



A Schlumberger Company

DIRECTIONAL SURVEY REPORT

RECEIVED

MAY 13 2013

NMOCD ARTESIA

30-015-40627

DEVON ENERGY

AQUILA 22 FEDERAL COM #1H

EDDY, NEW MEXICO

PREPARED BY: MARCUS MITCHAM

Pathfinder

6213 WCR. 112
Midland, Texas. 79706-3725, USA
Tel. (432) 687-1647
Fax (432) 687-1544



DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) ALEX CASTILLO
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 11/10/12 TO 11/17/12
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: EDDY COUNTY, NM
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:

DEVON ENERGY
AQUILA 22 FEDERAL COM #1H
EDDY COUNTY, NM
RIG: H&P 300
9. SURVEY CERTIFIED FROM: 8,493 TO 13,724 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE
DISPLACED AT 4880.77 FEET ON A BEARING OF 270.15 DEGREES FROM THE
CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 13,812 FEET,
ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.



MARCUS MITCHAM
M/LWD SERVICE COORDINATOR

PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 11/10/2012
Date Completed: 11/17/2012

DEVON ENERGY PRODUCTION CO., LP
AQUILA 22 FED COM #1H / 30-015-40627
EDDY COUNTY, NM
Rig:H&P 300
PathFinder Office Supervisor: MARCUS MITCHUM
PathFinder Field Engineers:A.CASTILLO
R.BLANCO

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.39.1.7853 N LON:103.50.55.3662 W
GRID Reference:NAD83 new mexico east Transverse Mercator
Ref GRID Coord: X: 690494.5400 Y: 600721.7000
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.31°EAST TO GRID
Vertical Section Plane: 270.24
Survey Vert. Reference: 25.10' Rotary Table To Ground
Altitude:3535.90' Ground To MSL

Measured Depth	13812.00	(feet)
Inclination	89.16	(deg)
Azimuth	266.57	(deg)
True Vertical Depth	9119.89	(feet)
Vertical Section	4880.77	(feet)
Survey X cord	685613.78	(feet)
Survey Y cord	600734.47	(feet)
Survey Lat	32.65059125 N	(deg)
Survey Lon	103.86457006 W	(deg)
Rectangular Corr. N/S	12.77 N	(feet)
Rectangular Corr. E/W	4880.76 W	(feet)
Closure Distance	4880.77	(feet)
Direction of Closure	270.15	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

DEVON ENERGY PRODUCTION CO., LP
AQUILA 22 FED COM #1H / 30-015-40627
EDDY COUNTY, NM

Rig:H&P 300

PathFinder Office Supervisor: MARCUS MITCHUM

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North Aligned To:GRID NORTH
Total Magnetic Correction: 7.31° EAST TO GRID
Vertical Section Plane: 270.24
Survey Vert. Reference: 25.10' Rotary Table To Ground
Altitude:3535.90' Ground To MSL

Survey Calculations by RX5 V6.04B using Minimum Curvature

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL		Closure		DLS
						Rectangular (ft)	Offsets (ft)	Dist (ft)	Dir (deg)	
THE FOLLOWING ARE VAUGHN ENERGY SERVICE GYRO SURVEYS										
100.00	0.15	289.82	100.00	0.00	0.13	0.04 N	0.13 W	0.13@	288.25	0.00
200.00	0.10	266.28	200.00	100.00	0.34	0.08 N	0.34 W	0.35@	283.42	0.07
300.00	0.18	351.30	300.00	100.00	0.45	0.23 N	0.45 W	0.50@	297.22	0.20
400.00	0.26	39.51	400.00	100.00	0.33	0.56 N	0.33 W	0.65@	329.79	0.19
500.00	0.28	181.10	500.00	100.00	0.19	0.49 N	0.19 W	0.53@	339.20	0.51
600.00	0.27	16.08	600.00	100.00	0.13	0.47 N	0.13 W	0.49@	345.10	0.54
700.00	0.26	107.52	700.00	100.00	-0.15	0.63 N	0.16 E	0.65@	13.87	0.38
800.00	0.22	197.07	800.00	100.00	-0.31	0.38 N	0.32 E	0.49@	39.79	0.34
900.00	0.21	251.77	900.00	100.00	-0.08	0.14 N	0.09 E	0.16@	31.68	0.20
1000.00	0.21	336.99	1000.00	100.00	0.16	0.25 N	0.16 W	0.30@	327.30	0.28
1100.00	0.22	20.87	1100.00	100.00	0.17	0.60 N	0.16 W	0.62@	344.70	0.16
1200.00	0.25	88.07	1200.00	100.00	-0.12	0.78 N	0.12 E	0.79@	8.90	0.26
1300.00	0.03	217.90	1300.00	100.00	-0.32	0.77 N	0.32 E	0.84@	22.84	0.27
1400.00	0.15	20.37	1400.00	100.00	-0.35	0.87 N	0.35 E	0.94@	22.08	0.18
1500.00	0.76	53.48	1499.99	100.00	-0.93	1.39 N	0.93 E	1.67@	33.85	0.64
1600.00	0.98	56.24	1599.98	100.00	-2.17	2.26 N	2.18 E	3.14@	43.92	0.22
1700.00	1.46	41.83	1699.96	100.00	-3.72	3.69 N	3.74 E	5.25@	45.40	0.57
1800.00	1.69	44.74	1799.92	100.00	-5.60	5.68 N	5.63 E	8.00@	44.71	0.24
1900.00	1.32	67.15	1899.89	100.00	-7.69	7.18 N	7.72 E	10.54@	47.11	0.69
2000.00	1.07	43.49	1999.87	100.00	-9.39	8.30 N	9.43 E	12.56@	48.64	0.55
2100.00	1.46	25.73	2099.84	100.00	-10.58	10.13 N	10.62 E	14.68@	46.37	0.55
2200.00	1.44	37.32	2199.81	100.00	-11.89	12.27 N	11.94 E	17.12@	44.21	0.29
2300.00	0.63	61.12	2299.79	100.00	-13.13	13.54 N	13.18 E	18.90@	44.24	0.90
2400.00	0.33	54.23	2399.79	100.00	-13.84	13.97 N	13.90 E	19.71@	44.85	0.31
2500.00	0.23	108.55	2499.79	100.00	-14.26	14.08 N	14.32 E	20.08@	45.49	0.27

PathFinder Energy Services, Inc.

