



DIRECTIONAL SURVEY CERTIFICATION

RE: Mallon Oil Company (Operator)

Jicarilla 457-03 #3 (Well Name & No.)

Section 3 Twp. 30 N Range 03 W

Well File No. 300-39-25779 Side-track #1

I, Matthew K. Brown, having personal knowledge of all the facts, hereby certify that the

attached directional surveys for the well run from measured depth of

3,713 feet to a measured depth of 5,062 feet,

respectively, are true and correct as determined from all available records.

Matthew K. Brown

Operations Coord.

Nevis Energy Services,

Inc

Signature

Title

Company

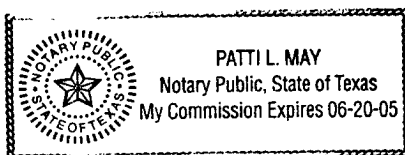
State of Texas

County of Harris

Surface 1805 / S 865/W
Begin horiz 1867 / S 923/W
end horiz 1583 / S 2265/W

On this 21 day of January, 2005, before me personally appeared

Matthew K. Brown to me known as the person described in and who executed the foregoing instrument and acknowledged that he executed the same as his free act and deed.



Patti L. May
Notary Public

6/20/05
My Commission Expire

Lateral #1

HOLD C104 FOR PC plat w/ horizontal



21 January 2005

State of New Mexico
Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

Re: Mallon Oil Company
Jicarilla 457-03 #3 ST #1
Rio Arriba Co., NM
Job #204-256
API No. 300-39-25779

To whom it May Concern:

Enclosed please find the Directional Survey data and Lease Plat for the above referenced well to be filed with your group.

Name & Title of Surveyor	Drainhole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Jeff Arenas	#11 ST #1	3,713	5,062	15 Sep 04	30 Sep 04	MWD

Thank you for the opportunity to be of service. Please contact me if you have any questions or require additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Matthew K. Brown", with a long horizontal stroke extending to the right.

Matthew K. Brown
Operations Coordinator



1724-B Townhurst Dr, Houston, Tx 77043
(713) 827-8302
www.nevisenergy.com

Job Number: 204-256
Company: BHEP / Mallon Oil
Lease/Well: Jicarilla 457-03 # 3 ST #1
Location: Rio Arriba County
Rig Name: Key Rig #44
RKB: ☐
G.L. or M.S.L.: API #300-39-25779

State/Country: New Mexico
Declination: 10.72° East
Grid:
File name: N:\BLACKH~1\204-25~1\457-3#3.SVY
Date/Time: 06-Jan-05 / 11:46
Curve Name: Side-track # 1 NMOCD Final Filling

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 106.96
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT
Tie in to Original Hole						
3703.00	1.56	43.10	3701.50	61.70	56.00	35.57
First Nevis MWD Survey						
3713.00	6.70	120.00	3711.47	61.51	56.60	36.20
3722.00	11.80	120.00	3720.35	60.78	57.85	37.60
3732.00	17.60	111.60	3730.02	59.72	60.14	40.11
3742.00	23.00	120.10	3739.40	58.18	63.24	43.52
3752.00	28.00	117.60	3748.43	56.11	67.02	47.73
3762.00	32.90	112.70	3757.04	53.97	71.61	52.75
3772.00	38.90	110.90	3765.14	51.80	77.05	58.59
3782.00	44.50	108.80	3772.61	49.55	83.31	65.23
3792.00	50.50	106.30	3779.36	47.34	90.33	72.60
3803.00	56.50	103.90	3785.90	45.04	98.87	81.43
3813.00	61.80	102.80	3791.03	43.06	107.22	89.99
3823.00	67.40	102.50	3795.31	41.08	116.03	99.00
3833.00	73.40	101.80	3798.67	39.10	125.23	108.38
3838.00	76.00	101.80	3799.99	38.12	129.95	113.18
3869.00	89.60	102.10	3803.86	31.76	159.97	143.75
3899.00	94.30	103.20	3802.84	25.20	189.22	173.64
3930.00	96.60	103.50	3799.90	18.07	219.24	204.44
3962.00	96.60	103.20	3796.22	10.73	250.17	236.16
3994.00	96.60	102.10	3792.54	3.77	281.19	267.86
4025.00	97.30	102.50	3788.79	-2.78	311.25	298.53

