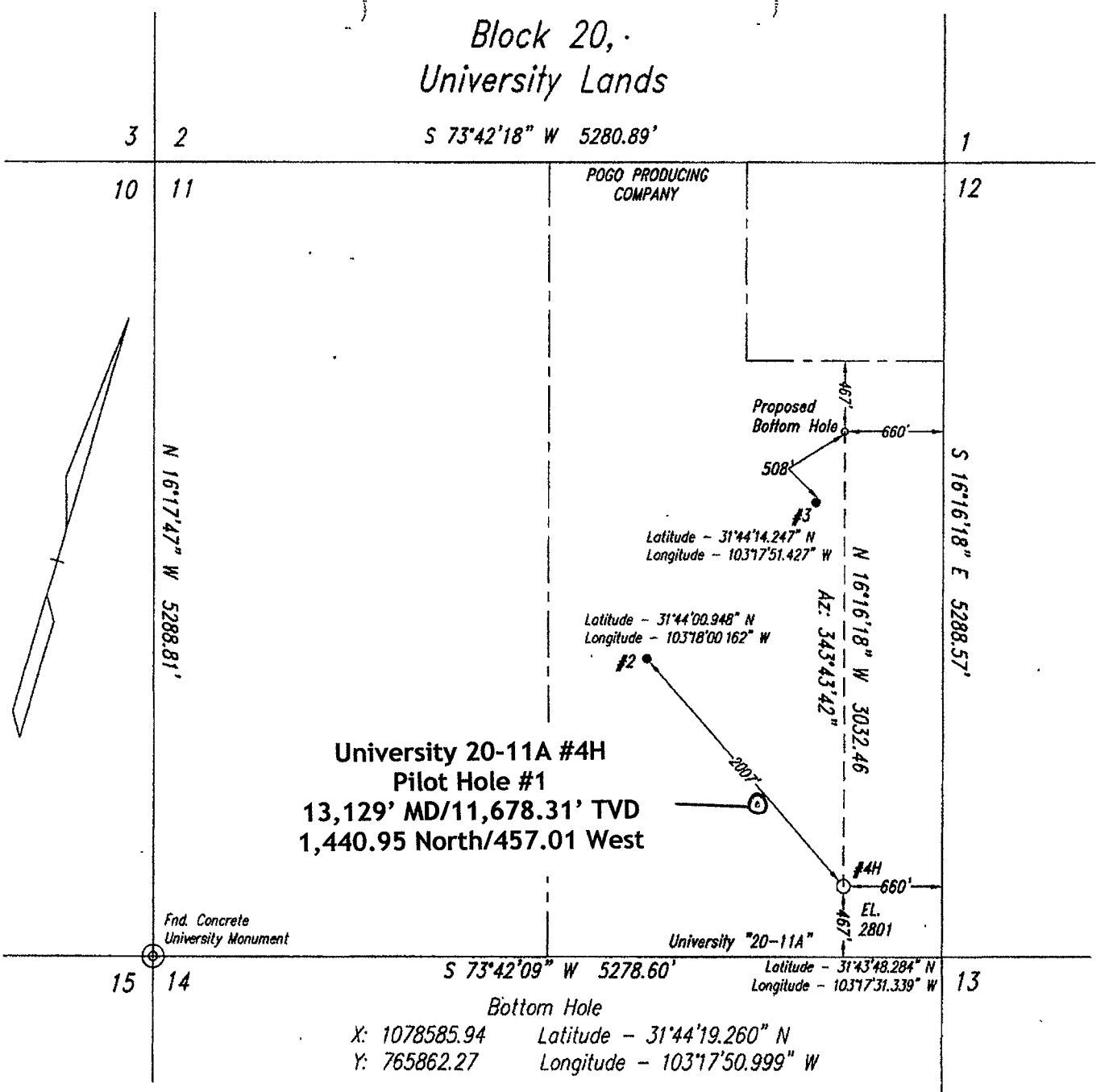
Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL(U20-11A) - survey misses by 1521 67ft at 13129.00ft MD (11678 31 TVD, 1440.95 N, -457.01 E) - Point	0 00	0.00	11,695.00	2,910.99	-849 67	765,862.27	1,078,585.94	31° 44' 19 244 N	103° 17' 51 023 W

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
11,458 00	11,455.30	7.81	90.53	First MWD Survey
13,129.00	11,678.31	1,440 95	-457 01	Last MWD Survey

Checked By: _____ Approved By: _____ Date: _____



Note: All bearings and coordinates shown are based on the Texas Coordinate System of 1927, Central Zone.
A combined grid factor of 0.9998276 must be divided into Section Line distances to obtain a true horizontal distance.
Note: Example: (S-99999) indicates General Land Office file number.
Note: NAD '27 Coordinates & Latitude/Longitude on well location in Section 11.
Note: Well location is approximately 15 miles southwest of Kermit.

