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PATHFINDER[®]

A Schlumberger Company

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AUG 01 2012

NMOCD ARTESIA

DIRECTIONAL SURVEY REPORT

30-015-39544

YATES PETROLEUM

DOMINO AOJ FED COM #13H

EDDY COUNTY, NEW MEXICO

PREPARED BY: JUAN ALCOCER

Pathfinder

6213 WCR 112
Midland, Texas 79706
Tel (432) 687-1147
Fax (432) 687-1544



DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) JOHN OVERTON
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 03-13-12 TO 03-28-12
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: EDDY COUNTY, NM
7. TYPE OF SURVEY(S) PERFORMED: GAMMA-RAY
8. COMPLETE IDENTIFICATION OF WELL:

YATES PETROLEUM
DOMINO AOJ FED COM #13H
EDDY COUNTY, NM
RIG: PATTERSON 511
9. SURVEY CERTIFIED FROM: 8547 TO 13233 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 4600.40 FEET ON A BEARING OF 273.72 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 13305 FEET, ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.


JUAN ALCOCER
MWD COORDINATOR

PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 03/12/2012
Date Completed: 03/28/2012

YATES PETROLEUM CORP.
DOMINO AOJ FED COM #13H
EDDY COUNTY, NM
Rig:PATTERSON 511
PathFinder Office Supervisor: STEVE BIBB
PathFinder Field Engineers:J.OVERTON
S.CARRILLO
J.HULL

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.40.7.0073 N LON:103.52.0.5928 W
GRID Reference:NAD83 new mexico east Transverse Mercator
Ref GRID Coord: X: 684888.9880 Y: 607287.9740
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.41° EAST TO GRID
Vertical Section Plane: 273.75
Survey Vert. Reference: 18.80' Kelly Bushing To Ground
Altitude:3549.00' Ground To MSL

Measured Depth	13305.00	(feet)
Inclination	91.54	(deg)
Azimuth	273.77	(deg)
True Vertical Depth	8963.84	(feet)
Vertical Section	4600.40	(feet)
Survey X cord	680298.27	(feet)
Survey Y cord	607586.27	(feet)
Survey Lat	32.66948761 N	(deg)
Survey Lon	103.88174536 W	(deg)
Rectangular Corr. N/S	298.29 N	(feet)
Rectangular Corr. E/W	4590.72 W	(feet)
Closure Distance	4600.40	(feet)
Direction of Closure	273.72	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORP.
DOMINO AOJ FED COM #13H
EDDY COUNTY, NM
Rig:PATTERSON 511
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Vertical Section Plane: 273.75
Survey Vert. Reference: 18.80' Kelly Bushing To Ground
Altitude:3549.00' Ground To MSL