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT
4056.00	97.10	102.50	3784.90	-9.44	341.28	329.19
4087.00	97.30	102.10	3781.02	-15.99	371.33	359.84
4118.00	97.80	102.80	3776.95	-22.62	401.34	390.48
4181.00	98.50	102.80	3768.01	-36.43	462.15	452.68
4213.00	98.70	103.50	3763.23	-43.63	492.96	484.25
4243.00	98.50	103.90	3758.74	-50.66	521.78	513.86
4275.00	98.50	103.50	3754.01	-58.15	552.53	545.46
4306.00	98.90	103.90	3749.32	-65.41	582.30	576.05
4338.00	99.40	103.20	3744.24	-72.81	613.01	607.59
4369.00	99.60	102.80	3739.12	-79.69	642.80	638.09
4400.00	99.80	102.80	3733.90	-86.46	672.60	668.57
4432.00	99.60	103.20	3728.50	-93.55	703.34	700.04
4472.00	99.80	102.80	3721.77	-102.42	741.75	739.37
4495.00	99.90	102.80	3717.83	-107.44	763.85	761.97
4526.00	98.90	103.50	3712.77	-114.40	793.63	792.49
4558.00	97.80	103.90	3708.12	-121.90	824.39	824.10
4621.00	96.80	104.20	3700.12	-137.07	885.01	886.50
4684.00	95.40	105.30	3693.42	-153.02	945.59	949.10
4746.00	92.40	106.30	3689.20	-169.86	1005.10	1010.93
4809.00	91.10	107.40	3687.28	-188.11	1065.36	1073.90
4872.00	90.30	108.80	3686.51	-207.68	1125.24	1136.88
4936.00	90.30	108.40	3686.18	-228.10	1185.89	1200.86
4999.00	89.70	109.90	3686.18	-248.76	1245.41	1263.81
Last Nevis MWD Survey						
5062.00	89.70	109.90	3686.51	-270.21	1304.64	1326.72
Survey Projected to TD						
5102.00	89.90	110.00	3686.64	-283.85	1342.24	1366.67



DIRECTIONAL SURVEY CERTIFICATION

RE: Mallon Oil Company (Operator)

Jicarilla 457-03 #3 Side-track #2 (Well Name & No.)

Section 3 Twp. 30 N Range 03 W

Well File No. 300-39-25779

I, Matthew K. Brown, having personal knowledge of all the facts, hereby certify that the

attached directional surveys for the well run from measured depth of

3,740 feet to a measured depth of 5,905 feet,

respectively, are true and correct as determined from all available records.

Matthew K. Brown

Operations Coord.

Nevis Energy Services,

Inc

Signature

Title

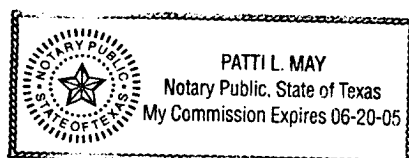
Company

State of Texas

County of Harris

On this 21 day of January, 2005, before me personally appeared

Matthew K. Brown to me known as the person described in and who executed the foregoing instrument and acknowledged that he executed the same as his free act and deed.



Patti L. May
Notary Public

6/20/05
My Commission Expires

Surface 1805/S 865/W
Begin horiz 1866/S 929/W
end horiz 314/S 2215/E

Latval #2
HOLD C104 FOR replat w/ horizontal



21 January 2005

State of New Mexico
Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

Re: Mallon Oil Company
Jicarilla 457-03 #3 Side-track #2
Rio Arriba Co., NM
Job #204-256
API No. 300-39-25779

To whom it May Concern:

Enclosed please find the Directional Survey data and Lease Plat for the above referenced well to be filed with your group.

Name & Title of Surveyor	Drainhole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Jeff Arenas	#11	3,740	5,905	01-Oct-04	08-Oct-04	MWD

Thank you for the opportunity to be of service. Please contact me if you have any questions or require additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Matthew K. Brown", with a stylized flourish at the end.

