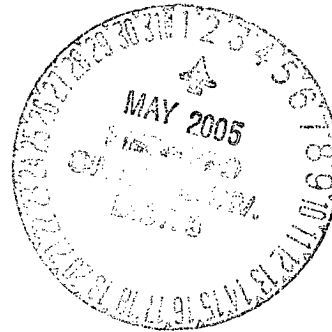




State of New Mexico
Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410



Re: Mallon Oil Company
Jicarilla 29-03-12 #2
Rio Arriba Co., NM
Job #204-305
API No. 300-39-26860

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.

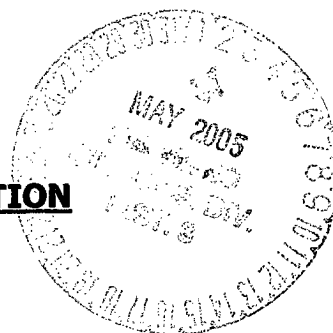
Name & Title of Surveyor	Drainhole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Scott Dean	#2	3,664	6,999	28 Nov 04	07 Dec 04	MWD

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

Sincerely,

Matthew K. Brown
Operations Coordinator

Surface 898/s 1745/w
BNL 867/s 228/w



DIRECTIONAL SURVEY CERTIFICATION

RE: Mallon Oil Company (Operator)

Jicarilla 29-03-12 #2 (Well Name & No.)

Section 12 Twp. 29 N Range 03 W

Well File No. _____

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

3,664 feet to a measured depth of 6,999 feet,

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

Matthew K. Brown

Signature

Ops. Cord.

Title

Nevis Energy Services, Inc

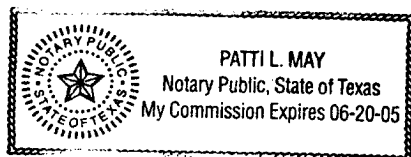
Company

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

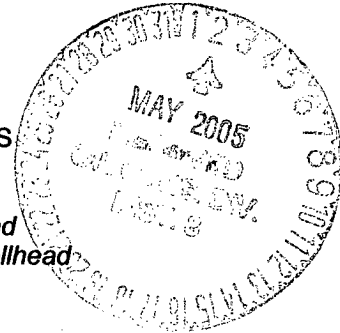


1724-B Townhurst Dr, Houston, Tx 77043
(713) 827-8302
www.nevisenergy.com

Job Number: 204-305
Company: BHEP/ Mallon Oil Co
Lease/Well: Jicarilla 29-03-12 # 2
Location: Rio Arriba County
Rig Name: Key 44
RKB: ☐
G.L. or M.S.L.: API #300-39-26860

State/Country: New Mexico
Declination: 10.39° East
Grid: ☐
File name: N:\BLACKH-1\204-30-1\29-03122.SVY
Date/Time: 21-Jan-05 / 13:41
Curve Name: Final NMOCD Filing

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 90.00
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
Tied in to Gyrodata survey						
3645.00	1.78	316.30	3644.60	25.10	-28.60	-28.60
First Nevis MWD Survey						
3664.00	7.90	80.00	3663.54	25.54	-27.52	-27.52
3674.00	13.70	63.80	3673.37	26.18	-25.77	-25.77
3684.00	19.00	67.70	3682.96	27.33	-23.20	-23.20
3694.00	24.50	66.60	3692.24	28.77	-19.79	-19.79
3726.00	42.20	73.00	3718.87	34.59	-3.29	-3.29
3757.00	60.90	78.90	3738.08	40.30	20.18	20.18
3792.00	80.10	84.90	3749.71	44.82	52.69	52.69
3823.00	88.00	87.70	3752.93	46.80	83.43	83.43
3855.00	91.00	88.80	3753.20	47.78	115.41	115.41
3885.00	95.40	90.60	3751.53	47.94	145.35	145.35
3917.00	99.10	91.60	3747.49	47.33	177.08	177.08
3948.00	99.80	92.30	3742.40	46.29	207.65	207.65
3979.00	100.30	93.00	3736.99	44.88	238.14	238.14
4011.00	100.50	93.40	3731.22	43.12	269.56	269.56
4042.00	100.50	93.70	3725.57	41.23	299.98	299.98
4073.00	100.70	93.70	3719.86	39.27	330.39	330.39
4104.00	99.60	92.30	3714.40	37.67	360.86	360.86
4136.00	99.60	91.90	3709.06	36.52	392.39	392.39
4167.00	99.10	90.60	3704.03	35.85	422.97	422.97
4199.00	99.20	90.60	3698.94	35.52	454.57	454.57

