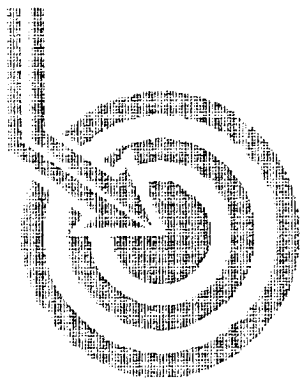




Scientific Drilling

LOUIS DREYFUS NATURAL GAS CORP

Field: Unknown
Site: Eddy County, NM
Well: ^SParagosa 17 Fed. Com #1
Wellpath: VH - Job #32K0301121
Survey: 3/2/01

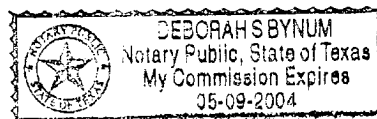
This survey is correct to the best of my knowledge
and is supported by actual field data.

Loz/ Nozdy.....Company Representative

Notorized this date 6th of April, 2001.

Deborah Sue Bynum
Notary Signature

County of Midland
State of Texas



Scientific Drilling International

Survey Report

Company: LOUIS DREYFUS NATURAL GAS CORP	Date: 4/5/2001	Time: 15:39:43	Page: 1
Field: Unknown	Co-ordinate(NE) Reference:	Site: Eddy County, NM, True North	
Site: Eddy County, NM	Vertical (TVD) Reference:	SITE 0.0 above Mean Sea Level	
Well: Paragosa 17 Fed. Com #1	Section (VS) Reference:	Well (0.0E,0.0N,244.4Azi)	
Wellpath: VH - Job #32K0301121	Survey Calculation Method:	Minimum Curvature	