Matthew K. Brown
Operations Coordinator



1724-B Townhurst Dr, Houston, Tx 77043
(713) 827-8302
www.nevisenergy.com

Job Number: 204-256
Company: BHEP / Mallon Oil
Lease/Well: Jicarilla 457-03 # 3 ST #2
Location: Rio Arriba County
Rig Name: Key Rig #44
RKB: ☐
G.L. or M.S.L.: API #300-39-25779

State/Country: New Mexico
Declination: 10.72° East
Grid:
File name: N:\BLACKH~1\204-25~1\457-3#3.SVY
Date/Time: 06-Jan-05 / 11:48
Curve Name: Side-track # 2 NMOCD Final Filling

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 106.96
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT
Tie in to Original Hole						
3703.00	1.56	43.10	3701.50	61.70	56.00	35.57
First Nevis MWD Survey						
3740.00	22.90	100.00	3737.48	60.81	63.53	43.03
3750.00	29.40	100.20	3746.45	60.03	67.86	47.40
3760.00	35.60	100.60	3754.88	59.06	73.15	52.74
3771.00	42.80	101.00	3763.40	57.76	79.97	59.64
3781.00	49.40	101.30	3770.33	56.36	87.03	66.81
3791.00	55.50	103.80	3776.42	54.64	94.77	74.71
3800.00	60.80	106.60	3781.17	52.63	102.14	82.35
3810.00	67.10	106.80	3785.56	50.05	110.74	91.33
3820.00	72.60	105.60	3789.01	47.43	119.75	100.71
3838.00	74.40	102.80	3794.12	43.20	136.48	117.94
3868.00	77.60	101.20	3801.38	37.15	164.95	146.94
3898.00	77.90	99.00	3807.74	32.01	193.81	176.04
3908.00	80.10	98.60	3809.65	30.51	203.51	185.76
3918.00	84.60	97.60	3810.98	29.11	213.32	195.55
3932.00	92.40	98.30	3811.35	27.18	227.17	209.36
3964.00	105.40	99.70	3806.41	22.25	258.33	240.60
3995.00	107.50	102.50	3797.63	16.53	287.50	270.17
4027.00	108.00	102.10	3787.87	10.04	317.28	300.55
4089.00	108.00	101.10	3768.71	-1.82	375.04	359.26
4152.00	106.40	104.20	3750.08	-15.00	433.75	419.26

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT
4215.00	104.50	106.00	3733.29	-30.82	492.37	479.94
4277.00	101.90	107.80	3719.14	-48.37	550.11	540.30
4340.00	97.90	109.50	3708.31	-68.22	608.90	602.32
4402.00	92.90	112.00	3702.47	-90.08	666.60	663.88
4465.00	93.30	113.00	3699.07	-114.16	724.71	726.50
4528.00	90.60	111.30	3696.92	-137.89	783.02	789.19
4591.00	90.30	111.00	3696.43	-160.62	841.78	852.02
4654.00	90.30	110.60	3696.10	-183.00	900.67	914.88
4717.00	90.60	109.50	3695.60	-204.59	959.85	977.79
4780.00	91.10	107.80	3694.67	-224.74	1019.53	1040.75
4843.00	90.60	108.80	3693.73	-244.52	1079.34	1103.72
4906.00	90.10	107.80	3693.35	-264.30	1139.15	1166.70
4969.00	89.70	108.10	3693.46	-283.71	1199.08	1229.70
5032.00	89.00	108.10	3694.17	-303.28	1258.96	1292.68
5095.00	89.40	108.40	3695.05	-323.01	1318.79	1355.66
5187.00	88.80	107.80	3696.50	-351.59	1406.22	1447.63
5218.00	89.40	107.80	3696.99	-361.06	1435.74	1478.62
5281.00	92.60	107.10	3695.89	-379.95	1495.82	1541.60
5344.00	91.80	107.80	3693.47	-398.83	1555.88	1604.55
5407.00	91.30	106.70	3691.76	-417.50	1616.02	1667.52
5470.00	91.70	106.40	3690.11	-435.44	1676.39	1730.50
5534.00	91.00	106.70	3688.61	-453.67	1737.72	1794.48
5597.00	91.00	105.60	3687.51	-471.19	1798.22	1857.46
5659.00	91.70	104.20	3686.05	-487.13	1858.12	1919.40
5723.00	92.20	103.50	3683.87	-502.44	1920.22	1983.27
5786.00	93.30	102.80	3680.85	-516.75	1981.50	2046.06
5849.00	93.60	102.80	3677.05	-530.69	2042.82	2108.78
Last Nevis MWD Survey						
5905.00	93.50	102.70	3673.59	-543.02	2097.33	2164.52
Survey projected to TD						
5945.00	93.50	102.70	3671.15	-551.80	2136.28	2204.34