Survey Calculations by RX5 V6.04 using Minimum Curvature

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)
THE FOLLOWING ARE MS ENERGY SERVICES GYRO SURVEYS										
200.00	0.75	218.42	199.99	0.00	0.74	1.02 S	0.81 W	1.30@	218.42	0.00
400.00	0.50	245.54	399.98	200.00	2.26	2.41 S	2.42 W	3.41@	225.11	0.19
600.00	0.25	241.66	599.98	200.00	3.39	2.98 S	3.60 W	4.67@	230.38	0.13
800.00	0.50	179.78	799.97	200.00	3.70	4.06 S	3.98 W	5.68@	224.43	0.22
1000.00	0.25	134.88	999.97	200.00	3.31	5.24 S	3.67 W	6.39@	214.98	0.18
1200.00	0.25	185.00	1199.97	200.00	3.00	5.98 S	3.39 W	6.88@	209.58	0.11
1400.00	0.25	113.10	1399.97	200.00	2.59	6.59 S	3.03 W	7.25@	204.71	0.15
1600.00	2.00	47.13	1599.92	200.00	-0.22	4.38 S	0.07 W	4.38@	180.93	0.96
1800.00	2.25	54.25	1799.78	200.00	-5.64	0.29 N	5.67 E	5.68@	87.12	0.18
2000.00	2.50	44.34	1999.61	200.00	-11.51	5.70 N	11.91 E	13.20@	64.42	0.24
2200.00	2.25	60.45	2199.44	200.00	-17.63	10.75 N	18.37 E	21.29@	59.66	0.35
2400.00	2.00	54.57	2399.31	200.00	-23.62	14.71 N	24.63 E	28.69@	59.15	0.17
2600.00	1.00	64.69	2599.24	200.00	-27.85	17.48 N	29.05 E	33.91@	58.96	0.52
2800.00	0.25	180.74	2799.23	200.00	-29.40	17.79 N	30.62 E	35.42@	59.84	0.57
3000.00	0.25	340.84	2999.23	200.00	-29.25	17.77 N	30.48 E	35.28@	59.75	0.25
3200.00	0.50	294.96	3199.22	200.00	-28.26	18.55 N	29.54 E	34.88@	57.87	0.19
3400.00	0.75	304.66	3399.21	200.00	-26.33	19.66 N	27.67 E	33.95@	54.61	0.13
3600.00	1.00	291.76	3599.19	200.00	-23.55	21.05 N	24.98 E	32.67@	49.87	0.16
3800.00	1.00	275.81	3799.16	200.00	-20.14	21.88 N	21.62 E	30.76@	44.66	0.14
4000.00	0.75	286.91	3999.13	200.00	-17.12	22.43 N	18.63 E	29.16@	39.71	0.15
4200.00	0.50	262.01	4199.12	200.00	-14.99	22.69 N	16.51 E	28.07@	36.04	0.18
4400.00	0.75	286.11	4399.11	200.00	-12.86	22.94 N	14.39 E	27.08@	32.11	0.18
4600.00	1.00	298.17	4599.09	200.00	-9.99	24.12 N	11.60 E	26.77@	25.67	0.16
4800.00	0.75	288.27	4799.06	200.00	-7.14	25.36 N	8.81 E	26.85@	19.17	0.14
5000.00	1.00	306.37	4999.04	200.00	-4.40	26.80 N	6.17 E	27.50@	12.96	0.19

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORP.
DOMINO AOJ FED COM #13H
EDDY COUNTY, NM
RIG:PATTERSON 511

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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)
5200.00	1.75	272.47	5198.98	200.00	0.12	27.97 N	1.71 E	28.02@	3.50	0.54
5400.00	2.50	274.52	5398.84	200.00	7.54	28.44 N	5.69 W	29.01@	348.69	0.38
5600.00	1.25	280.62	5598.73	200.00	14.07	29.19 N	12.18 W	31.63@	337.35	0.63
5800.00	0.75	261.67	5798.70	200.00	17.51	29.40 N	15.62 W	33.30@	332.02	0.30
6000.00	1.25	244.72	5998.67	200.00	20.70	28.28 N	18.89 W	34.01@	326.26	0.29
6200.00	1.25	213.75	6198.63	200.00	23.70	25.54 N	22.07 W	33.75@	319.16	0.33
6400.00	1.50	216.80	6398.57	200.00	26.22	21.63 N	24.85 W	32.95@	311.03	0.13
6600.00	2.00	232.84	6598.48	200.00	30.28	17.42 N	29.20 W	34.01@	300.82	0.35
6800.00	2.00	236.90	6798.35	200.00	35.71	13.41 N	34.91 W	37.40@	291.01	0.07
7000.00	3.00	221.91	6998.16	200.00	41.74	7.61 N	41.33 W	42.02@	280.43	0.59
7200.00	2.00	240.98	7197.97	200.00	47.91	2.02 N	47.88 W	47.92@	272.41	0.64
7400.00	2.00	245.04	7397.85	200.00	53.90	1.15 S	54.09 W	54.10@	268.79	0.07
7600.00	0.75	244.11	7597.79	200.00	58.10	3.19 S	58.43 W	58.52@	266.87	0.63
7800.00	0.25	41.14	7797.79	200.00	58.97	3.43 S	59.32 W	59.42@	266.69	0.49
8000.00	0.25	280.19	7997.79	200.00	59.14	3.03 S	59.47 W	59.54@	267.08	0.22
8200.00	1.00	285.57	8197.77	200.00	61.28	2.48 S	61.58 W	61.63@	267.69	0.38
8400.00	1.25	293.62	8397.73	200.00	65.04	1.14 S	65.26 W	65.27@	269.00	0.15
** TIED INTO MS ENERGY SERVICES GYRO @ 8500' MD										
8500.00	1.25	295.71	8497.71	100.00	67.08	0.23 S	67.24 W	67.24@	269.80	0.05
THE FOLLOWING ARE PATHFINDER MWD SURVEYS										
8547.00	7.91	265.42	8544.54	47.00	70.76	0.27 S	70.93 W	70.93@	269.79	14.59
8579.00	11.87	265.41	8576.05	32.00	76.20	0.71 S	76.41 W	76.41@	269.47	12.37
8611.00	15.92	267.04	8607.11	32.00	83.82	1.20 S	84.07 W	84.08@	269.19	12.71
8643.00	19.96	269.08	8637.55	32.00	93.62	1.51 S	93.92 W	93.93@	269.08	12.77
8674.00	23.74	269.77	8666.32	31.00	105.13	1.62 S	105.46 W	105.47@	269.12	12.22
8706.00	27.35	273.11	8695.19	32.00	118.91	1.25 S	119.24 W	119.25@	269.40	12.14
8738.00	30.78	275.21	8723.15	32.00	134.45	0.10 S	134.74 W	134.74@	269.96	11.18
8770.00	33.85	275.62	8750.19	32.00	151.54	1.51 N	151.77 W	151.78@	270.57	9.62
8801.00	36.76	275.05	8775.49	31.00	169.45	3.17 N	169.61 W	169.64@	271.07	9.45