#4H
X: 1079435.61
Y: 762951.28
Latitude - 31°43'50.685" N
Longitude - 103°17'40.266" W

Plat

POGO PRODUCING COMPANY
University "20-11A" Lease
E/2 less the NE/4 of the NE/4 of
Section 11, Block 20,
University Land,
Winkler County, Texas

Scale: 1" = 1000'

January 28, 2006
060128S

Scientific Drilling

Scientific Drilling International, Inc.
2034 Trade Drive • Midland, Texas 79703
P. O. Box 9699 • Midland, Texas 79708
Tel: 432-563-1339 • Fax: 432-697-0324

27 August 2006

Diane Crum
Railroad Commission of Texas
Oil & Gas Division
P.O. Box 12967
Austin, Texas 78711

Subject:

Company:	Pogo Productin
Lease Name:	University 20-11A, Well #4
RRC Lease ID No.:	Not Assigned
Field Name:	Block 20
Survey Co.:	UL
County:	Winkler
API No:	42-495-33162

Enclosed, please find the original and one copy of the survey performed on the above referenced well by Scientific Drilling International (P-5 No. 758300). Other information required by your office is as follows:

Name & Title of Surveyor	Surveyed Depths	Dates Performed	Type of Survey
Robert Gonzales Field Technician	0'-11375'	05/02/06	Keeper Gyro

A Certified plat on which the bottom hole location is oriented to the surface location is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Regards,

Becky Wharton

Enclosures

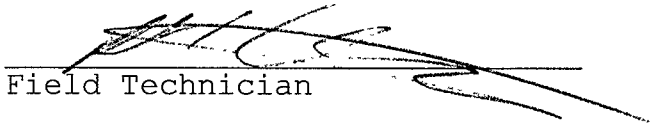
cc:

CERTIFIED MAIL™

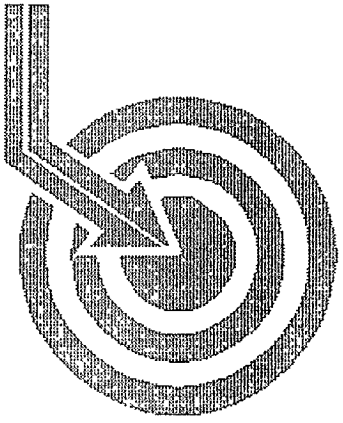
7005 2570 0001 1063 9970

State of Texas
County of Midland

I, __Robert Gonzales____, certify that; I am employed by Scientific Drilling International; that I did on the day(s) of __05/02/06_ through __05/02/06__ conduct or supervise the taking of a ____Keeper Gyro_____ survey from a depth of ___0____ feet to a depth of ___11375__ feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Scientific Drilling International; that I am authorized and qualified to make this report; that this survey was conducted at the request of ____Pogo Producting_____ for the __University 20-11A #4_____ Well, API#___42-495-33162_____ in __Winkler_____ County, Texas; and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by Scientific Drilling International.



Field Technician



Scientific Drilling

POGO

Field: Block 20
Site: Winkler County, Texas
Well: University 20-11A #4
Wellpath: VH - Job #32K0506359
Survey: 05/02/06

This survey is correct to the best of my knowledge and is supported by actual field data.

_____ **Company Representative**

Scientific Drilling

Scientific Drilling International
Survey Report

Company:	POGO	**Date:** 08/24/2006	**Time:** 19:33:47	**Page:**	1
Field:	Block 20	**Co-ordinate(NE) Reference:**	Site: Winkler County, Texas, Grid North		
Site:	Winkler County, Texas	**Vertical (TVD) Reference:**	SITE 0.0		
Well:	University 20-11A #4	**Section (VS) Reference:**	Well (0.00N,0.00E,343.73Azi)		
Wellpath:	VH - Job #32K0506359	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase

Survey:	05/02/06 KSRG 0'-11375'	**Start Date:**	05/02/2006
Company:	Scientific Drilling Internatio	**Engineer:**	Gonzales w/P&M
Tool:	Keeper;Keeper Gyro	**Tied-to:**	From Surface