Survey Report

DEVON ENERGY PRODUCTION CO., LP
 AQUILA 22 FED COM #1H / 30-015-40627
 EDDY COUNTY, NM
 RIG:H&P 300

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
2600.00	0.13	176.69	2599.79	100.00	-14.46	13.90 N	14.52 E	20.10@	46.25	0.22
2700.00	0.51	8.51	2699.79	100.00	-14.53	14.23 N	14.59 E	20.38@	45.72	0.64
2800.00	0.13	184.72	2799.79	100.00	-14.59	14.55 N	14.65 E	20.65@	45.18	0.64
2900.00	0.34	306.07	2899.79	100.00	-14.34	14.61 N	14.40 E	20.52@	44.57	0.42
3000.00	0.53	302.89	2999.78	100.00	-13.71	15.04 N	13.77 E	20.39@	42.47	0.19
3100.00	0.40	280.21	3099.78	100.00	-12.97	15.35 N	13.04 E	20.14@	40.34	0.22
3200.00	0.37	344.19	3199.78	100.00	-12.54	15.73 N	12.61 E	20.16@	38.72	0.41
3300.00	0.03	357.40	3299.78	100.00	-12.45	16.06 N	12.52 E	20.36@	37.93	0.34
3400.00	0.42	357.61	3399.78	100.00	-12.43	16.46 N	12.50 E	20.67@	37.22	0.39
3500.00	0.67	6.96	3499.77	100.00	-12.48	17.40 N	12.56 E	21.46@	35.81	0.26
3600.00	1.13	9.35	3599.76	100.00	-12.71	18.96 N	12.79 E	22.87@	34.00	0.46
3700.00	1.39	8.60	3699.73	100.00	-13.04	21.13 N	13.13 E	24.87@	31.86	0.26
3800.00	1.07	16.20	3799.71	100.00	-13.47	23.22 N	13.57 E	26.90@	30.30	0.36
3900.00	1.63	29.18	3899.68	100.00	-14.42	25.36 N	14.52 E	29.23@	29.80	0.63
4000.00	1.87	27.17	3999.64	100.00	-15.85	28.06 N	15.96 E	32.28@	29.64	0.25
4100.00	1.75	45.89	4099.59	100.00	-17.68	30.57 N	17.80 E	35.38@	30.22	0.60
4200.00	1.49	72.77	4199.55	100.00	-20.01	32.02 N	20.14 E	37.83@	32.17	0.79
4300.00	1.88	56.71	4299.51	100.00	-22.62	33.30 N	22.76 E	40.33@	34.34	0.61
4400.00	1.57	40.59	4399.46	100.00	-24.87	35.24 N	25.02 E	43.22@	35.37	0.57
4500.00	1.33	77.02	4499.43	100.00	-26.89	36.54 N	27.04 E	45.46@	36.50	0.93
4600.00	1.36	98.69	4599.40	100.00	-29.19	36.63 N	29.34 E	46.93@	38.70	0.51
4700.00	0.75	93.57	4699.39	100.00	-31.02	36.41 N	31.17 E	47.93@	40.57	0.62
4800.00	0.98	91.85	4799.38	100.00	-32.53	36.34 N	32.68 E	48.87@	41.97	0.23
4900.00	0.93	107.69	4899.36	100.00	-34.15	36.06 N	34.31 E	49.77@	43.57	0.27
5000.00	0.16	130.47	4999.36	100.00	-35.04	35.73 N	35.19 E	50.14@	44.56	0.78
5100.00	0.57	78.94	5099.35	100.00	-35.63	35.73 N	35.78 E	50.57@	45.04	0.49
5200.00	0.47	59.73	5199.35	100.00	-36.47	36.03 N	36.62 E	51.38@	45.47	0.20
5300.00	0.27	126.37	5299.35	100.00	-37.01	36.10 N	37.17 E	51.81@	45.83	0.44

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Survey Report

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AQUILA 22 FED COM #1H / 30-015-40627
EDDY COUNTY, NM
RIG:H&P 300

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
5400.00	0.23	104.61	5399.35	100.00	-37.40	35.91 N	37.55 E	51.96@	46.28	0.10
5500.00	0.35	340.59	5499.35	100.00	-37.49	36.15 N	37.64 E	52.19@	46.16	0.52
5600.00	0.30	359.00	5599.35	100.00	-37.38	36.70 N	37.54 E	52.49@	45.65	0.12
5700.00	0.31	333.17	5699.34	100.00	-37.25	37.20 N	37.41 E	52.76@	45.16	0.14
5800.00	0.32	26.86	5799.34	100.00	-37.26	37.69 N	37.41 E	53.11@	44.79	0.28
5900.00	0.74	2.73	5899.34	100.00	-37.41	38.58 N	37.57 E	53.86@	44.24	0.47
6000.00	0.37	30.61	5999.33	100.00	-37.60	39.51 N	37.77 E	54.65@	43.71	0.45
6100.00	0.64	337.15	6099.33	100.00	-37.54	40.30 N	37.71 E	55.19@	43.10	0.52
6200.00	0.65	8.75	6199.32	100.00	-37.41	41.38 N	37.58 E	55.90@	42.25	0.35
6300.00	0.45	13.57	6299.32	100.00	-37.58	42.32 N	37.76 E	56.72@	41.74	0.20
6400.00	1.02	357.26	6399.31	100.00	-37.63	43.59 N	37.81 E	57.70@	40.94	0.60
6500.00	0.81	2.45	6499.30	100.00	-37.61	45.18 N	37.80 E	58.91@	39.91	0.23
6600.00	0.82	337.18	6599.29	100.00	-37.36	46.55 N	37.55 E	59.81@	38.89	0.36
6700.00	1.24	349.32	6699.27	100.00	-36.87	48.27 N	37.07 E	60.87@	37.52	0.47
6800.00	0.90	333.59	6799.25	100.00	-36.31	50.04 N	36.52 E	61.95@	36.13	0.45
6900.00	0.84	330.18	6899.24	100.00	-35.59	51.38 N	35.81 E	62.63@	34.88	0.08
7000.00	0.90	332.59	6999.23	100.00	-34.86	52.71 N	35.08 E	63.32@	33.65	0.07
7100.00	1.04	359.41	7099.22	100.00	-34.49	54.32 N	34.71 E	64.46@	32.58	0.47
7200.00	0.97	30.78	7199.20	100.00	-34.90	55.95 N	35.14 E	66.07@	32.13	0.55
7300.00	0.76	345.06	7299.19	100.00	-35.16	57.32 N	35.40 E	67.37@	31.70	0.70
7400.00	1.26	14.37	7399.18	100.00	-35.25	59.02 N	35.50 E	68.88@	31.03	0.70
7500.00	1.21	339.88	7499.16	100.00	-35.15	61.08 N	35.41 E	70.60@	30.10	0.73
7600.00	1.44	358.13	7599.13	100.00	-34.74	63.33 N	35.01 E	72.36@	28.93	0.48
7700.00	1.60	356.92	7699.09	100.00	-34.61	65.98 N	34.89 E	74.64@	27.87	0.16
7800.00	1.56	0.11	7799.06	100.00	-34.53	68.73 N	34.82 E	77.05@	26.87	0.10
7900.00	1.61	348.48	7899.02	100.00	-34.24	71.47 N	34.54 E	79.38@	25.79	0.32
8000.00	1.61	338.76	7998.98	100.00	-33.44	74.16 N	33.75 E	81.48@	24.47	0.27
8100.00	1.40	351.20	8098.94	100.00	-32.73	76.67 N	33.05 E	83.50@	23.32	0.39

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Survey Report

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AQUILA 22 FED COM #1H / 30-015-40627
EDDY COUNTY, NM
RIG:H&P 300