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORP.
DOMINO AOJ FED COM #13H
EDDY COUNTY, NM
RIG:PATTERSON 511

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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)
8833.00	40.19	274.45	8800.54	32.00	189.35	4.82 N	189.44 W	189.51@	271.46	10.78
8865.00	43.79	272.98	8824.32	32.00	210.76	6.20 N	210.80 W	210.90@	271.68	11.66
8897.00	47.48	273.57	8846.69	32.00	233.63	7.51 N	233.64 W	233.76@	271.84	11.61
8929.00	50.30	272.56	8867.73	32.00	257.74	8.79 N	257.71 W	257.86@	271.95	9.13
8961.00	52.76	274.49	8887.64	32.00	282.78	10.34 N	282.71 W	282.90@	272.09	9.02
8992.00	55.31	275.40	8905.84	31.00	307.87	12.50 N	307.71 W	307.96@	272.33	8.56
9024.00	58.21	275.76	8923.38	32.00	334.62	15.11 N	334.34 W	334.68@	272.59	9.11
9056.00	61.99	275.59	8939.33	32.00	362.34	17.85 N	361.94 W	362.38@	272.82	11.82
9088.00	65.69	275.07	8953.43	32.00	391.04	20.52 N	390.54 W	391.07@	273.01	11.65
9119.00	69.56	274.32	8965.23	31.00	419.70	22.86 N	419.10 W	419.72@	273.12	12.68
9151.00	73.25	273.07	8975.44	32.00	450.02	24.81 N	449.36 W	450.05@	273.16	12.11
9183.00	77.21	272.12	8983.59	32.00	480.95	26.21 N	480.27 W	480.98@	273.12	12.70
9214.00	81.25	270.90	8989.38	31.00	511.38	27.01 N	510.70 W	511.42@	273.03	13.59
9247.00	85.82	269.73	8993.10	33.00	544.10	27.19 N	543.48 W	544.16@	272.86	14.29
9278.00	89.43	269.23	8994.38	31.00	574.98	26.91 N	574.45 W	575.08@	272.68	11.76
9310.00	89.96	269.48	8994.55	32.00	606.88	26.55 N	606.45 W	607.03@	272.51	1.83
9342.00	90.04	269.66	8994.55	32.00	638.80	26.31 N	638.45 W	638.99@	272.36	0.61
9405.00	89.43	271.89	8994.85	63.00	701.71	27.16 N	701.44 W	701.96@	272.22	3.67
9469.00	89.16	271.90	8995.63	64.00	765.67	29.27 N	765.39 W	765.95@	272.19	0.42
9533.00	89.25	273.55	8996.52	64.00	829.65	32.32 N	829.31 W	829.94@	272.23	2.58
9596.00	89.25	273.31	8997.35	63.00	892.65	36.08 N	892.20 W	892.93@	272.32	0.38
9660.00	89.87	274.52	8997.84	64.00	956.64	40.45 N	956.04 W	956.90@	272.42	2.12
9723.00	90.04	274.24	8997.89	63.00	1019.64	45.27 N	1018.86 W	1019.86@	272.54	0.52
9787.00	90.13	273.74	8997.79	64.00	1083.64	49.72 N	1082.70 W	1083.84@	272.63	0.79
9850.00	90.13	274.58	8997.65	63.00	1146.64	54.29 N	1145.54 W	1146.82@	272.71	1.33
9914.00	90.40	276.01	8997.35	64.00	1210.61	60.19 N	1209.26 W	1210.76@	272.85	2.27
9977.00	90.40	275.54	8996.91	63.00	1273.57	66.53 N	1271.94 W	1273.68@	272.99	0.75
10041.00	90.31	275.21	8996.52	64.00	1337.54	72.53 N	1335.66 W	1337.63@	273.11	0.53