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
0.00	0 00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.32	301.95	100.00	0.21	0.15	-0.24	0 32	0.28	301.95
200.00	0.32	301.35	200.00	0.62	0.44	-0.71	0.00	0.84	301.75
300.00	0.66	11.94	299.99	1.34	1.15	-0.83	0.63	1.42	324.12
400.00	0.63	17.08	399.99	2.30	2.24	-0.55	0.07	2.31	346.17
500.00	0.69	15.41	499.98	3.27	3.34	-0.23	0.06	3.35	356.07
600 00	0.91	13.73	599.97	4 48	4.70	0.12	0.22	4.70	1.45
700.00	0.85	20.05	699.96	5.76	6.16	0.56	0.11	6.19	5.21
800.00	0 92	13.44	799.95	7.06	7.64	1.00	0.12	7.71	7.47
900.00	0.87	21 82	899.94	8.35	9.13	1.47	0.14	9 25	9 16
1000.00	0.58	20.99	999.93	9.35	10.31	1.93	0.29	10.49	10.63
1100.00	0.53	18.46	1099.92	10.13	11.22	2.26	0.06	11.44	11.40
1200.00	0.47	9.65	1199.92	10.88	12.06	2.48	0.10	12.31	11.61
1300.00	0.59	7.59	1299.92	11.72	12.97	2.61	0.12	13.24	11.39
1400.00	0.59	12.15	1399.91	12.65	13.99	2.79	0.05	14.26	11.28
1500.00	0 72	37.99	1499.90	13.47	14.99	3.29	0.32	15.34	12.37
1600.00	0 93	53.23	1599.89	14.12	15 97	4.32	0.30	16.54	15.15
1700.00	1.17	56.09	1699.88	14.71	17.02	5.82	0.25	17.99	18.88
1800.00	1.32	54.66	1799.85	15.40	18.26	7.61	0.15	19.78	22.62
1900.00	1 44	55.57	1899.82	16.16	19 64	9.58	0 12	21.85	26.01
2000.00	1.56	58.52	1999.79	16.91	21.06	11.78	0.14	24.13	29.23
2100.00	1 94	60.16	2099.74	17.67	22.61	14.41	0.38	26.81	32.51
2200.00	2.02	62.06	2199.68	18.42	24.28	17.43	0.10	29.89	35.68
2300 00	2.25	61.78	2299.61	19.18	26.03	20.72	0.23	33.27	38.52
2400.00	2.20	64.98	2399.54	19.88	27.77	24.19	0.13	36.83	41.06
2500.00	2.32	63.06	2499.46	20.55	29.50	27.73	0.14	40.49	43.23
2600 00	2.30	63.47	2599.38	21.28	31.31	31.33	0.03	44.30	45.02
2700.00	2.13	66.79	2699.30	21.86	32.94	34.84	0.21	47.95	46.60
2800 00	1.96	66.57	2799.24	22.30	34.35	38.11	0.17	51.31	47.97
2900.00	1.85	67 16	2899.19	22.70	35.66	41.17	0.11	54.47	49.10
3000 00	1 86	68 35	2999.13	23.04	36.89	44.17	0.04	57.54	50.13
3100.00	2.12	69.24	3099.07	23.33	38.14	47.40	0.26	60.84	51.18
3200 00	2.18	69.70	3199.00	23.61	39.46	50.92	0.06	64.42	52.23
3300.00	2.18	71.37	3298.93	23.82	40.72	54.50	0.06	68.04	53.23
3400.00	1.64	67.66	3398.87	24.05	41.88	57.63	0.55	71.24	54.00
3500.00	1.40	52.27	3498.84	24.65	43 17	59.92	0.47	73.85	54.23
3600.00	1.49	47.49	3598.81	25.67	44.79	61.84	0.15	76.36	54.08
3700.00	1 83	58.31	3698.77	26.67	46.51	64.16	0.46	79.25	54.06
3800.00	2.11	64.13	3798.71	27.40	48.15	67.18	0.34	82.65	54.37
3900.00	2 34	65.57	3898.63	28.00	49 80	70.69	0.24	86.47	54.84
4000.00	2.05	67.57	3998.56	28.48	51.33	74.20	0.30	90.22	55.33
4100.00	2.17	56.04	4098.49	29.25	53.07	77.43	0.44	93.87	55.57
4200.00	1.75	54.76	4198.43	30.32	55.01	80.24	0.42	97.29	55.57
4300.00	1.13	56.68	4298.40	31.11	56.43	82.32	0.62	99.80	55.57
4400.00	1.01	65.09	4398.38	31.53	57.34	83.94	0.20	101.65	55.66
4500.00	1.10	85.92	4498.37	31.46	57.78	85.70	0.39	103.36	56.01
4600.00	0.94	110.71	4598.35	30.76	57.56	87.42	0.46	104.67	56.64
4700.00	0 90	112.68	4698.34	29.77	56.97	88.91	0.05	105.60	57.35
4800.00	1.14	111.81	4798.32	28.67	56.29	90.56	0.24	106.63	58.13