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
8200.00	1.28	353.63	8198.92	100.00	-32.41	78.99 N	32.74 E	85.51@	22.52	0.13
8300.00	1.19	354.87	8298.89	100.00	-32.19	81.14 N	32.53 E	87.41@	21.85	0.09
8400.00	1.09	359.22	8398.88	100.00	-32.07	83.12 N	32.42 E	89.22@	21.31	0.13
** TIED-IN TO VAUGHN ENERGY SERVICE GYRO SURVEY AT 8475.00'MD										
8475.00	1.14	1.40	8473.86	75.00	-32.08	84.58 N	32.43 E	90.58@	20.98	0.09
THE FOLLOWING ARE PATHFINDER MWD SURVEYS										
8493.00	1.41	169.03	8491.86	18.00	-32.12	84.54 N	32.48 E	90.56@	21.01	14.08
8524.00	1.23	166.74	8522.85	31.00	-32.27	83.84 N	32.63 E	89.97@	21.26	0.60
8556.00	1.85	243.47	8554.84	32.00	-31.89	83.28 N	32.24 E	89.30@	21.16	6.16
8588.00	6.07	269.58	8586.76	32.00	-29.74	83.03 N	30.09 E	88.32@	19.92	14.01
8619.00	9.67	273.35	8617.46	31.00	-25.50	83.18 N	25.85 E	87.10@	17.26	11.73
8650.00	13.10	277.84	8647.85	31.00	-19.41	83.81 N	19.77 E	86.11@	13.27	11.42
8682.00	16.62	276.96	8678.77	32.00	-11.27	84.86 N	11.63 E	85.65@	7.80	11.02
8713.00	18.11	278.36	8708.36	31.00	-2.10	86.09 N	2.46 E	86.13@	1.64	4.99
8745.00	18.64	278.45	8738.73	32.00	7.89	87.57 N	7.52 W	87.89@	355.09	1.66
8776.00	20.66	276.43	8767.92	31.00	18.23	88.91 N	17.85 W	90.68@	348.64	6.87
8808.00	24.62	274.67	8797.45	32.00	30.49	90.08 N	30.11 W	94.98@	341.52	12.55
8839.00	28.05	274.41	8825.23	31.00	44.20	91.17 N	43.82 W	101.16@	334.33	11.07
8871.00	30.78	272.74	8853.10	32.00	59.89	92.14 N	59.50 W	109.68@	327.15	8.91
8902.00	32.18	273.62	8879.54	31.00	76.05	93.04 N	75.67 W	119.93@	320.88	4.75
8934.00	34.47	273.62	8906.28	32.00	93.60	94.15 N	93.21 W	132.49@	315.29	7.16
8965.00	37.28	273.88	8931.39	31.00	111.73	95.34 N	111.34 W	146.58@	310.57	9.08
8997.00	41.24	273.62	8956.16	32.00	131.94	96.66 N	131.54 W	163.24@	306.31	12.39
9028.00	43.70	272.30	8979.03	31.00	152.85	97.74 N	152.44 W	181.08@	302.67	8.44
9060.00	46.08	273.79	9001.70	32.00	175.40	98.94 N	174.99 W	201.03@	299.49	8.13
9091.00	48.80	273.53	9022.66	31.00	198.19	100.40 N	197.77 W	221.80@	296.91	8.80
9123.00	51.53	273.18	9043.16	32.00	222.73	101.84 N	222.30 W	244.52@	294.61	8.57
9154.00	53.73	272.74	9061.98	31.00	247.33	103.11 N	246.90 W	267.57@	292.67	7.19
9186.00	57.86	273.88	9079.96	32.00	273.75	104.64 N	273.32 W	292.67@	290.95	13.24

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EDDY COUNTY, NM
RIG:H&P 300

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9217.00	61.29	273.53	9095.66	31.00	300.43	106.37 N	299.99 W	318.29@	289.52	11.11
9249.00	63.93	272.65	9110.38	32.00	328.81	107.90 N	328.36 W	345.63@	288.19	8.60
9280.00	66.83	272.95	9123.29	31.00	356.96	109.27 N	356.50 W	372.87@	287.04	9.40
9312.00	69.91	272.91	9135.09	32.00	386.67	110.79 N	386.21 W	401.79@	286.01	9.63
9343.00	74.22	273.06	9144.63	31.00	416.12	112.33 N	415.65 W	430.57@	285.12	13.91
9375.00	79.32	273.33	9151.95	32.00	447.22	114.07 N	446.75 W	461.08@	284.32	15.96
9406.00	84.33	273.50	9156.36	31.00	477.85	115.89 N	477.37 W	491.23@	283.65	16.17
9437.00	88.29	273.27	9158.35	31.00	508.73	117.72 N	508.24 W	521.70@	283.04	12.80
9532.00	90.22	269.66	9159.59	95.00	603.68	120.15 N	603.18 W	615.03@	281.27	4.31
9626.00	90.84	268.79	9158.72	94.00	697.66	118.88 N	697.17 W	707.23@	279.68	1.14
9721.00	91.36	268.70	9156.89	95.00	792.61	116.80 N	792.13 W	800.69@	278.39	0.56
9816.00	91.71	268.96	9154.35	95.00	887.55	114.86 N	887.07 W	894.48@	277.38	0.46
9910.00	90.40	268.26	9152.62	94.00	981.49	112.58 N	981.03 W	987.47@	276.55	1.58
10005.00	90.84	268.79	9151.59	95.00	1076.44	110.13 N	1075.99 W	1081.61@	275.84	0.72
10099.00	91.45	269.84	9149.71	94.00	1170.41	109.01 N	1169.96 W	1175.03@	275.32	1.29
10194.00	89.87	267.47	9148.62	95.00	1265.36	106.78 N	1264.92 W	1269.42@	274.83	3.00
10288.00	89.25	267.03	9149.34	94.00	1359.23	102.27 N	1358.81 W	1362.65@	274.30	0.81
10383.00	89.52	267.82	9150.36	95.00	1454.10	98.00 N	1453.71 W	1457.01@	273.86	0.88
10478.00	91.01	267.73	9149.92	95.00	1549.01	94.31 N	1548.63 W	1551.50@	273.49	1.57
10572.00	91.10	267.29	9148.19	94.00	1642.89	90.23 N	1642.53 W	1645.00@	273.14	0.48
10667.00	90.31	268.17	9147.02	95.00	1737.79	86.47 N	1737.44 W	1739.59@	272.85	1.25
10761.00	91.01	268.87	9145.94	94.00	1831.74	84.04 N	1831.41 W	1833.33@	272.63	1.05
10856.00	91.01	268.43	9144.26	95.00	1926.69	81.80 N	1926.36 W	1928.10@	272.43	0.46
10950.00	91.01	267.65	9142.61	94.00	2020.60	78.59 N	2020.29 W	2021.82@	272.23	0.83
11045.00	90.40	268.30	9141.44	95.00	2115.52	75.23 N	2115.23 W	2116.56@	272.04	0.94
11139.00	90.40	268.92	9140.78	94.00	2209.48	72.95 N	2209.20 W	2210.40@	271.89	0.66
11234.00	90.31	269.37	9140.19	95.00	2304.46	71.53 N	2304.18 W	2305.29@	271.78	0.48
11328.00	90.04	269.60	9139.91	94.00	2398.45	70.69 N	2398.18 W	2399.22@	271.69	0.38

PathFinder Energy Services, Inc.