PathFinder Energy Services, Inc.

Survey Report

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DOMINO AOJ FED COM #13H
EDDY COUNTY, NM
RIG:PATTERSON 511

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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)
10104.00	90.48	275.41	8996.08	63.00	1400.52	78.36 N	1398.39 W	1400.58@	273.21	0.42
10168.00	90.57	275.15	8995.50	64.00	1464.49	84.25 N	1462.11 W	1464.54@	273.30	0.43
10231.00	90.40	274.75	8994.96	63.00	1527.47	89.68 N	1524.87 W	1527.51@	273.37	0.69
10295.00	90.13	274.79	8994.67	64.00	1591.46	95.01 N	1588.65 W	1591.49@	273.42	0.43
10359.00	89.87	274.55	8994.67	64.00	1655.46	100.22 N	1652.44 W	1655.47@	273.47	0.55
10429.00	89.60	274.48	8994.99	70.00	1725.45	105.73 N	1722.22 W	1725.46@	273.51	0.40
10493.00	89.78	273.98	8995.34	64.00	1789.44	110.45 N	1786.05 W	1789.46@	273.54	0.83
10557.00	89.96	273.94	8995.48	64.00	1853.44	114.87 N	1849.89 W	1853.46@	273.55	0.29
10620.00	89.96	273.24	8995.53	63.00	1916.44	118.81 N	1912.77 W	1916.46@	273.55	1.11
10684.00	88.29	273.61	8996.50	64.00	1980.43	122.63 N	1976.64 W	1980.44@	273.55	2.67
10748.00	88.20	273.51	8998.46	64.00	2044.40	126.61 N	2040.49 W	2044.42@	273.55	0.21
10812.00	88.55	273.43	9000.28	64.00	2108.38	130.48 N	2104.35 W	2108.39@	273.55	0.56
10875.00	88.72	273.13	9001.78	63.00	2171.36	134.08 N	2167.23 W	2171.37@	273.54	0.55
10939.00	88.99	273.08	9003.06	64.00	2235.34	137.55 N	2231.12 W	2235.36@	273.53	0.43
11003.00	88.99	273.65	9004.19	64.00	2299.33	141.30 N	2295.00 W	2299.35@	273.52	0.89
11066.00	88.99	273.52	9005.30	63.00	2362.32	145.24 N	2357.87 W	2362.34@	273.52	0.21
11130.00	89.08	273.15	9006.37	64.00	2426.31	148.97 N	2421.75 W	2426.33@	273.52	0.60
11193.00	89.16	273.46	9007.34	63.00	2489.30	152.60 N	2484.64 W	2489.32@	273.51	0.51
11256.00	89.52	272.20	9008.07	63.00	2552.28	155.71 N	2547.55 W	2552.31@	273.50	2.08
11320.00	90.57	273.38	9008.02	64.00	2616.27	158.82 N	2611.48 W	2616.30@	273.48	2.47
11384.00	91.01	273.86	9007.14	64.00	2680.27	162.86 N	2675.34 W	2680.29@	273.48	1.02
11447.00	91.45	274.06	9005.78	63.00	2743.25	167.21 N	2738.18 W	2743.28@	273.49	0.77
11511.00	91.80	274.29	9003.97	64.00	2807.22	171.87 N	2801.98 W	2807.25@	273.51	0.65
11574.00	90.92	274.10	9002.47	63.00	2870.20	176.48 N	2864.79 W	2870.22@	273.53	1.43
11638.00	91.54	274.49	9001.10	64.00	2934.18	181.27 N	2928.60 W	2934.20@	273.54	1.14
11701.00	92.15	274.41	8999.07	63.00	2997.15	186.15 N	2991.38 W	2997.16@	273.56	0.98
11765.00	92.33	274.61	8996.57	64.00	3061.09	191.18 N	3055.13 W	3061.11@	273.58	0.42
11828.00	91.01	274.76	8994.73	63.00	3124.06	196.33 N	3117.89 W	3124.07@	273.60	2.11