Survey: 3/2/01 KSRG 0'-11760'	Start Date:	4/5/2001
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Company: Scientific Drilling Internatio Tool: Keeper	Engineer:	Gary DeSpain
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Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	ClsD ft	ClsA deg
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.00
100.0	0.05	190.02	100.0	0.0	0.0	0.0	0.0	190.02
200.0	0.22	216.35	200.0	-0.2	-0.2	-0.1	0.3	208.20
300.0	0.18	256.90	300.0	-0.4	-0.4	-0.4	0.6	222.57
400.0	0.38	283.20	400.0	-0.4	-0.4	-0.9	1.0	245.86
500.0	0.64	316.35	500.0	0.1	0.1	-1.6	1.6	273.23
600.0	1.04	311.46	600.0	1.1	1.1	-2.6	2.9	292.47
700.0	1.06	328.45	700.0	2.5	2.5	-3.8	4.5	303.10
800.0	1.19	326.35	799.9	4.1	4.1	-4.9	6.4	310.35
900.0	0.59	316.34	899.9	5.4	5.4	-5.8	7.9	312.31
1000.0	0.48	267.51	999.9	5.7	5.7	-6.6	8.7	311.06
1100.0	1.06	253.51	1099.9	5.4	5.4	-7.9	9.6	304.85
1200.0	1.14	254.95	1199.9	4.9	4.9	-9.7	10.9	296.86
1300.0	1.33	257.56	1299.9	4.4	4.4	-11.8	12.6	290.49
1400.0	1.31	254.27	1399.9	3.9	3.9	-14.1	14.6	285.35
1500.0	1.07	264.95	1499.8	3.5	3.5	-16.1	16.5	282.16
1600.0	0.95	265.57	1599.8	3.3	3.3	-17.8	18.1	280.54
1700.0	0.97	269.52	1699.8	3.2	3.2	-19.5	19.8	279.45
1800.0	0.84	269.79	1799.8	3.2	3.2	-21.1	21.3	278.73
1900.0	0.61	271.58	1899.8	3.3	3.3	-22.4	22.6	278.27
2000.0	0.50	283.63	1999.8	3.4	3.4	-23.3	23.6	278.22
2100.0	0.61	288.45	2099.8	3.6	3.6	-24.2	24.5	278.54
2200.0	0.53	280.65	2199.8	3.9	3.9	-25.2	25.5	278.78
2300.0	0.53	284.13	2299.8	4.1	4.1	-26.1	26.4	278.91
2400.0	0.47	278.22	2399.8	4.3	4.3	-27.0	27.3	278.98
2500.0	0.47	287.73	2499.8	4.4	4.4	-27.8	28.1	279.10
2600.0	0.47	281.79	2599.8	4.7	4.7	-28.5	28.9	279.26
2700.0	0.29	313.54	2699.7	4.9	4.9	-29.1	29.5	279.57
2800.0	0.11	298.38	2799.7	5.1	5.1	-29.4	29.8	279.90
2900.0	0.18	240.82	2899.7	5.1	5.1	-29.6	30.1	279.77
3000.0	0.26	274.52	2999.7	5.0	5.0	-30.0	30.4	279.55
3100.0	0.35	291.47	3099.7	5.2	5.2	-30.5	30.9	279.63
3200.0	0.28	274.79	3199.7	5.3	5.3	-31.0	31.5	279.70
3300.0	0.48	276.85	3299.7	5.4	5.4	-31.7	32.1	279.63
3400.0	0.67	267.53	3399.7	5.4	5.4	-32.7	33.1	279.38
3500.0	0.72	270.70	3499.7	5.4	5.4	-33.9	34.3	279.02
3600.0	0.75	268.21	3599.7	5.4	5.4	-35.2	35.6	278.68
3700.0	0.75	271.53	3699.7	5.4	5.4	-36.5	36.9	278.37
3800.0	0.80	270.12	3799.7	5.4	5.4	-37.8	38.2	278.10
3900.0	0.81	266.43	3899.7	5.3	5.3	-39.2	39.6	277.75
4000.0	0.76	272.21	3999.7	5.3	5.3	-40.6	41.0	277.47
4100.0	0.73	267.64	4099.7	5.3	5.3	-41.9	42.2	277.24
4200.0	0.57	272.38	4199.7	5.3	5.3	-43.0	43.4	277.04
4300.0	0.53	269.49	4299.7	5.3	5.3	-44.0	44.3	276.91
4400.0	0.45	261.99	4399.7	5.3	5.3	-44.9	45.2	276.71
4500.0	0.49	258.95	4499.7	5.1	5.1	-45.7	46.0	276.42
4600.0	0.40	260.45	4599.7	5.0	5.0	-46.4	46.7	276.15
4700.0	0.44	236.88	4699.7	4.7	4.7	-47.1	47.3	275.74

Scientific Drilling International

Survey Report

Company: LOUIS DREYFUS NATURAL GAS CORP
 Field: Unknown
 Site: Eddy County, NM
 Well: Paragosa 17 Fed. Com #1
 Wellpath: VH - Job #32K0301121

Date: 4/5/2001

Time: 15:39:43

Page: 2

Co-ordinate(N/E) Reference:

Site: Eddy County, NM, True North

Vertical (TVD) Reference:

SITE 0.0 above Mean Sea Level

Section (VS) Reference:

Well (0.0E, 0.0N, 244.4Azi)

Survey Calculation Method:

Minimum Curvature

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	ClsD ft	ClsA deg
4800.0	0.36	233.20	4799.6	4.3	4.3	-47.7	47.9	275.20
4900.0	0.52	233.27	4899.6	3.9	3.9	-48.3	48.4	274.59
5000.0	0.47	236.97	4999.6	3.4	3.4	-49.0	49.1	273.95
5100.0	0.43	218.81	5099.6	2.9	2.9	-49.6	49.7	273.31
5200.0	0.39	233.77	5199.6	2.4	2.4	-50.1	50.1	272.71
5300.0	0.47	228.76	5299.6	1.9	1.9	-50.7	50.7	272.15
5400.0	0.42	245.64	5399.6	1.5	1.5	-51.3	51.3	271.65
5500.0	0.63	220.02	5499.6	0.9	0.9	-52.0	52.0	271.00
5600.0	0.80	230.96	5599.6	0.0	0.0	-52.9	52.9	270.05
5700.0	0.68	220.11	5699.6	-0.8	-0.8	-53.8	53.8	269.10
5800.0	0.67	209.53	5799.6	-1.8	-1.8	-54.5	54.5	268.10
5900.0	0.76	203.22	5899.6	-2.9	-2.9	-55.0	55.1	266.95
6000.0	0.52	201.68	5999.6	-4.0	-4.0	-55.5	55.6	265.91
6100.0	0.52	214.36	6099.6	-4.8	-4.8	-55.9	56.1	265.13
6200.0	0.41	212.31	6199.6	-5.4	-5.4	-56.3	56.6	264.49
6300.0	0.42	216.09	6299.6	-6.0	-6.0	-56.7	57.1	263.93
6400.0	0.50	239.33	6399.6	-6.6	-6.6	-57.3	57.7	263.48
6500.0	0.53	239.09	6499.6	-7.0	-7.0	-58.1	58.5	263.12
6600.0	0.47	247.55	6599.6	-7.4	-7.4	-58.9	59.3	262.83
6700.0	0.60	251.41	6699.6	-7.7	-7.7	-59.8	60.3	262.63
6800.0	0.69	263.30	6799.6	-8.0	-8.0	-60.8	61.4	262.54
6900.0	0.99	296.23	6899.5	-7.7	-7.7	-62.2	62.7	262.99
7000.0	1.04	289.79	6999.5	-7.0	-7.0	-63.8	64.2	263.77
7100.0	0.90	291.78	7099.5	-6.4	-6.4	-65.4	65.7	264.44
7200.0	0.95	287.24	7199.5	-5.8	-5.8	-67.0	67.2	265.02
7300.0	0.89	270.11	7299.5	-5.6	-5.6	-68.5	68.7	265.34
7400.0	0.90	271.05	7399.5	-5.6	-5.6	-70.1	70.3	265.46
7500.0	1.15	254.13	7499.5	-5.8	-5.8	-71.8	72.1	265.36
7600.0	1.33	245.38	7599.4	-6.6	-6.6	-73.9	74.1	264.90
7700.0	1.26	250.55	7699.4	-7.4	-7.4	-75.9	76.3	264.41
7800.0	0.85	279.51	7799.4	-7.7	-7.7	-77.7	78.1	264.36
7900.0	0.64	290.03	7899.4	-7.4	-7.4	-79.0	79.3	264.67
8000.0	0.79	282.13	7999.4	-7.0	-7.0	-80.2	80.5	264.99
8100.0	0.71	282.22	8099.4	-6.8	-6.8	-81.4	81.7	265.26
8200.0	0.49	270.30	8199.4	-6.6	-6.6	-82.5	82.7	265.41
8300.0	0.43	276.20	8299.4	-6.6	-6.6	-83.3	83.5	265.49
8400.0	0.58	264.92	8399.4	-6.6	-6.6	-84.2	84.4	265.53
8500.0	0.40	270.01	8499.4	-6.6	-6.6	-85.0	85.3	265.54
8600.0	0.30	225.53	8599.4	-6.8	-6.8	-85.5	85.8	265.45
8700.0	0.13	151.85	8699.4	-7.1	-7.1	-85.7	86.0	265.27
8800.0	0.04	128.98	8799.4	-7.2	-7.2	-85.6	85.9	265.18
8900.0	0.22	144.63	8899.4	-7.4	-7.4	-85.5	85.8	265.06
9000.0	0.38	189.03	8999.4	-7.9	-7.9	-85.4	85.8	264.73
9100.0	0.38	206.52	9099.4	-8.5	-8.5	-85.6	86.0	264.33
9200.0	0.75	209.68	9199.3	-9.4	-9.4	-86.1	86.6	263.79
9300.0	0.93	209.14	9299.3	-10.6	-10.6	-86.8	87.4	263.01
9400.0	1.05	234.94	9399.3	-11.9	-11.9	-87.9	88.7	262.31
9500.0	0.89	221.30	9499.3	-13.0	-13.0	-89.2	90.1	261.72
9600.0	0.84	228.33	9599.3	-14.1	-14.1	-90.3	91.4	261.15
9700.0	1.00	228.90	9699.3	-15.1	-15.1	-91.5	92.7	260.61
9800.0	0.89	229.97	9799.3	-16.2	-16.2	-92.7	94.1	260.09
9900.0	0.87	229.32	9899.3	-17.2	-17.2	-93.9	95.5	259.63