Survey Report

DEVON ENERGY PRODUCTION CO., LP
AQUILA 22 FED COM #1H / 30-015-40627
EDDY COUNTY, NM
RIG:H&P 300

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
11423.00	90.40	269.03	9139.54	95.00	2493.44	69.55 N	2493.17 W	2494.14@	271.60	0.71
11517.00	91.54	268.75	9137.95	94.00	2587.40	67.73 N	2587.14 W	2588.02@	271.50	1.25
11612.00	91.54	268.58	9135.40	95.00	2682.33	65.52 N	2682.08 W	2682.88@	271.40	0.18
11706.00	91.19	269.12	9133.16	94.00	2776.27	63.63 N	2776.03 W	2776.76@	271.31	0.68
11801.00	90.66	269.02	9131.62	95.00	2871.24	62.09 N	2871.01 W	2871.68@	271.24	0.57
11896.00	90.84	269.21	9130.38	95.00	2966.21	60.62 N	2965.99 W	2966.61@	271.17	0.28
11990.00	90.84	269.27	9129.00	94.00	3060.19	59.38 N	3059.97 W	3060.54@	271.11	0.06
12085.00	91.28	269.79	9127.24	95.00	3155.17	58.60 N	3154.95 W	3155.49@	271.06	0.72
12179.00	91.01	269.85	9125.37	94.00	3249.14	58.30 N	3248.93 W	3249.45@	271.03	0.29
12273.00	90.66	269.56	9124.00	94.00	3343.13	57.82 N	3342.92 W	3343.42@	270.99	0.48
12368.00	89.87	268.75	9123.56	95.00	3438.11	56.42 N	3437.90 W	3438.37@	270.94	1.19
12462.00	89.96	269.72	9123.70	94.00	3532.09	55.16 N	3531.89 W	3532.33@	270.89	1.04
12557.00	89.78	269.72	9123.91	95.00	3627.09	54.70 N	3626.89 W	3627.31@	270.86	0.19
12651.00	88.99	269.98	9124.92	94.00	3721.08	54.45 N	3720.89 W	3721.28@	270.84	0.89
12746.00	89.34	269.47	9126.31	95.00	3816.07	54.00 N	3815.87 W	3816.26@	270.81	0.65
12841.00	90.84	269.59	9126.16	95.00	3911.06	53.22 N	3910.87 W	3911.23@	270.78	1.58
12936.00	90.57	269.20	9124.99	95.00	4006.04	52.21 N	4005.86 W	4006.20@	270.75	0.50
13030.00	91.19	269.07	9123.54	94.00	4100.01	50.79 N	4099.83 W	4100.15@	270.71	0.67
13124.00	90.57	268.59	9122.10	94.00	4193.97	48.88 N	4193.80 W	4194.09@	270.67	0.83
13219.00	91.28	268.07	9120.57	95.00	4288.90	46.11 N	4288.75 W	4289.00@	270.62	0.93
13314.00	90.92	267.13	9118.74	95.00	4383.78	42.13 N	4383.65 W	4383.85@	270.55	1.06
13408.00	90.13	267.05	9117.88	94.00	4477.64	37.36 N	4477.52 W	4477.68@	270.48	0.85
13503.00	89.69	266.56	9118.03	95.00	4572.47	32.06 N	4572.37 W	4572.49@	270.40	0.69
13597.00	90.22	266.30	9118.10	94.00	4666.26	26.21 N	4666.19 W	4666.26@	270.32	0.63
13692.00	89.60	266.25	9118.25	95.00	4761.03	20.04 N	4760.99 W	4761.03@	270.24	0.65
13724.00	89.16	266.57	9118.60	32.00	4792.96	18.03 N	4792.92 W	4792.96@	270.22	1.70
STRAIGHT LINE PROJECTION TO BIT DEPTH AT 13812.00'MD										
13812.00	89.16	266.57	9119.89	88.00	4880.77	12.77 N	4880.76 W	4880.77@	270.15	0.00

PathFinder Energy Services, Inc.

Survey Report

DEVON ENERGY PRODUCTION CO., LP
AQUILA 22 FED COM #1H / 30-015-40627
EDDY COUNTY, NM
RIG:H&P 300

Page 07/06

- ** The survey data at tie-in point was furnished by a recognized survey company and entered as submitted. Survey stations above the tie-in point represent recalculated data by PathFinder Energy Services, Inc. and may reflect minor changes due to rounding differences between survey programs. Only survey stations taken by qualified PathFinder personnel are subject to certification.



A Schlumberger Company

TIE-IN SURVEY INFORMATION SHEET

CLIENT INFORMATION

CLIENT:	DEVON ENERGY PRODUCTION CO.,LP		
LEASE / WELL No.:	AQUILA 22 FED COM	#1H	
WELL LOCATION:	EDDY COUNTY, NEW MEXICO		
COUNTY / STATE / COUNTRY:	EDDY	NM	USA
RIG:	H&P 300		
API WELL No:	30-015-40627		
JOB No:	12MLD0394		
P.O. / AFE No.	98-51302		
DIRECTIONAL COMPANY:	PATHFINDER		

WELL SITE INFORMATION

TOTAL MAGNETIC CORRECTION (TMC):			
On Wall Plat:	7.38	LWD Calculated:	7.311698
Agreed Upon:		7.31	
X =	690494.540000	Feet	Y = 600721.700000
		Feet	
SITE LATITUDE:	32.650496 N	SITE LONGITUDE:	103.848713 W
GRID SYSTEM:	TRUE ☐ UTM ☐ LAMBERT ☒	ZONE:	New Mexico East
PROPOSED DRIFT DIRECTION:	269.09		
KELLY BUSHING ELEVATION:	25.1		
ALTITUDE:	3535.9	Feet	WATER DEPTH:
		Feet	

TIE-IN SURVEY

MEASURED DEPTH:	8475		
DRIFT ANGLE:	1.14		
DRIFT DIRECTION:	1.4		
TRUE VERTICAL DEPTH:	8473.86		
VERTICAL SECTION:	84.66		
RECTANGULAR COORDINATE (N / S) :	84.66		
RECTANGULAR COORDINATE (E / W) :	32.43		
CLOSURE DISTANCE / DIRECTION:	90.66	20.96	
SURVEY CALCULATION METHOD:	AA ☐	MC ☒	RC ☐ BT ☐
SOURCE OF TIE-IN DATA (COMPANY):	VAUGHN ENERGY SERVICES		
COPY OF TIE-IN SURVEY REPORT	☒ YES		☐ NO

WELL PLAN

KICKOFF DEPTH:	8674	TOTAL DEPTH:	13795
KICKOFF ANGLE:	0	MAX ANGLE:	92

PES Engineers: ALEX CASTILLO
REYDEL BLANCO

**Signature of both field engineers required if applicable

Directional Driller: JORDAN WILLIAMS

DATE: 10-Nov-2012



Company: Devon Energy
Lease/Well: Aquila 22 Fed Com /1H

Rig Name: H&P 300
State/County: New Mexico/Eddy
Latitude: 32.65, Longitude: -103.85
GRID North is 0.26 Degrees East of True North
VS-Azi: 0.00 Degrees



FIELD COPY ONLY (NOT DEFINITIVE)

Depth Reference : RKB=26 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: ...2 fed com 1h ha gyro-de_01.ut