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Survey Report

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RIG:PATTERSON 511

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11892.00	90.22	275.13	8994.05	64.00	3188.04	201.84 N	3181.65 W	3188.04@	273.63	1.36
11955.00	90.75	275.10	8993.51	63.00	3251.02	207.46 N	3244.40 W	3251.02@	273.66	0.84
12019.00	90.84	275.18	8992.62	64.00	3314.99	213.19 N	3308.13 W	3314.99@	273.69	0.19
12082.00	91.63	275.39	8991.27	63.00	3377.95	218.99 N	3370.85 W	3377.95@	273.72	1.30
12146.00	90.84	275.52	8989.89	64.00	3441.91	225.08 N	3434.54 W	3441.91@	273.75	1.25
12209.00	91.45	275.71	8988.63	63.00	3504.86	231.24 N	3497.23 W	3504.87@	273.78	1.01
12273.00	91.80	275.57	8986.81	64.00	3568.80	237.53 N	3560.89 W	3568.81@	273.82	0.59
12336.00	90.57	274.43	8985.51	63.00	3631.77	243.02 N	3623.64 W	3631.78@	273.84	2.66
12400.00	91.01	274.44	8984.63	64.00	3695.76	247.96 N	3687.44 W	3695.77@	273.85	0.69
12463.00	91.01	274.43	8983.52	63.00	3758.75	252.84 N	3750.24 W	3758.75@	273.86	0.02
12526.00	90.66	272.92	8982.60	63.00	3821.74	256.87 N	3813.10 W	3821.75@	273.85	2.46
12590.00	91.01	272.82	8981.67	64.00	3885.72	260.08 N	3877.02 W	3885.73@	273.84	0.57
12653.00	91.19	272.51	8980.46	63.00	3948.70	263.01 N	3939.94 W	3948.70@	273.82	0.57
12718.00	91.19	272.40	8979.11	65.00	4013.67	265.79 N	4004.86 W	4013.67@	273.80	0.17
12781.00	91.45	271.81	8977.66	63.00	4076.63	268.10 N	4067.80 W	4076.63@	273.77	1.02
12845.00	91.98	272.13	8975.74	64.00	4140.57	270.30 N	4131.74 W	4140.57@	273.74	0.97
12908.00	91.10	273.70	8974.05	63.00	4203.54	273.51 N	4194.63 W	4203.54@	273.73	2.86
12971.00	91.36	273.50	8972.70	63.00	4266.52	277.46 N	4257.49 W	4266.52@	273.73	0.52
13035.00	91.54	273.46	8971.08	64.00	4330.50	281.34 N	4321.35 W	4330.50@	273.73	0.29
13098.00	91.80	273.33	8969.24	63.00	4393.47	285.07 N	4384.21 W	4393.47@	273.72	0.46
13162.00	91.28	273.65	8967.52	64.00	4457.45	288.97 N	4448.07 W	4457.45@	273.72	0.95
13233.00	91.54	273.77	8965.77	71.00	4528.43	293.56 N	4518.90 W	4528.43@	273.72	0.40
STRAIGHT LINE PROJECTION TO BIT AT 13305'MD										
13305.00	91.54	273.77	8963.84	72.00	4600.40	298.29 N	4590.72 W	4600.40@	273.72	0.00