Scientific Drilling International

Survey Report

Company: LOUIS DREYFUS NATURAL GAS CORP
Field: Unknown
Site: Eddy County, NM
Well: Paragosa 17 Fed. Com #1
Wellpath: VH - Job #32K0301121

Date: 4/5/2001 **Time:** 15:39:43 **Page:** 3
Co-ordinate(NE) Reference: Site: Eddy County, NM, True North
Vertical (TVD) Reference: SITE 0.0 above Mean Sea Level
Section (VS) Reference: Well (0.0E,0.0N,244.4Azi)
Survey Calculation Method: Minimum Curvature

Survey

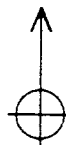
MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	ClsD ft	ClsA deg
10000.0	1.25	249.58	9999.2	-18.1	-18.1	-95.5	97.2	259.30
10100.0	1.44	252.63	10099.2	-18.8	-18.8	-97.7	99.5	259.11
10200.0	1.49	250.30	10199.2	-19.6	-19.6	-100.1	102.0	258.91
10300.0	1.34	242.98	10299.1	-20.6	-20.6	-102.4	104.5	258.63
10400.0	1.48	231.80	10399.1	-21.9	-21.9	-104.5	106.7	258.15
10500.0	1.48	219.25	10499.1	-23.7	-23.7	-106.3	108.9	257.42
10600.0	1.41	202.84	10599.1	-25.9	-25.9	-107.6	110.7	256.49
10700.0	1.51	201.07	10699.0	-28.2	-28.2	-108.5	112.2	255.43
10800.0	1.60	210.22	10799.0	-30.7	-30.7	-109.7	113.9	254.39
10900.0	1.52	207.44	10898.9	-33.0	-33.0	-111.0	115.8	253.43
11000.0	1.55	203.58	10998.9	-35.5	-35.5	-112.2	117.7	252.46
11100.0	1.49	196.21	11098.9	-37.9	-37.9	-113.1	119.3	251.45
11200.0	1.39	190.91	11198.8	-40.4	-40.4	-113.7	120.6	250.44
11300.0	1.59	188.02	11298.8	-42.9	-42.9	-114.1	121.9	249.38
11400.0	1.48	182.27	11398.8	-45.6	-45.6	-114.4	123.1	248.26
11500.0	1.59	179.00	11498.7	-48.3	-48.3	-114.4	124.2	247.11
11600.0	1.43	180.26	11598.7	-50.9	-50.9	-114.4	125.2	246.00
11700.0	1.36	181.42	11698.7	-53.4	-53.4	-114.4	126.2	244.99
11760.0	1.24	173.12	11758.7	-54.7	-54.7	-114.3	126.8	244.43



Scientific
Drilling

Field: Unknown
Site: Eddy County, NM
Well: Paragosa 17 Fed. Com #1
Wellpath: VH - Job #32K0301121
Survey: 3/2/01

T/M



All Angles Relative
To True North

True North: 0.00
Magnetic North: 0.00

