

DEVIATION REPORT

Name of Company		Address		
MERIDIAN OIL INC.		PO Box 4289, Farmington, NM		
Lease Name & Number	Unit Letter	Sec.	Twn	Rge
Huerfano Unit #218	800' ENL, 800' FWL	29	26	10
Pool and Formation		County		
Gallegos Gallup		San Juan		

Depth	Deviation	Depth	Deviation
(Ft.)	(Degrees)	(Ft.)	(Degrees)
see attached			

RECEIVED
APR 29 1993
OIL CON. DIV.
DIST. 3

I, the undersigned, certify that I, acting in my capacity as Petroleum Engineer for **MERIDIAN OIL INC.**, am authorized by said Company to make this report; and that this report was prepared under my supervision and directions, and that the facts stated herein are true to the best of my knowledge and belief.

Subscribed and sworn to before me this 28th day of April, 1993.

[Signature]
Notary Public in and for San Juan County, New Mexico
My commission expires August 17, 1996.

< BECFIELD SURVEY CALCULATION PROGRAM

>

OPERATOR: MERIDIAN OIL CO. START: 07-20-92
 WELL: HUERFANO UNIT #218 RE-ENTRY FINISH: 07-28-92
 LOCATION: SAN JUAN COUNTY, NEW MEXICO BECFIELD DIR.COORDINATOR
 MIKE LYON, TERRY PEARCY

11.7 DEG. APPLIED = TRUE
 JOB No. 92-081

< MINIMUM CURVATURE CALCULATIONS(SPE-3362) CLOSURE DIRECTION 103.13 >

SUR			TRUE					DLS/
NU	MD	INC	AZM	TVD	N-S	E-W	SECT	100
0	5383.00	0.00	0.00	5383.00	0.00	0.00	0.00	0.00
1	5410.00	2.46	112.00	5409.99	-0.22	0.54	0.57	9.11
2	5442.00	10.35	105.90	5441.77	-1.26	3.94	4.13	24.71
3	5473.00	18.70	113.95	5471.75	-4.05	11.18	11.80	27.65
4	5504.00	25.37	107.60	5500.48	-8.08	22.06	23.32	22.82
5	5535.00	30.00	98.30	5527.93	-11.21	36.08	37.68	20.39
6	5568.00	37.66	104.50	5555.33	-14.93	54.03	56.01	25.43
7	5599.00	45.10	102.50	5578.58	-19.69	73.95	76.49	24.37
8	5630.00	52.21	105.00	5599.05	-25.24	96.53	99.74	23.72
9	5661.00	53.97	99.80	5617.67	-30.55	120.73	124.51	14.56
10	5693.00	59.00	102.70	5635.34	-35.77	146.88	151.16	17.44
11	5724.00	65.10	102.00	5649.86	-41.62	173.62	178.53	19.78
12	5755.00	71.80	102.00	5661.24	-47.61	201.80	207.34	21.61
13	5783.00	78.00	102.00	5668.53	-53.23	228.23	234.36	22.14

Survey No.'s 1 thru 12 DMI Steering tool records.

Survey No. 13 is a projection to bit-depth.

Bottom Hole location from Surface Location.

Horizontal Displacement = 234.36 feet

Displacement Bearing = South 76.87 East (TRUE)

①

BECFIELD SURVEY CALCULATION PROGRAM

>

②

OPERATOR: MERIDIAN OIL CO.
 WELL: HUERFANO UNIT #218 RE-ENTRY
 LOCATION: SAN JUAN COUNTY, NEW MEXICO

START: 07-28-92
 FINISH: 08-06-92
 BECFIELD DIR.COORDINATOR
 MIKE LYON, TERRY PEARCY

Survey number 0 is assumed vertical.