** 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:	YATES PETROLEUM CORP.		
LEASE / WELL No.:	DOMINO AOJ FED COM	# 13H	
WELL LOCATION:	EDDY COUNTY, NM		
COUNTY / STATE / COUNTRY:	EDDY	NM	USA
RIG:	PATTERSON 511		
API WELL No:	30-015-39544		
JOB No:	12MLD0082		
P.O. / AFE No.			
DIRECTIONAL COMPANY:	PATHFINDER		

WELL SITE INFORMATION

TOTAL MAGNETIC CORRECTION (TMC):			
On Wall Plat:	7.43	LWD Calculated:	7.41
		Agreed Upon:	7.41
X =	684888.988000	Feet	Y = 607287.974000
			Feet
SITE LATITUDE:	32.668613 N	SITE LONGITUDE:	103.866831 W
GRID SYSTEM:	TRUE ☐ UTM ☒	LAMBERT ☐	ZONE: NEW MEXICO EAST
PROPOSED DRIFT DIRECTION:	273.75°		
KELLY BUSHING ELEVATION:	18.8'		
ALTITUDE:	3549'	Feet	WATER DEPTH: N/A
			Feet

TIE-IN SURVEY

MEASURED DEPTH:	8500'		
DRIFT ANGLE:	1.25°		
DRIFT DIRECTION:	295.71'		
TRUE VERTICAL DEPTH:	8497.71'		
VERTICAL SECTION:	67.08'		
RECTANGULAR COORDINATE (N / S) :	0.23 S		
RECTANGULAR COORDINATE (E / W) :	67.24 W		
CLOSURE DISTANCE / DIRECTION:	67.24'	269.80°	
SURVEY CALCULATION METHOD:	AA ☐	MC ☒	RC ☐ BT ☐
SOURCE OF TIE-IN DATA (COMPANY):	MS ENERGY SERVICES		
COPY OF TIE-IN SURVEY REPORT	☒ YES ☐ NO		

WELL PLAN

KICKOFF DEPTH:	8537.60'	TOTAL DEPTH:	13443.20'
KICKOFF ANGLE:	0.00°	MAX ANGLE:	91.24°

PES Engineers: JOHN OVERTON
SAUL CARRILLO

**Signature of both field engineers required if applicable

Directional Driller: _____

DATE: 12-Mar-2012

MS ENERGY SERVICES
ODESSA, TEXAS

GYROSCOPIC DIRECTIONAL SURVEY
BY MINIMUM CURVATURE

FOR

* YATES PETROLEUM *

JOB NUMBER: SVCO-120340

WELL NAME: DOMINO AOJ FEDERAL COM. #13H

LOCATION: EDDY COUNTY, NEW MEXICO

SURVEY DATE: MARCH 13, 2012

SURVEY ENGINEER: S. SMITH

MAGNETIC DECLINATION: 07.43 GRID NORTH

GYRO REFERENCE BEARING: GRID NORTH

VERTICAL SECTION CALCULATED IN A

PROPOSAL DIRECTION OF: 273.75

SURF. ELEVATION: 19

***** DEPTH MEASURED IN FEET *****

COMMENTS: PATTERSON 511

RKB 19'

EMAIL TBUSSELL@YATESPETROLEUM.COM**

MIKEL@YATESPETROLEUM.COM

*** THIS DIRECTIONAL SURVEY REPORT IS ***
** CORRECT TO THE BEST OF MY KNOWLEDGE ***
* AND IS SUPPORTED BY ACTUAL FIELD DATA! *
**