Scientific Drilling

Scientific Drilling International
Survey Report

Company:	POGO	**Date:** 08/24/2006	**Time:** 19:33:47	**Page:**	2
Field:	Block 20	**Co-ordinate(NE) Reference:**	Site: Winkler County, Texas, Grid North		
Site:	Winkler County, Texas	**Vertical (TVD) Reference:**	SITE 0.0		
Well:	University 20-11A #4	**Section (VS) Reference:**	Well (0.00N,0.00E,343.73Azi)		
Wellpath:	VH - Job #32K0506359	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
4900.00	0.66	126.61	4898.31	27.59	55.58	91.95	0.53	107.44	58.85
5000.00	0 50	146.80	4998.30	26.72	54.87	92.65	0.26	107.68	59.36
5100.00	0.39	147.59	5098.30	25.97	54 22	93.07	0.11	107.71	59.78
5200.00	0.52	173.74	5198.30	25.20	53.48	93.30	0.24	107.54	60.18
5300.00	0.38	181.41	5298.29	24.44	52.70	93.34	0.15	107.19	60.55
5400.00	0 34	179.08	5398.29	23.83	52.07	93.34	0.04	106.88	60.84
5500.00	0.51	179.51	5498.29	23 12	51.33	93.35	0.17	106.53	61.20
5600.00	0.47	197.31	5598.29	22.35	50.49	93.23	0.16	106.02	61.56
5700.00	0.60	203.29	5698.28	21 60	49.62	92.90	0.14	105 32	61.89
5800.00	0.68	206.00	5798.28	20.76	48.60	92.43	0.09	104.43	62.26
5900.00	0.63	212.76	5898.27	19.96	47.61	91.88	0.09	103.48	62 61
6000.00	0.67	218.76	5998.26	19.27	46.69	91.21	0.08	102.47	62.89
6100.00	0.66	220.53	6098.26	18.62	45.80	90.47	0.02	101.40	63.15
6200.00	0.63	223.70	6198.25	18.03	44.96	89.72	0.05	100.35	63.38
6300.00	0.67	228.67	6298.24	17.50	44.18	88.90	0 07	99.27	63.57
6400.00	0 67	225.60	6398.24	16 98	43.38	88.04	0.04	98.15	63.77
6500.00	0.67	224.29	6498.23	16.42	42.56	87.22	0.02	97.04	63.99
6600.00	0.63	226.70	6598.22	15.88	41.76	86.41	0.05	95.97	64.21
6700.00	0.63	222.59	6698.22	15.35	40.98	85.63	0.05	94.93	64.43
6800.00	0.73	229.25	6798.21	14.80	40.16	84.78	0.13	93.81	64 65
6900.00	0.73	222.38	6898.20	14.20	39.27	83.87	0.09	92.61	64.91
7000.00	0.59	222.76	6998.20	13.61	38.42	83.09	0.14	91.54	65.18
7100.00	1.47	156.95	7098.18	12 07	36.86	83.24	1.34	91.04	66.11
7200.00	1.52	157.41	7198.15	9.47	34.46	84.25	0.05	91.03	67.76
7300.00	1.53	159.53	7298.11	6.82	31.98	85.23	0.06	91.03	69.43
7400.00	1.35	158.66	7398.08	4.32	29.64	86.13	0.18	91.08	71.01
7500.00	1.24	152.09	7498.05	2.09	27.58	87.06	0.18	91.33	72.42
7600.00	0.89	156.81	7598.04	0.26	25.91	87.87	0.36	91.61	73 57
7700.00	0.93	151.49	7698.02	-1.31	24 49	88.57	0.09	91.89	74 55
7800.00	0.96	156.05	7798.01	-2.93	23.01	89.29	0 08	92.21	75.55
7900.00	0.67	148.97	7898.00	-4.33	21 74	89.94	0 31	92.53	76.41
8000.00	0.61	149.54	7997.99	-5.41	20.78	90.51	0.06	92.86	77.07
8100.00	0.57	147.29	8097.99	-6.40	19.90	91.05	0.05	93.20	77.67
8200.00	0.49	130.55	8197.98	-7.24	19.21	91.64	0.17	93.63	78.16
8300.00	1.25	75.40	8297.97	-7.63	19.20	93.02	1.05	94.98	78.34
8400.00	1.24	69.72	8397.95	-7.58	19.85	95.09	0.12	97.14	78.21
8500.00	1 04	69.16	8497.93	-7.43	20.55	96.95	0.20	99.11	78.03
8600.00	0.97	73.20	8597.91	-7 35	21.12	98.61	0.10	100.85	77.91
8700.00	0.95	61.38	8697.90	-7 17	21.76	100.15	0.20	102.49	77.74
8800.00	0 84	59.39	8797.89	-6.81	22.53	101.51	0.11	103.98	77.49
8900 00	1.18	69.69	8897.87	-6.56	23.26	103.10	0.38	105.70	77.29
9000.00	1.30	78.02	8997.85	-6.57	23.85	105.18	0.22	107.85	77 22
9100.00	1.15	74.99	9097.83	-6.68	24.35	107.26	0.16	109.99	77.21
9200.00	0.79	99.87	9197.81	-7.00	24.49	108.91	0.55	111.63	77.33
9300.00	0.67	108.51	9297.80	-7.64	24.19	110.14	0.16	112.77	77.61
9400.00	0.71	42.80	9397.80	-7.65	24.46	111.12	0.75	113.78	77.59
9500.00	0.48	39.44	9497.79	-7.10	25.24	111.80	0 23	114.62	77 28
9600.00	0.28	6.87	9597.79	-6.64	25.80	112.10	0.29	115.03	77.04
9700.00	0.24	273.46	9697.79	-6.34	26.06	111.92	0.38	114.91	76.89
9800.00	0.27	225.16	9797.79	-6.38	25.90	111.54	0.21	114.51	76.93
9900.00	0.62	198.34	9897.79	-6.94	25.22	111.21	0.40	114.03	77 22
10000.00	0 77	208.74	9997.78	-7.86	24.12	110.71	0.20	113.31	77.71