Minimum Curvature Method

Report Date/Time: 11/10/2012 / 02:52

Vaughn Energy Services
Midland, Texas
Office 432-563-5444
Troy Hardin

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.15	289.82	100.00	0.05	-0.13	0.05	0.13	289.82	0.15
200.00	0.10	266.28	200.00	0.09	-0.34	0.09	0.35	284.27	0.08
300.00	0.18	351.30	300.00	0.24	-0.44	0.24	0.50	298.07	0.20
400.00	0.26	39.51	400.00	0.57	-0.32	0.57	0.65	330.49	0.20
500.00	0.28	181.10	500.00	0.50	-0.18	0.50	0.53	340.06	0.51
600.00	0.27	16.08	600.00	0.48	-0.12	0.48	0.50	346.00	0.55
700.00	0.26	107.52	700.00	0.64	0.16	0.64	0.66	13.84	0.38
800.00	0.22	197.07	800.00	0.39	0.32	0.39	0.50	38.79	0.34
900.00	0.21	251.77	900.00	0.15	0.09	0.15	0.18	29.79	0.20
1000.00	0.21	336.99	1000.00	0.27	-0.16	0.27	0.31	329.34	0.28
1100.00	0.22	20.87	1099.99	0.61	-0.16	0.61	0.63	345.09	0.16
1200.00	0.25	88.07	1199.99	0.79	0.13	0.79	0.80	8.97	0.26
1300.00	0.03	217.90	1299.99	0.78	0.33	0.78	0.84	22.86	0.28
1400.00	0.15	20.37	1399.99	0.88	0.35	0.88	0.95	22.04	0.18
1500.00	0.76	53.48	1499.99	1.39	0.93	1.39	1.68	33.83	0.64
1600.00	0.98	56.24	1599.98	2.27	2.18	2.27	3.14	43.89	0.22
1700.00	1.46	41.83	1699.96	3.69	3.74	3.69	5.26	45.39	0.57
1800.00	1.69	44.74	1799.92	5.69	5.63	5.69	8.01	44.70	0.24
1900.00	1.32	67.15	1899.88	7.19	7.73	7.19	10.56	47.09	0.69
2000.00	1.07	43.49	1999.86	8.32	9.44	8.32	12.58	48.62	0.55
2100.00	1.46	25.73	2099.84	10.15	10.64	10.15	14.70	46.36	0.55
2200.00	1.44	37.32	2199.81	12.30	11.96	12.30	17.15	44.20	0.29
2300.00	0.63	61.12	2299.79	13.56	13.20	13.56	18.92	44.22	0.90
2400.00	0.33	54.23	2399.79	13.99	13.91	13.99	19.73	44.83	0.30
2500.00	0.23	108.55	2499.79	14.10	14.34	14.10	20.11	45.48	0.27
2600.00	0.13	176.69	2599.78	13.93	14.53	13.93	20.13	46.21	0.21
2700.00	0.51	8.51	2699.78	14.26	14.60	14.26	20.41	45.68	0.64
2800.00	0.13	184.72	2799.78	14.60	14.66	14.60	20.69	45.13	0.64
2900.00	0.34	306.07	2899.78	14.66	14.41	14.66	20.56	44.52	0.42
3000.00	0.53	302.89	2999.78	15.08	13.79	15.08	20.43	42.45	0.19
3100.00	0.40	280.21	3099.78	15.39	13.06	15.39	20.18	40.32	0.22
3200.00	0.37	344.19	3199.77	15.77	12.62	15.77	20.20	38.69	0.41
3300.00	0.03	357.40	3299.77	16.11	12.53	16.11	20.41	37.89	0.34
3400.00	0.42	357.61	3399.77	16.50	12.52	16.50	20.71	37.19	0.39

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
3500.00	0.67	6.96	3499.77	17.44	12.57	17.44	21.50	35.79	0.27
3600.00	1.13	9.35	3599.76	19.00	12.80	19.00	22.91	33.98	0.46
3700.00	1.39	8.60	3699.73	21.16	13.15	21.16	24.91	31.85	0.26
3800.00	1.07	16.20	3799.71	23.26	13.59	23.26	26.94	30.29	0.36
3900.00	1.63	29.18	3899.68	25.39	14.54	25.39	29.26	29.80	0.63
4000.00	1.87	27.17	3999.63	28.08	15.98	28.08	32.31	29.64	0.25
4100.00	1.75	45.89	4099.58	30.60	17.82	30.60	35.40	30.21	0.60
4200.00	1.49	72.77	4199.55	32.04	20.16	32.04	37.86	32.17	0.79
4300.00	1.88	56.71	4299.50	33.33	22.77	33.33	40.37	34.34	0.61
4400.00	1.57	40.59	4399.46	35.27	25.03	35.27	43.25	35.37	0.57
4500.00	1.33	77.02	4499.43	36.56	27.05	36.56	45.48	36.49	0.93
4600.00	1.36	98.69	4599.40	36.64	29.34	36.64	46.94	38.69	0.50
4700.00	0.75	93.57	4699.38	36.42	31.17	36.42	47.94	40.55	0.61
4800.00	0.98	91.85	4799.37	36.36	32.68	36.36	48.89	41.95	0.23
4900.00	0.93	107.69	4899.36	36.08	34.31	36.08	49.79	43.56	0.27
5000.00	0.16	130.47	4999.35	35.75	35.19	35.75	50.16	44.55	0.78
5100.00	0.57	78.94	5099.35	35.75	35.78	35.75	50.58	45.03	0.48
5200.00	0.47	59.73	5199.35	36.05	36.62	36.05	51.39	45.45	0.20
5300.00	0.27	126.37	5299.35	36.12	37.17	36.12	51.83	45.82	0.44
5400.00	0.23	104.61	5399.35	35.93	37.55	35.93	51.97	46.27	0.10
5500.00	0.35	340.59	5499.34	36.16	37.65	36.16	52.20	46.15	0.51
5600.00	0.30	359.00	5599.34	36.71	37.54	36.71	52.50	45.64	0.12
5700.00	0.31	333.17	5699.34	37.21	37.41	37.21	52.77	45.16	0.14
5800.00	0.32	26.86	5799.34	37.70	37.42	37.70	53.12	44.78	0.29
5900.00	0.74	2.73	5899.34	38.60	37.57	38.60	53.87	44.23	0.47
6000.00	0.37	30.61	5999.33	39.52	37.77	39.52	54.67	43.70	0.45
6100.00	0.64	337.15	6099.33	40.32	37.71	40.32	55.21	43.09	0.52
6200.00	0.65	8.75	6199.32	41.40	37.58	41.40	55.91	42.24	0.35
6300.00	0.45	13.57	6299.32	42.35	37.76	42.35	56.74	41.73	0.21
6400.00	1.02	357.26	6399.31	43.62	37.81	43.62	57.73	40.92	0.60
6500.00	0.81	2.45	6499.30	45.22	37.80	45.22	58.94	39.90	0.23
6600.00	0.82	337.18	6599.29	46.58	37.55	46.58	59.83	38.88	0.36
6700.00	1.24	349.32	6699.27	48.31	37.07	48.31	60.90	37.50	0.47
6800.00	0.90	333.59	6799.25	50.08	36.52	50.08	61.98	36.11	0.45
6900.00	0.84	330.18	6899.24	51.41	35.81	51.41	62.66	34.86	0.08
7000.00	0.90	332.59	6999.23	52.74	35.09	52.74	63.35	33.63	0.07
7100.00	1.04	359.41	7099.21	54.35	34.72	54.35	64.49	32.57	0.47
7200.00	0.97	30.78	7199.20	55.99	35.14	55.99	66.10	32.12	0.55
7300.00	0.76	345.06	7299.19	57.36	35.41	57.36	67.41	31.69	0.70
7400.00	1.26	14.37	7399.17	59.07	35.51	59.07	68.92	31.01	0.71
7500.00	1.21	339.88	7499.15	61.13	35.42	61.13	70.65	30.08	0.74
7600.00	1.44	358.13	7599.13	63.39	35.01	63.39	72.41	28.91	0.48
7700.00	1.60	356.92	7699.09	66.05	34.90	66.05	74.70	27.85	0.16
7800.00	1.56	0.11	7799.05	68.80	34.82	68.80	77.11	26.85	0.10
7900.00	1.61	348.48	7899.01	71.54	34.54	71.54	79.44	25.77	0.33
8000.00	1.61	338.76	7998.98	74.23	33.75	74.23	81.55	24.45	0.27
8100.00	1.40	351.20	8098.94	76.75	33.06	76.75	83.57	23.30	0.39
8200.00	1.28	353.63	8198.91	79.07	32.74	79.07	85.58	22.50	0.13
8300.00	1.19	354.87	8298.89	81.22	32.53	81.22	87.49	21.83	0.10
8400.00	1.09	359.22	8398.87	83.20	32.42	83.20	89.30	21.29	0.14
8475.00	1.14	1.40	8473.86	84.66	32.43	84.66	90.66	20.96	0.10

HORIZONTAL DISPLACEMENT IS
90.66 FEET AT 20.96 DEGREES

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

DEVON
AQUILA 22 FED COM 1H, API 30-015-40627
EDDY COUNTY, NEW MEXICO
Rig:HP 300

Tue Oct 23 11:25:37 2012

Coordinates

Latitude: 32.650496 N (32 deg. 39 min. 1.7853 sec.)
Longitude: 103.848713 W (-103 deg. 50 min. 55.3662 sec.)
Elevation: 3561.00 feet.
Calculation Date: Oct/23/2012