** ***** **
** COMPANY REPRESENTATIVE **

**

MS ENERGY SERVICES
ODESSA, TEXAS

JOB NUMBER: SVCO-120340

WELL NAME: DOMINO AOJ FEDERAL COM. #13H

INRUN SURVEY
BY MINIMUM CURVATURE

MEAS. DEPTH	VERT. DEPTH	VERT. SECT.	L/R PROP.	INCL	BEARING AZIMUTH	COORDINATES LATITUDE DEPARTURE	D-LEG /100	D-LEG /CL	STATION DISP.	DISPLACEMENT DIRECTION
0.0	0.00	0.00	0.000	00.00	000.00	0.00 N 0.00 E	0.00		0.00 AT	000.00
200.0	199.99	0.74	-1.077	00.75	218.42	1.03 S 0.81 W	0.38	0.75	1.31 AT	218.42
400.0	399.98	2.26	-2.566	00.50	245.54	2.41 S 2.42 W	0.19	0.38	3.42 AT	225.10
600.0	599.98	3.40	-3.210	00.25	241.66	2.98 S 3.60 W	0.13	0.25	4.67 AT	230.37
800.0	799.97	3.71	-4.312	00.50	179.78	4.06 S 3.98 W	0.22	0.44	5.69 AT	224.43
1000.0	999.97	3.32	-5.470	00.25	134.88	5.24 S 3.67 W	0.18	0.37	6.40 AT	214.98
1200.0	1199.97	3.00	-6.193	00.25	185.00	5.98 S 3.40 W	0.11	0.21	6.88 AT	209.58
1400.0	1399.97	2.60	-6.774	00.25	113.10	6.59 S 3.03 W	0.15	0.29	7.25 AT	204.72
1600.0	1599.92	-0.21	-4.382	02.00	047.13	4.39 S 0.07 W	0.96	1.91	4.39 AT	180.96
1800.0	1799.79	-5.64	0.652	02.25	054.25	0.28 N 5.67 E	0.18	0.36	5.68 AT	087.15
2000.0	1999.62	-11.51	6.462	02.50	044.34	5.70 N 11.91 E	0.24	0.48	13.20 AT	064.43
2200.0	2199.45	-17.63	11.930	02.25	060.45	10.75 N 18.37 E	0.35	0.71	21.28 AT	059.66
2400.0	2399.31	-23.61	16.290	02.00	054.57	14.71 N 24.63 E	0.17	0.33	28.69 AT	059.15
2600.0	2599.24	-27.84	19.343	01.00	064.69	17.48 N 29.05 E	0.52	1.03	33.90 AT	058.96
2800.0	2799.23	-29.39	19.755	00.25	180.74	17.79 N 30.62 E	0.57	1.13	35.41 AT	059.85
3000.0	2999.23	-29.25	19.721	00.25	340.84	17.77 N 30.47 E	0.25	0.49	35.27 AT	059.76
3200.0	3199.22	-28.26	20.438	00.50	294.96	18.55 N 29.54 E	0.19	0.37	34.88 AT	057.88
3400.0	3399.21	-26.33	21.426	00.75	304.66	19.66 N 27.67 E	0.14	0.27	33.94 AT	054.61
3600.0	3599.19	-23.54	22.638	01.00	291.76	21.05 N 24.97 E	0.16	0.32	32.66 AT	049.87
3800.0	3799.16	-20.14	23.241	01.00	275.81	21.87 N 21.62 E	0.14	0.28	30.75 AT	044.66
4000.0	3999.13	-17.12	23.602	00.75	286.91	22.43 N 18.63 E	0.15	0.30	29.16 AT	039.71
4200.0	4199.12	-14.99	23.722	00.50	262.01	22.69 N 16.51 E	0.18	0.36	28.06 AT	036.04
4400.0	4399.11	-12.86	23.825	00.75	286.11	22.93 N 14.39 E	0.18	0.36	27.07 AT	032.11
4600.0	4599.09	-9.99	24.826	01.00	298.17	24.12 N 11.59 E	0.15	0.31	26.76 AT	025.67
4800.0	4799.06	-7.13	25.876	00.75	288.27	25.35 N 8.81 E	0.15	0.29	26.84 AT	019.16
5000.0	4999.04	-4.40	27.145	01.00	306.37	26.80 N 6.16 E	0.18	0.37	27.50 AT	012.95
5200.0	5198.99	0.13	28.018	01.75	272.47	27.97 N 1.71 E	0.54	1.08	28.02 AT	003.49
5400.0	5398.85	7.54	28.008	02.50	274.52	28.44 N 5.69 W	0.38	0.75	29.01 AT	348.68
5600.0	5598.74	14.07	28.328	01.25	280.62	29.19 N 12.19 W	0.63	1.26	31.63 AT	337.34
5800.0	5798.70	17.51	28.315	00.75	261.67	29.40 N 15.62 W	0.30	0.59	33.29 AT	332.01
6000.0	5998.67	20.70	26.982	01.25	244.72	28.28 N 18.89 W	0.29	0.58	34.01 AT	326.25
6200.0	6198.63	23.70	24.034	01.25	213.75	25.53 N 22.08 W	0.33	0.67	33.75 AT	319.15
6400.0	6398.57	26.22	19.951	01.50	216.80	21.62 N 24.86 W	0.13	0.26	32.95 AT	311.02
6600.0	6598.48	30.28	15.471	02.00	232.84	17.42 N 29.21 W	0.35	0.70	34.01 AT	300.81
6800.0	6798.36	35.71	11.093	02.00	236.90	13.40 N 34.91 W	0.07	0.14	37.40 AT	291.00
7000.0	6998.17	41.74	4.884	03.00	221.91	7.60 N 41.33 W	0.59	1.19	42.02 AT	280.42
7200.0	7197.98	47.91	-1.120	02.00	240.98	2.02 N 47.88 W	0.64	1.29	47.92 AT	272.41
7400.0	7397.85	53.90	-4.686	02.00	245.04	1.15 S 54.09 W	0.07	0.14	54.11 AT	268.78
7600.0	7597.79	58.10	-7.009	00.75	244.11	3.19 S 58.44 W	0.63	1.25	58.52 AT	266.87
7800.0	7797.79	58.98	-7.310	00.25	041.14	3.44 S 59.33 W	0.49	0.99	59.43 AT	266.68
8000.0	7997.79	59.14	-6.915	00.25	280.19	3.03 S 59.47 W	0.22	0.44	59.55 AT	267.08
8200.0	8197.77	61.29	-6.508	01.00	285.57	2.49 S 61.58 W	0.38	0.75	61.63 AT	267.69
8400.0	8397.73	65.05	-5.409	01.25	293.62	1.14 S 65.26 W	0.15	0.30	65.27 AT	269.00
8500.0	8497.71	67.08	-4.631	01.25	295.71	0.23 S 67.24 W	0.05	0.05	67.24 AT	269.80