Scientific Drilling

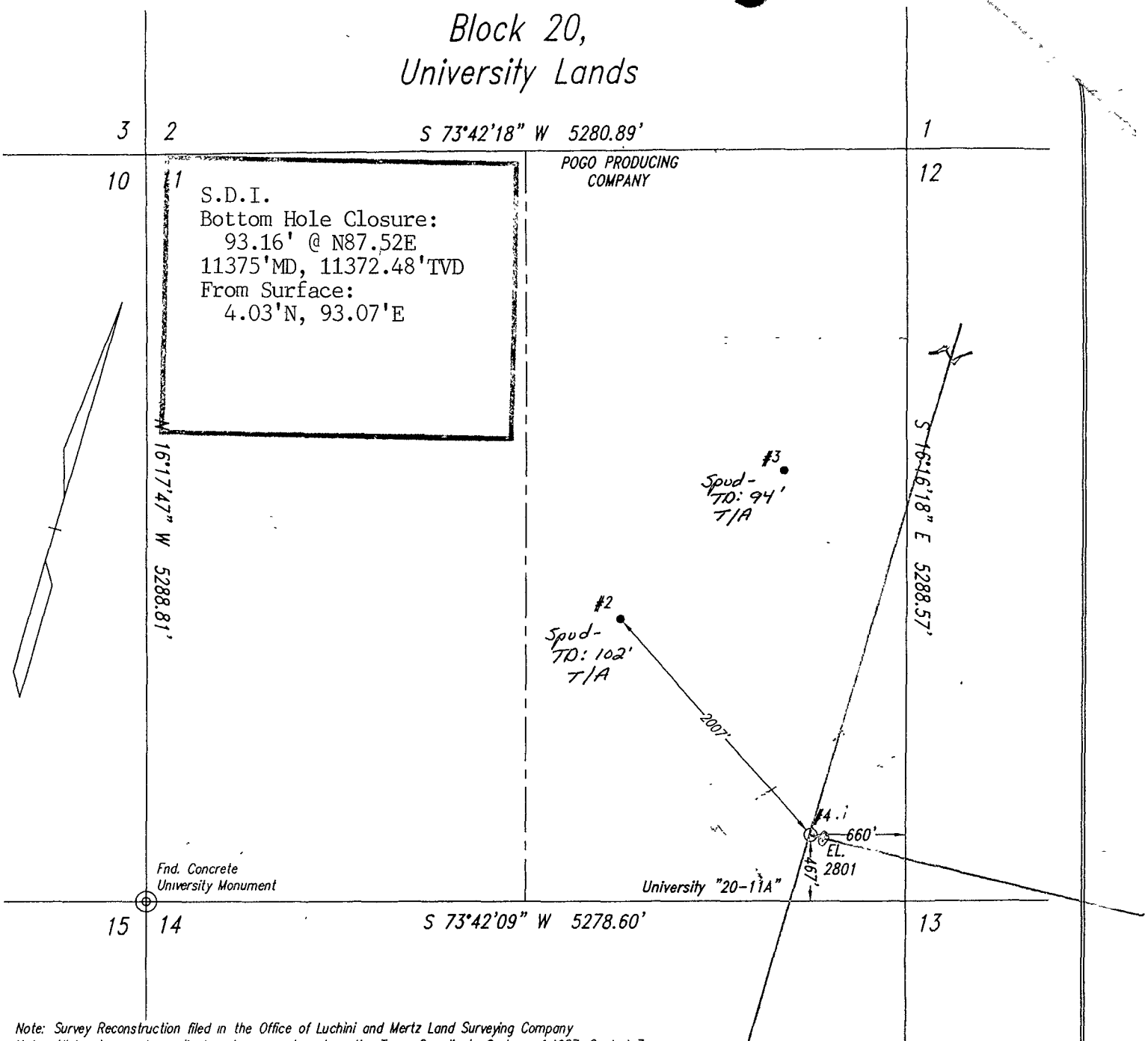
Scientific Drilling International
Survey Report

Company:	POGO	**Date:** 08/24/2006	**Time:** 19:33:47	**Page:**	3
Field:	Block 20	**Co-ordinate(NE) Reference:**	Site: Winkler County, Texas, Grid North		
Site:	Winkler County, Texas	**Vertical (TVD) Reference:**	SITE 0.0		
Well:	University 20-11A #4	**Section (VS) Reference:**	Well (0.00N,0.00E,343.73Azi)		
Wellpath:	VH - Job #32K0506359	**Survey Calculation Method:**	Minimum Curvature	**Db:**	Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
10100.00	1.18	240.92	10097.77	-8.57	23.03	109.49	0.67	111.88	78.12
10200.00	1.32	252.60	10197.74	-8.82	22.19	107.49	0.29	109.76	78.34
10300.00	1.07	249.09	10297.72	-8.92	21.51	105.52	0.26	107.69	78 48
10400.00	0.91	231.94	10397.70	-9.29	20.69	104.02	0.33	106.06	78.75
10500.00	0.81	198.98	10497.69	-10.16	19.53	103.17	0.50	105.00	79.28
10600.00	1.06	191.28	10597.68	-11.56	17.95	102.76	0.28	104.31	80.09
10700.00	1.41	195.32	10697.66	-13.42	15.86	102.25	0.36	103.47	81.18
10800 00	1.34	201.05	10797.63	-15 40	13.58	101.50	0.15	102.41	82.38
10900.00	1.10	218.36	10897.61	-16.89	11.74	100.49	0.44	101.17	83.34
11000.00	1.09	222.62	10997.59	-17.93	10.28	99.25	0.08	99.78	84.08
11100.00	1.19	228.17	11097.57	-18.87	8.89	97.83	0.15	98.23	84.81
11200.00	1.48	224.99	11197.54	-19.94	7.29	96.14	0.30	96.42	85.67
11300.00	1.45	220.74	11297.51	-21.25	5.41	94.41	0.11	94.56	86.72
11375.00	1.49	227.05	11372.48	-22.21	4.03	93.07	0.22	93.16	87 52

Block 20,
University Lands



Note: Survey Reconstruction filed in the Office of Luchini and Mertz Land Surveying Company
Note: All bearings and coordinates shown are based on the Texas Coordinate System of 1927, Central Zone
A combined grid factor of 0.9998276 must be divided into Section Line distances to obtain a true horizontal distance
Note: Example, (S-99999) indicates General Land Office file number.
Note NAD '27 Coordinates & Latitude/Longitude on well location in Section 11.
Note. Well location is approximately 15 miles southwest of Kermit.