Magnetic Calculations

Model: IGRF2010
Dip Angle: 60.5003 degrees
Total Magnetic Field: 0.48706 gauss
Magnetic Declination: 7.579234 degrees
Horizontal Intensity: 0.239838 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.579234 Degr

Transverse Mercator Grid Calculations NAD83

Grid System: Transverse Mercator: new mexico east
Ellipsoid: GRS80
X: 690494.5400 feet
Y: 600721.7000 feet
True to Grid: (convergence) -0.261464 degrees
Magnetic to Grid: 7.317771 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.317771 Degr.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number		² Pool Code		³ Pool Name					
⁴ Property Code		⁵ Property Name AQUILA "22" FEDERAL COM						⁶ Well Number 1H	
⁷ OGRID No. 6137		⁸ Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.						⁹ Elevation 3535.9	
¹⁰ Surface Location									
UL or lot no. A	Section 22	Township 19 S	Range 31 E	Lot Idn	Feet from the 990	North/South line NORTH	Feet from the 50	East/West line EAST	County EDDY
¹¹ Bottom Hole Location If Different From Surface									
UL or lot no. D	Section 22	Township 19 S	Range 31 E	Lot Idn	Feet from the 990	North/South line NORTH	Feet from the 340	East/West line WEST	County EDDY
¹² Dedicated Acres		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

NW CORNER LAT. = 32.6531943°N LONG. = 103.8657142°W NMSP EAST (FT) N = 601679.93 E = 685257.46		N Q CORNER LAT. = 32.6532052°N LONG. = 103.8571400°W NMSP EAST (FT) N = 601695.64 E = 687896.37		NE CORNER LAT. = 32.6532167°N LONG. = 103.8485583°W NMSP EAST (FT) N = 601711.78 E = 690537.57	
340' BOTTOM OF HOLE LAT. = 32.6504746°N LONG. = 103.8646008°W NMSP EAST (FT) N = 600691.98 E = 685604.52		50' SURFACE LOCATION LAT. = 32.6504959°N (NAD83) LONG. = 103.8487128°W NMSP EAST (FT) N = 600721.70 E = 690494.54		SE CORNER LAT. = 32.6387059°N LONG. = 103.8485136°W NMSP EAST (FT) N = 596432.63 E = 690575.45	

¹⁷ OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature _____ Date _____

Printed Name _____

E-mail Address _____

¹⁸ SURVEYOR CERTIFICATION
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

AUGUST 9, 2012

Date of Survey _____

Signature and Seal of Professional Surveyor _____
Certificate Number 8814 MCNBR JARAMILLO, PLS 12797

SURVEY NO. 853A

OCD-ARTESIA

ATS-12-502
EA-12-844Form 3160-3
(February 2005)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

1a Type of work. ☒ DRILL ☐ REENTER		5 Lease Serial No. SL: NM 044594 BHL: NM 044594
1b Type of Well ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		6 If Indian, Allottee or Tribe Name
2 Name of Operator Devon Energy Production Co., LP		7 If Unit or CA Agreement, Name and No.
3a Address 20 North Broadway OKC, OK 73102		8 Lease Name and Well No. Aquila 22 Fed Com 1H <39414>
3b Phone No. (include area code) (405)-552-7802		9 API Well No. 30-015-406.27
4 Location of Well (Report location clearly and in accordance with any State requirements *) At surface NENE 990' FNL & 50' FEL L1A At proposed prod zone NWNW 400' FNL & 340' FWL L1D		10 Field and Pool, or Exploratory Lusk; Bone Spring, West <414807>
11 Sec, T R M or Blk and Survey or Area Sec 22-T19S-R31E		12 County or Parish Eddy
13 State NM		14 Distance in miles and direction from nearest town or post office* Approximately 14 miles southeast of Loco Hills, NM.
15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drg unit line, if any) 50'	16 No. of acres in lease SL: 520 & BHL: 40	17 Spacing Unit dedicated to this well 160 acres
18 Distance from proposed* location to nearest well, drilling, completed, applied for, on this lease, ft See Plat	19 Proposed Depth MTVD 9150' MD 13831'	20 BLM/BIA Bond No on file CO-1104 NMB00801
21 Elevations (Show whether DF, KDB, RT, GL, etc.) 3535' GL	22 Approximate date work will start* 05/15/2012	23 Estimated duration 45 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No 1, must be attached to this form

- | | |
|--|---|
| 1 Well plat certified by a registered surveyor | 4 Bond to cover the operations unless covered by an existing bond on file (see Item 20 above) |
| 2 A Drilling Plan | 5 Operator certification |
| 3 A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office) | 6 Such other site specific information and/or plans as may be required by the BLM |

25. Signature	Name (Printed/Typed) Stephanie A. Ysasaga	Date 03/20/2012
Title Sr. Staff Engineering Technician		
Approved by (Signature) Is/ Don Peterson	Name (Printed/Typed) Is/ Don Peterson	Date AUG 17 2012
Title FIELD MANAGER		
Office CARLSBAD FIELD OFFICE		

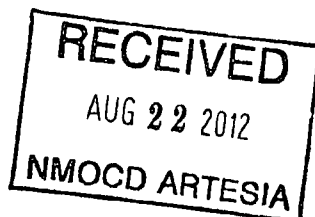
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon
Conditions of approval, if any, are attached

APPROVAL FOR TWO YEARS

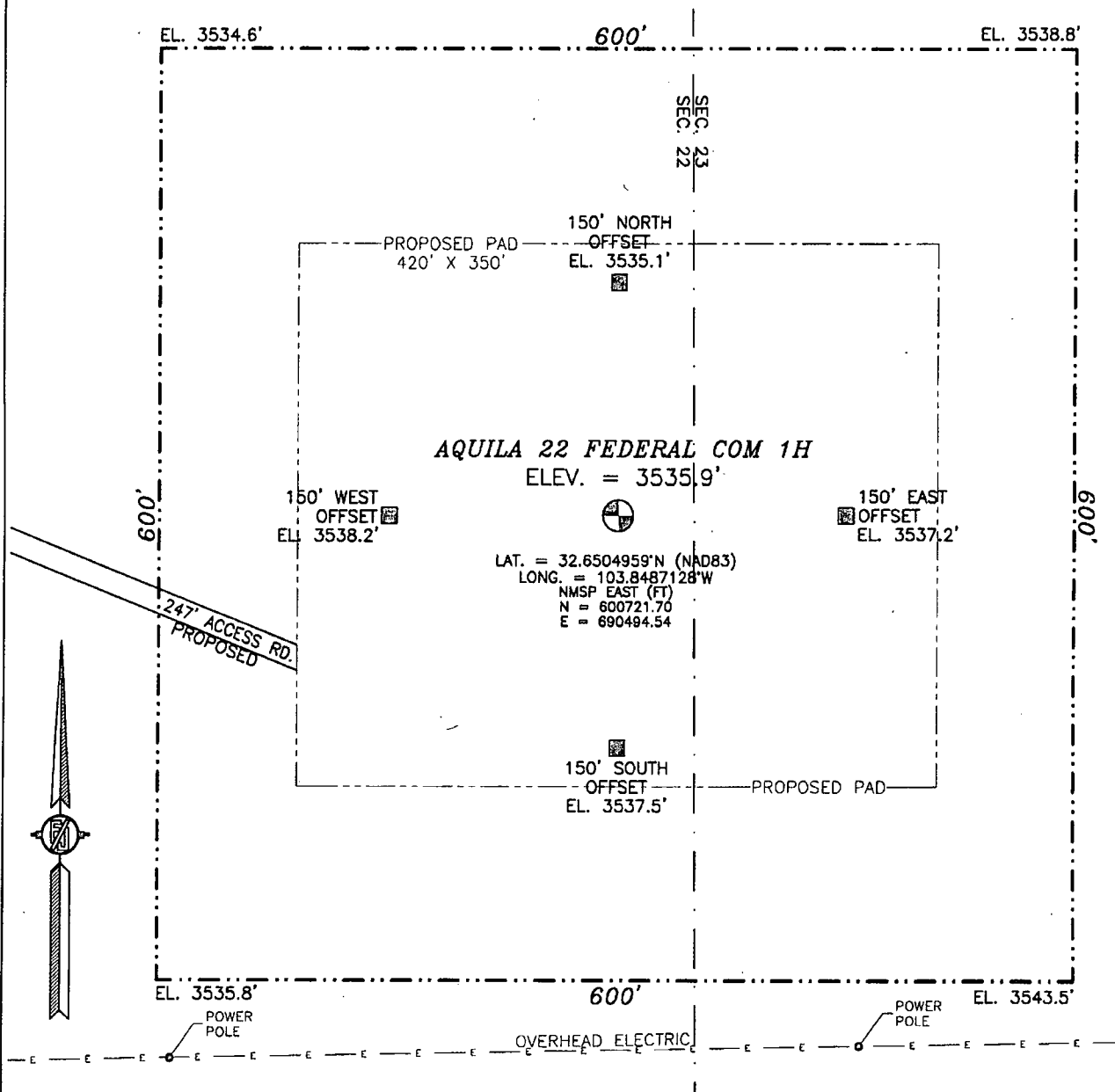
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