 * THE HORIZONTAL DISPLACEMENT AT THE DEPTH OF *
 * ***** *
 * 8500.00 FEET EQUALS 67.24 FEET AT 269.80 *
 * ***** *

PathFinder Energy Services, Inc. Magnetic & Grid Calculations

Yates Petroleum Corporation
Domino AOJ Federal Com #13H
Eddy County, NM
Rig: Patterson 511

Tue Feb 28 11:06:51 2012

Coordinates

Latitude: 32.668613 N (32 deg. 40 min. 7.0073 sec.)
Longitude: 103.866831 W (-103 deg. 52 min. 0.5928 sec.)
Elevation: 3567.80 feet.
Calculation Date: Feb/28/2012

Magnetic Calculations

Model: IGRF2010
Dip Angle: 60.5301 degrees
Total Magnetic Field: 0.48780 gauss
Magnetic Declination: 7.668883 degrees
Horizontal Intensity: 0.239980/gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.668883 Degr

Transverse Mercator Grid Calculations NAD83

Grid System: Transverse Mercator: new mexico east
Ellipsoid: GRS80
X: 684888.9880 feet
Y: 607287.9740 feet
True to Grid: (convergence) -0.251812 degrees
Magnetic to Grid: 7.417071 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.417071 Degr.

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

YATES PETROLEUM CORP.
DOMINO AOJ FED COM #13H
HACKBERRY; BONE SPRING

Field
C-8-1

Mon Mar 12 06:56:26 2012

Coordinates

Latitude: 32.668613 N (32 deg. 40 min. 7.0073 sec.)
Longitude: 103.866831 W (-103 deg. 52 min. 0.5928 sec.)
Elevation: 3567.80 feet.
Calculation Date: Mar/12/2012

Magnetic Calculations

Model: IGRF2010
Dip Angle: 60.5293 degrees
Total Magnetic Field: 0.48777 gauss
Magnetic Declination: 7.664842 degrees
Horizontal Intensity: 0.239970 gauss

To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.664842 Degr

Transverse Mercator Grid Calculations NAD83

Grid System: Transverse Mercator: new mexico east
Ellipsoid: GRS80
X: 684888.9880 feet
Y: 607287.9740 feet
True to Grid: (convergence) -0.251812 degrees
Magnetic to Grid: 7.413030 degrees

To Convert a Magnetic Dir. to a GRID dir. Add 7.413030 Degr.