#4
X: 1079435.61
Y: 762951.28
Latitude – 31°43'50.685" N
Longitude – 103°17'40.266" W

Railroad Commission Permit Plat

POGO PRODUCING COMPANY
University "20-11A" Lease
E/2 less the NE/4 of the NE/4 of
Section 11, Block 20,
University Land,
Winkler County, Texas

Scale: 1" = 1000'

PROFESSIONAL LAND SURVEYORS
Well Locations
Pipelines
LUCHINI & MERTZ
Boundary Surveys
P. O. Box 1963 Midland, Texas 79702 (432) 684-6728 Fax 686-1845

January 28, 2006
060128S

PATHFINDER

3201 East Loop 250 North
Midland, Texas 79705
Phone: 432-687-1647
Fax: 432-687-1544

September 13, 2006

Attention: Railroad Commission of Texas
Oil & Gas Division
P.O. Box 12967
Capital Station
Austin, Texas 78711-2967

Attention: Cathy Garrison or Diane Crum

Re: Customer: POGO PRODUCING CO.
Well Name: University "20-11" A #4
Sec. 11, Blk 20 , Survey UL
660 FEL & 467 FSL
Winkler County, Texas
API No. 42-495-33162
Certified # 7004-0750-0000-7122-9105

Enclosed, please find the original and one copy of the survey performed on the referenced well by PathFinder Energy Service (P-5 No. 643292). Other information required by your office is as follows:

Name & Title of Surveyor	Drainhole Number	Surveyed Depths				Dates Performed				Type of Survey
Marty Schmidt	1	From	11412	To	13882	From	6/15/2006	To	7/6/2006	MWD

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (or unit line 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.

Lisa Fleurichamp
Log Analyist

PATHFINDER

3201 East Loop 250 North
Midland, Texas 79705
Phone: 432-687-1647
Fax: 432-687-1544

September 13, 2006

SURVEY CERTIFICATION SHEET

STATE OF TEXAS
COUNTY OF MIDLAND

I, Marty Schmidt certify that; I am employed by PathFinder Energy Service; that I did on the day(s) of 6/15/2006 to 7/6/2006 conduct or supervise the taking of a MWD survey from a depth of 11412 feet to a depth of 13882 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by PathFinder Energy Service; that I am authorized and qualified to make this report; that this survey was conducted at the request of POGO PRODUCING C for the University "20-11" A #4 Well API No. 42-495-33162 in Winkler County, Texas and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by PathFinder Energy Service.

Marty Schmidt

Marty Schmidt

PATHFINDER

3201 East Loop 250 North
Midland, Texas 79705
Phone: 432-687-1647
Fax: 432-687-1544

Record for Survey

POGO PRODUCING CO.

University "20-11" A #4
Winkler County, Texas

Sec. 11, Blk. 20 , Survey UL
660 FEL & 467 FSL
API No. 42-495-33162
Certified # 7004-0750-0000-7122-9105

September 13, 2006

Pathfinder

BHL Report

F
Job No: 101005595 W
Date: 7/6
Time: 8:
Wellpath ID: 10
Date Created: 6/15
Last Revision: 7/6

Calculated using the Minimum Curvarture Method
Computed using PDS VER2.2.6
Vertical Section Plane: 343.73 deg.

Survey Reference: WELLHEAD
Reference World Coordinates: Lat. 31.7307 N - Lon. 103.2945 W
Reference GRID System: LAMBERT Zone: Texas Central
Reference GRID Coordinates: 1079435.74 X 762951.35 Y
North Aligned to: TRUE NORTH
Vertical Section Reference: WELLHEAD
Closure Reference: WELLHEAD
TVD Reference: WELLHEAD

POGO PRODUCING
UNIVERSITY 20-11 "A" #4
WINKLER CO. TX
PATTERSON # 631

DECL: 9.53° EAST TO TRUE
KBH: 29.8' KELLY BUSHING TO GROUND

PATHFINDER OFFICE SUPERVISOR
CODY MEBANE
PATHFINDER FIELD ENGINEERS
FRANCISCO SINISTERRA
MARTY SCHMIDT

Measured Depth	13882.00	(ft)
Inclination	88.20	(deg)
Azimuth	338.51	(deg)
True Vertical Depth	11700.55	(ft)
Vertical Section	2313.18	(ft)
Grid Coordinates		
X	1078859.92	(ft)
Y	765191.67	(ft)
Rectangular Offsets		
North/South	2224.28 N	(ft)
East/West	635.29W	(ft)
Closure Dist & Dir	2313.22@344.06	(deg)
Dogleg Severity	0.00	(deg/100ft)
Build Rate	0.00	(deg/100ft)
Walk Rate	0.00	(deg/100ft)

Pathfinder

Survey Report

F
Job No: 101005595 W
Date: 7/6
Time: 8:
Wellpath ID: 10
Date Created: 6/15
Last Revision: 7/6

Calculated using the Minimum Curvarture Method
Computed using PDS VER2.2.6
Vertical Section Plane: 343.73 deg.