*(Instructions on page 2)

Capitan Controlled Water Basin

SEE ATTACHED FOR
CONDITIONS OF APPROVALApproval Subject to General Requirements
& Special Stipulations Attached

SECTION 22, TOWNSHIP 19 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO



0 10 50 100 200

SCALE 1" = 100'

DIRECTIONS TO LOCATION

FROM INTERSECTION OF CR 222 (SHUGART) AND CR 248 (LUSK PLANT RD) GO SOUTH ON CR 222 1.1 MILES TURN LEFT (EAST) ON CALICHE ROAD GO 0.85 MILES, SITE IS ON THE LEFT 300' +/- (EAST)

DEVON ENERGY PRODUCTION COMPANY, L.P.

AQUILA 22 FEDERAL COM 1H

LOCATED 990 FT. FROM THE NORTH LINE
AND 50 FT. FROM THE EAST LINE OF
SECTION 22, TOWNSHIP 19 SOUTH,
RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

SURVEY NO. 853A

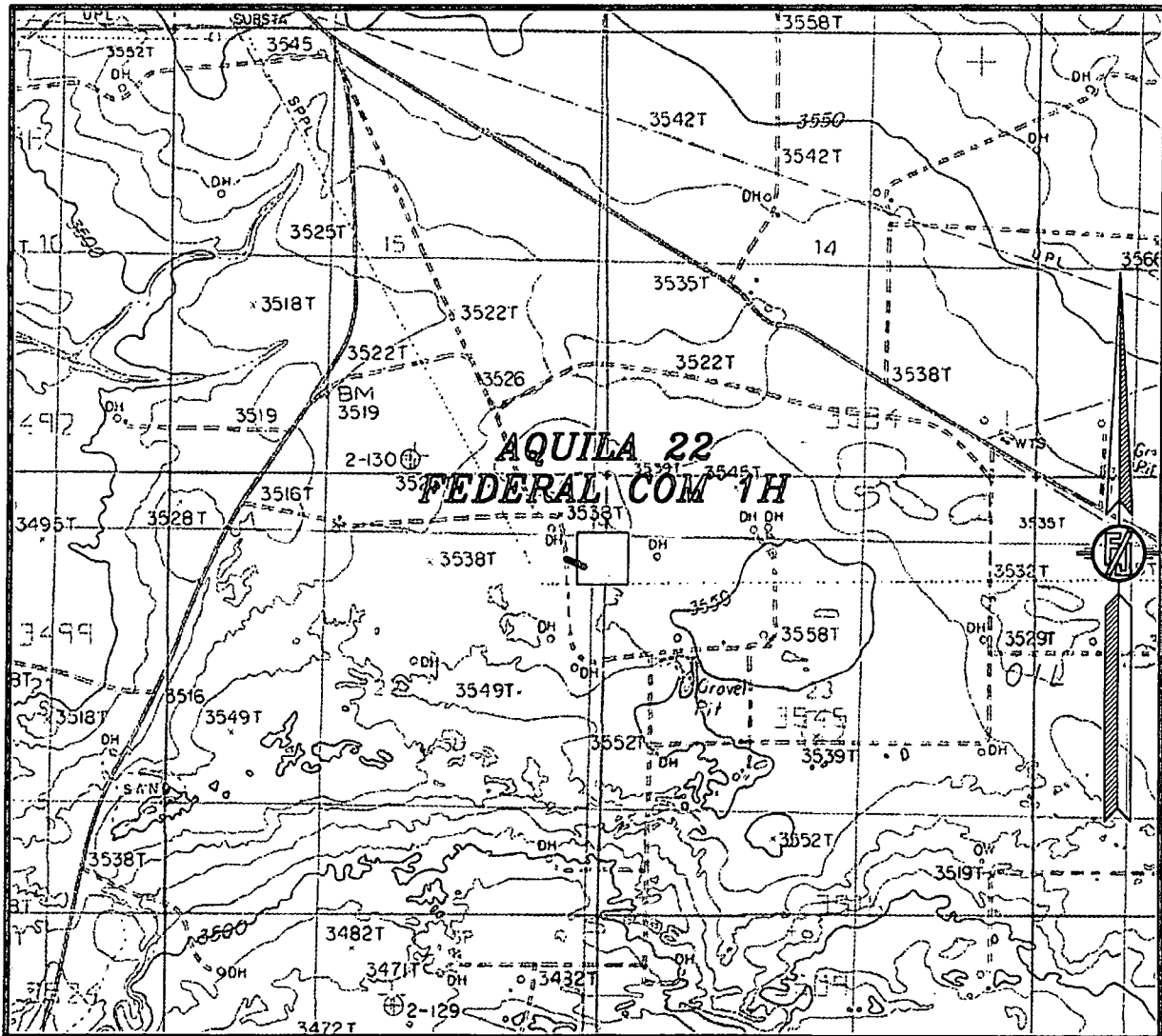
AUGUST 9, 2012

MADRON SURVEYING, INC.