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT
4230.00	99.60	90.60	3693.88	35.20	485.15	485.15
4262.00	100.10	90.90	3688.40	34.78	516.67	516.67
4293.00	100.30	90.90	3682.91	34.31	547.18	547.18
4325.00	98.20	90.60	3677.77	33.89	578.76	578.76
4356.00	98.00	90.60	3673.40	33.57	609.45	609.45
4387.00	95.50	90.20	3669.76	33.36	640.23	640.23
4419.00	95.20	90.20	3666.77	33.24	672.09	672.09
4451.00	94.80	90.20	3663.99	33.13	703.97	703.97
4483.00	94.80	89.50	3661.31	33.22	735.86	735.86
4514.00	95.40	89.10	3658.55	33.59	766.73	766.73
4545.00	93.80	89.10	3656.07	34.08	797.63	797.63
4577.00	91.70	88.80	3654.53	34.67	829.58	829.58
4608.00	91.50	88.80	3653.66	35.31	860.56	860.56
4640.00	91.10	87.70	3652.94	36.29	892.54	892.54
4671.00	90.80	86.70	3652.42	37.81	923.50	923.50
4703.00	91.00	86.30	3651.92	39.76	955.43	955.43
4766.00	90.60	88.10	3651.04	42.84	1018.35	1018.35
4797.00	90.60	87.70	3650.72	43.97	1049.33	1049.33
4828.00	90.60	87.70	3650.39	45.22	1080.30	1080.30
4899.00	88.70	83.90	3650.83	50.41	1151.09	1151.09
4960.00	89.60	83.50	3651.73	57.11	1211.72	1211.72
5053.00	90.10	78.60	3651.98	71.57	1303.55	1303.55
5085.00	91.00	79.30	3651.67	77.70	1334.96	1334.96
5116.00	91.10	80.00	3651.10	83.27	1365.45	1365.45
5148.00	90.80	81.40	3650.57	88.44	1397.02	1397.02
5210.00	91.70	83.90	3649.22	96.37	1458.49	1458.49
5273.00	91.40	86.00	3647.51	101.92	1521.22	1521.22
5336.00	91.00	87.40	3646.19	105.54	1584.10	1584.10
5398.00	91.80	89.10	3644.68	107.43	1646.05	1646.05
5461.00	91.80	89.50	3642.70	108.20	1709.02	1709.02
5493.00	91.80	91.60	3641.69	107.90	1741.00	1741.00
5587.00	92.70	91.30	3638.00	105.52	1834.89	1834.89
5618.00	91.70	93.40	3636.81	104.25	1865.84	1865.84
5681.00	92.00	92.70	3634.78	100.90	1928.72	1928.72
5713.00	91.50	95.10	3633.80	98.72	1960.63	1960.63
5807.00	92.40	94.10	3630.60	91.19	2054.27	2054.27
5838.00	91.70	96.20	3629.50	88.41	2085.12	2085.12
5901.00	92.40	95.80	3627.24	81.83	2147.74	2147.74
5964.00	90.30	96.90	3625.76	74.86	2210.33	2210.33
6026.00	91.00	96.50	3625.05	67.63	2271.90	2271.90
6090.00	91.70	96.90	3623.55	60.16	2335.45	2335.45
6151.00	92.00	97.60	3621.58	52.47	2395.93	2395.93
6214.00	92.20	97.20	3619.27	44.36	2458.36	2458.36
6308.00	91.70	97.20	3616.07	32.59	2551.56	2551.56
6370.00	90.30	97.20	3614.99	24.82	2613.06	2613.06

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT
6433.00	89.60	96.50	3615.04	17.30	2675.61	2675.61
6496.00	89.70	96.20	3615.43	10.34	2738.23	2738.23
6590.00	88.70	96.20	3616.74	.18	2831.67	2831.67
6684.00	87.60	94.80	3619.77	-8.82	2925.18	2925.18
6716.00	87.10	94.40	3621.25	-11.38	2957.04	2957.04
6810.00	86.70	93.70	3626.34	-18.01	3050.67	3050.67
6904.00	86.00	93.00	3632.32	-23.50	3144.32	3144.32
Last Nevis MWD Survey						
6999.00	85.00	92.70	3639.78	-28.20	3238.91	3238.91
Survey Projected to TD						
7068.00	85.00	92.70	3645.79	-31.44	3307.57	3307.57