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Reference GRID System: LAMBERT Zone: Texas Central
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Closure Reference: WELLHEAD
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POGO PRODUCING
UNIVERSITY 20-11 "A" #4
WINKLER CO. TX
PATTERSON # 631

DECL: 9.53° EAST TO TRUE
KBH: 29.8' KELLY BUSHING TO GROUND

PATHFINDER OFFICE SUPERVISOR
CODY MEBANE
PATHFINDER FIELD ENGINEERS
FRANCISCO SINISTERRA
MARTY SCHMIDT

Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)	(ft)	Closure Dist. (ft)	Dir. (deg.)	DLS (dg/100ft)
TIE-IN TO GYRO-DATA SURVEY										
11375.00	1.49	227.05	11372.47	0.00	-22.21	4.03 N	93.07 E	93.16@	87.52	0.00
THE FOLLOWING ARE PATHFINDER MWD SURVEYS										
11412.00	10.73	336.57	11409.26	37.00	-18.99	6.87 N	91.34 E	91.60@	85.70	30.58
11425.00	13.10	345.62	11421.98	13.00	-16.32	9.41 N	90.50 E	90.98@	84.06	23.16
11457.00	13.63	7.95	11453.13	32.00	-9.25	16.66 N	90.12 E	91.64@	79.52	16.12
11489.00	20.75	2.41	11483.69	32.00	-0.43	26.07 N	90.88 E	94.54@	73.99	22.81
11520.00	27.52	358.72	11511.96	31.00	11.70	38.73 N	90.95 E	98.85@	66.93	22.36
11552.00	34.29	357.49	11539.40	32.00	27.62	55.15 N	90.39 E	105.88@	58.61	21.25
11583.00	41.68	355.47	11563.82	31.00	46.22	74.18 N	89.19 E	116.00@	50.25	24.17
11615.00	48.45	353.53	11586.41	32.00	68.46	96.71 N	87.00 E	130.08@	41.97	21.59
11647.00	56.19	350.90	11605.96	32.00	93.49	121.77 N	83.54 E	147.67@	34.45	25.04
11677.00	64.02	349.93	11620.90	30.00	119.30	147.40 N	79.20 E	167.33@	28.25	26.25
11708.00	68.32	346.59	11633.42	31.00	147.56	175.15 N	73.42 E	189.91@	22.74	17.01
11740.00	73.42	345.18	11643.91	32.00	177.76	204.45 N	66.05 E	214.86@	17.90	16.47
11772.00	77.82	345.18	11651.85	32.00	208.74	234.41 N	58.12 E	241.51@	13.93	13.75
11803.00	82.31	344 39	11657.20	31.00	239.26	263.87 N	50.11 E	268.59@	10.75	14.70
11836.00	83.45	344.13	11661.29	33.00	272.01	295.39 N	41.22 E	298.25@	7.94	3.54
11867.00	84.94	343.69	11664.42	31.00	302.85	325.02 N	32.68 E	326.66@	5.74	5.01
11899.00	84.59	342.81	11667.34	32.00	334.71	355.53 N	23.49 E	356.31@	3.78	2.95
11930.00	85.91	342.02	11669.91	31.00	365.60	384.98 N	14.16 E	385.24@	2.11	4.96
11962.00	84.24	343.87	11672.66	32.00	397.47	415.46 N	4.81 E	415.49@	0.66	7.77
11994.00	85.12	344.22	11675.63	32.00	429.33	446.09 N	3.95W	446.11@	359.49	2.96