301 SOUTH CANAL
(575) 234-3341

CARLSBAD, NEW MEXICO

SECTION 22, TOWNSHIP 19 SOUTH, RANGE 31 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO
 LOCATION VERIFICATION MAP



USGS QUAD MAP:
 GREENWOOD LAKE

NOT TO SCALE

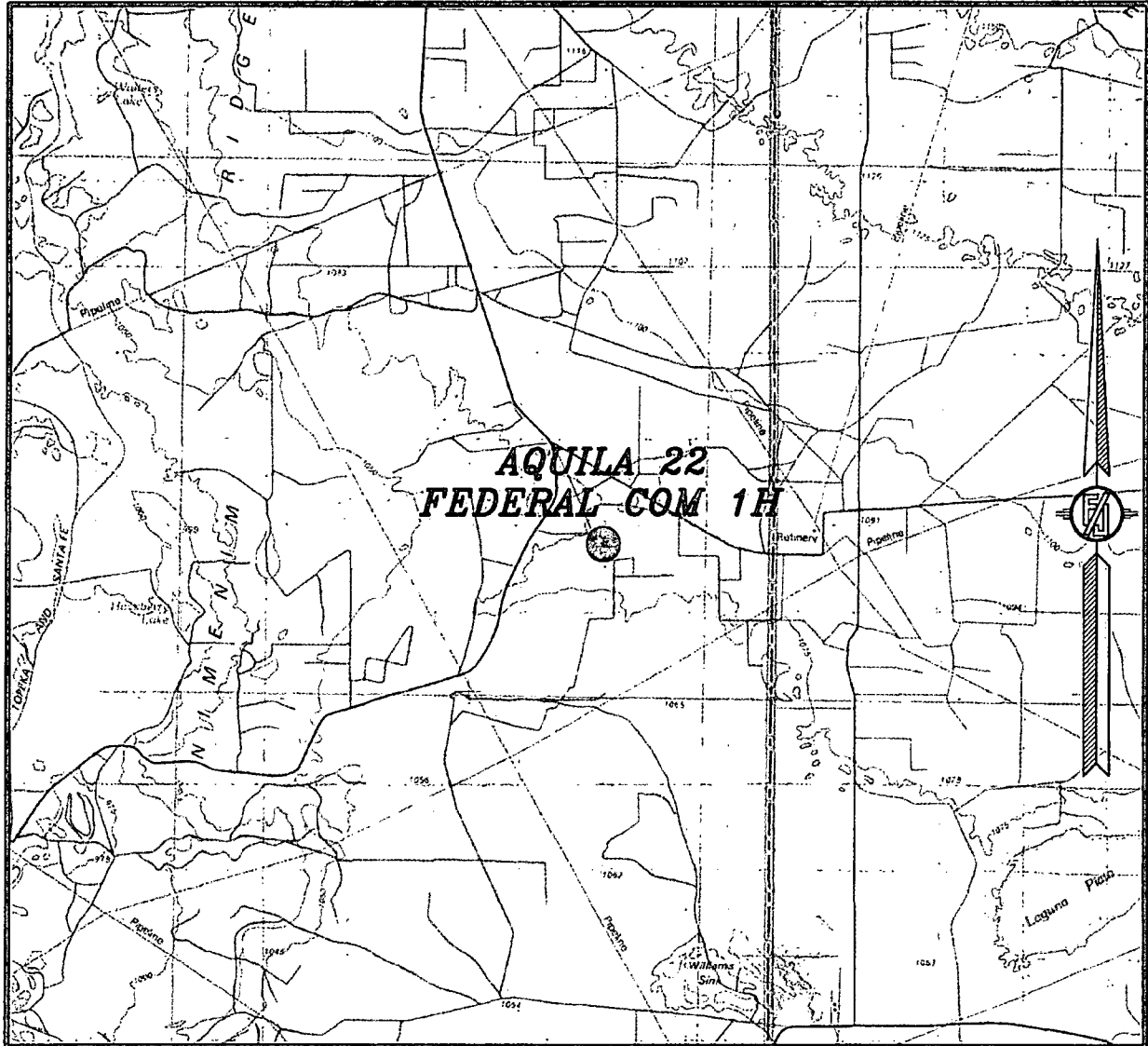
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 EDDY COUNTY, STATE OF NEW MEXICO

AUGUST 9, 2012

SURVEY NO. 853A

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SECTION 22, TOWNSHIP 19 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
VICINITY MAP



NOT TO SCALE

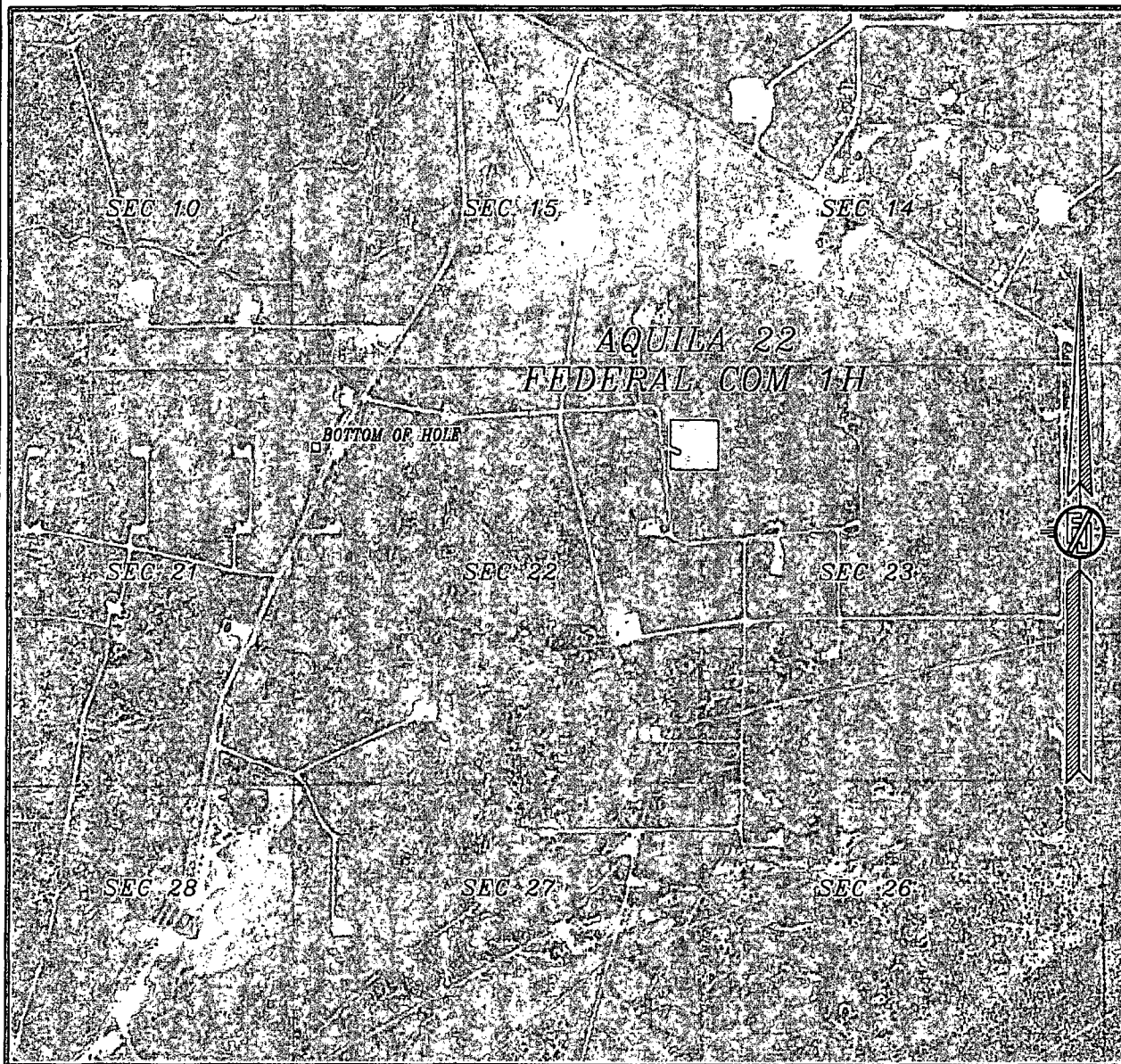
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SECTION 22, TOWNSHIP 19 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
MAY 2009

DEVON ENERGY PRODUCTION COMPANY, L.P.

AQUILA 22 FEDERAL COM 1H

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AUGUST 9, 2012

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