Pathfinder

Survey Report

Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)	(ft)	Closure Dist. (ft)	Dir. (deg.)	DLS (dg/100ft)
12025.00	88.02	342 99	11677.48	31.00	460.28	475.78 N	12.68W	475.94	@358.47	10.16
12057.00	88.81	342.20	11678.37	32.00	492.26	506.30 N	22.25W	506.79	@357.48	3.49
12088.00	88.72	342.37	11679.03	31.00	523.24	535.82 N	31.68W	536.76	@356.62	0.62
12120.00	88.99	341.58	11679.67	32.00	555.22	566.24 N	41.58W	567.77	@355.80	2.61
12152.00	90.04	340.61	11679.94	32.00	587.18	596.52 N	51.95W	598.77	@355.02	4.47
12184.00	90.22	340.70	11679.87	32.00	619.14	626.71 N	62.55W	629.82	@354.30	0.63
12215.00	90.22	340.79	11679.75	31.00	650.09	655.98 N	72.77W	660.00	@353.67	0.29
12247.00	90.13	340.61	11679.65	32.00	682.05	686.18 N	83.35W	691.22	@353.07	0.63
12279.00	90.13	340.79	11679.58	32.00	714.00	716.38 N	93.92W	722.51	@352.53	0.56
12311.00	90.04	341.49	11679.53	32.00	745.97	746.66 N	104.27W	753.91	@352.05	2.21
12342.00	89.87	341.84	11679.56	31.00	776.95	776.09 N	114.02W	784.42	@351.64	1.26
12374.00	90.04	341.58	11679.58	32.00	808.93	806.47 N	124.06W	815.96	@351.25	0.97
12406.00	89.96	341.14	11679.58	32.00	840.90	836.79 N	134.29W	847.50	@350.88	1.40
12438.00	89.87	341.49	11679.63	32.00	872.87	867.10 N	144.54W	879.07	@350.54	1.13
12470.00	89.69	341.05	11679.75	32.00	904.84	897.41 N	154.82W	910.67	@350.21	1.49
12501.00	89.69	341.58	11679.92	31.00	935.82	926.77 N	164.75W	941.30	@349.92	1.71
12533.00	89.60	341.67	11680.12	32.00	967.79	957.14 N	174.84W	972.98	@349.65	0.40
12565.00	89.60	341.67	11680.34	32.00	999.77	987.52 N	184.90W	1004.68	@349.39	0.00
12597.00	90.04	342.11	11680.45	32.00	1031.76	1017.93 N	194.85W	1036.41	@349.16	1.94
12628.00	89.96	342.81	11680.45	31.00	1062.75	1047.49 N	204.19W	1067.21	@348.97	2.27
12660.00	89.78	343.34	11680.52	32.00	1094.75	1078.11 N	213.50W	1099.04	@348.80	1.75
12692.00	90.31	343.95	11680.49	32.00	1126.75	1108.81 N	222.51W	1130.92	@348.65	2.53
12724.00	90.04	343.43	11680.39	32.00	1158.74	1139.52 N	231.50W	1162.80	@348.52	1.83
12756.00	90.40	342.72	11680.27	32.00	1190.74	1170.14 N	240.82W	1194.66	@348.37	2.49
12787.00	89.78	342.02	11680.22	31.00	1221.73	1199.68 N	250.21W	1225.49	@348.22	3.02
12819.00	89.43	341.23	11680.44	32.00	1253.71	1230.05 N	260.29W	1257.29	@348.05	2.70
12851.00	89.96	340.17	11680.61	32.00	1285.66	1260.25 N	270.87W	1289.03	@347.87	3.70
12883.00	89.16	339.38	11680.86	32.00	1317.59	1290.27 N	281.93W	1320.72	@347.67	3.51
12914.00	89.60	339.30	11681.19	31.00	1348.49	1319.28 N	292.87W	1351.39	@347.48	1.44
12946.00	90.04	337.80	11681.29	32.00	1380.36	1349.06 N	304.57W	1383.01	@347.28	4.88
12978.00	90.13	338.42	11681.25	32.00	1412.21	1378.75 N	316.50W	1414.61	@347.07	1.96
13010.00	90.13	338.42	11681.17	32.00	1444.07	1408.51 N	328.27W	1446.26	@346.88	0.00
13041.00	89.43	338.07	11681.29	31.00	1474.93	1437.30 N	339.76W	1476.91	@346.70	2.52
13073.00	89.25	337.71	11681.66	32.00	1506.76	1466.95 N	351.80W	1508.54	@346.51	1.26
13105.00	89.16	338.15	11682.11	32.00	1538.59	1496.60 N	363.83W	1540.19	@346.34	1.40
13137.00	89.43	338.60	11682.50	32.00	1570.45	1526.34 N	375.62W	1571.88	@346.17	1.64
13168.00	89.60	339.30	11682.76	31.00	1601.34	1555.27 N	386.75W	1602.64	@346.04	2.32
13200.00	89.52	339.30	11683.01	32.00	1633.25	1585.21 N	398.06W	1634.42	@345.90	0.25
13232.00	89.34	339.91	11683.33	32.00	1665.16	1615.20 N	409.21W	1666.23	@345.78	1.99
13263.00	89.16	339.56	11683.73	31.00	1696.08	1644.28 N	419.95W	1697.06	@345.67	1.27
13295.00	88.99	340.09	11684.25	32.00	1728.00	1674.31 N	430.98W	1728.89	@345.56	1.74
13327.00	89.08	340.00	11684.79	32.00	1759.93	1704.38 N	441.90W	1760.74	@345.46	0.40
13359.00	88.46	340.09	11685.48	32.00	1791.86	1734.46 N	452.82W	1792.59	@345.37	1.96
13390.00	88.46	340.35	11686.31	31.00	1822.79	1763.62 N	463.31W	1823.46	@345.28	0.84

Pathfinder

Survey Report

F
Date: 7/6
Wellpath ID: 10

Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)		Closure Dist. (ft)	Closure Dir. (deg.)	DLS (dg/100ft)
13422.00	88.02	340.44	11687.29	32.00	1854.72	1793.75 N	474.04W	1855.33	@345.20	1.40
13454.00	87.58	340.35	11688.52	32.00	1886.64	1823.87 N	484.77W	1887.19	@345.12	1.40
13485.00	87.23	340.61	11689.92	31.00	1917.56	1853.06 N	495.12W	1918.06	@345.04	1.41
13517.00	88.72	340.17	11691.05	32.00	1949.49	1883.18 N	505.85W	1949.94	@344.96	4.85
13549.00	88.46	340.26	11691.84	32.00	1981.42	1913.28 N	516.68W	1981.82	@344.89	0.86
13581.00	87.85	339.47	11692.87	32.00	2013.33	1943.31 N	527.69W	2013.68	@344.81	3.12
13613.00	88.90	341.84	11693.78	32.00	2045.27	1973.49 N	538.28W	2045.59	@344.74	8.10
13644.00	89.25	339.12	11694.28	31.00	2076.21	2002.70 N	548.64W	2076.49	@344.68	8.85
13676.00	88.99	338.59	11694.77	32.00	2108.09	2032.54 N	560.18W	2108.33	@344.59	1.84
13707.00	88.64	338.86	11695.41	31.00	2138.96	2061.43 N	571.43W	2139 16	@344.51	1.43
13739.00	88.37	338.59	11696.25	32.00	2170.83	2091.24 N	583.03W	2170.99	@344.42	1.19
13770.00	88.29	338.42	11697.15	31.00	2201.69	2120.07 N	594.39W	2201.81	@344.34	0.61
13802.00	88.37	338.77	11698.08	32.00	2233.55	2149.85 N	606.06W	2233 64	@344.26	1.12
13834.00	88.20	338.51	11699.04	32.00	2265.41	2179.64 N	617.71W	2265.48	@344.18	0.97
STRAIGHT LINE PROJECTION TO BIT										
13882.00	88.20	338.51	11700.55	48.00	2313.18	2224.28 N	635.29W	2313.22	@344.06	0.00