11.7 DEG. APPLIED = TRUE
 JOB No. 92-081

<
 MINIMUM CURVATURE CALCULATIONS(SPE-3362)

>
 CLOSURE DIRECTION 104.26

SUR			TRUE					DLS/
NU	MD	INC	AZM	TVD	N-S	E-W	SECT	100
0	5383.00	0.00	0.00	5383.00	0.00	0.00	0.00	0.00
1	5410.00	2.46	112.00	5409.99	-0.22	0.54	0.57	9.11
2	5442.00	10.35	105.90	5441.77	-1.26	3.94	4.13	24.71
3	5473.00	18.70	113.95	5471.75	-4.05	11.18	11.83	27.65
4	5504.00	25.37	107.60	5500.48	-8.08	22.06	23.37	22.82
5	5535.00	30.00	98.30	5527.93	-11.21	36.08	37.73	20.39
6	5568.00	37.66	104.50	5555.33	-14.93	54.03	56.05	25.43
7	5599.00	45.10	102.50	5578.58	-19.69	73.95	76.52	24.37
8	5629.00	51.02	102.20	5598.62	-24.45	95.74	98.81	19.75
9	5660.00	57.08	101.80	5616.81	-29.67	120.27	123.88	19.58
10	5691.00	63.41	102.70	5632.19	-35.38	146.56	150.76	20.57
11	5720.00	70.88	102.90	5643.44	-41.30	172.60	177.45	25.77
12	5751.00	75.54	102.90	5652.40	-47.92	201.52	207.12	15.03
13	5782.00	80.16	101.00	5658.92	-54.19	231.16	237.39	16.06
14	5814.00	83.82	102.90	5663.38	-60.75	262.16	269.04	12.86
15	5847.00	89.10	97.70	5665.42	-66.63	294.54	301.88	22.43
16	5878.00	89.77	97.90	5665.72	-70.84	325.25	332.68	2.26
17	5910.00	84.78	99.30	5667.24	-75.62	356.84	364.48	16.19
18	5942.00	87.28	102.80	5669.46	-81.74	388.17	396.34	13.42
19	5971.00	91.16	103.50	5669.85	-88.33	416.40	425.33	13.60
20	6002.00	92.13	100.90	5668.96	-94.88	446.68	456.29	8.95
21	6033.00	90.07	104.30	5668.37	-101.64	476.93	487.27	12.82
22	6064.00	88.96	103.10	5668.63	-108.98	507.04	518.26	5.27
23	6096.00	86.55	105.28	5669.88	-116.82	538.04	550.23	10.15
24	6127.00	85.97	100.82	5671.91	-123.80	568.16	581.15	14.48
25	6158.00	87.17	104.90	5673.76	-130.69	598.33	612.08	13.70
26	6190.00	88.00	104.10	5675.11	-138.69	629.28	644.05	3.60
27	6221.00	89.80	107.70	5675.71	-147.18	659.08	675.03	12.98
28	6252.00	91.70	105.70	5675.30	-156.09	688.77	705.99	8.90
29	6284.00	91.73	106.30	5674.34	-164.90	719.51	737.96	1.88
30	6315.00	93.17	106.80	5673.02	-173.73	749.20	768.91	4.92
31	6346.00	92.78	106.80	5671.41	-182.67	778.84	799.84	1.26
32	6377.00	92.88	106.30	5669.88	-191.49	808.52	830.78	1.64
33	6408.00	91.62	105.90	5668.66	-200.08	838.28	861.74	4.26

BECFIELD SURVEY CALCULATION PROGRAM

>

OPERATOR: MERIDIAN OIL CO. START: 07-28-92
WELL: HUERFANO UNIT #218 RE-ENTRY FINISH: 08-06-92
LOCATION: SAN JUAN COUNTY, NEW MEXICO BECFIELD DIR.COORDINATOR
MIKE LYON, TERRY PEARCY

Survey number 0 is assumed vertical.

11.7 DEG. APPLIED = TRUE
JOB No. 92-081

<

>

MINIMUM CURVATURE CALCULATIONS(SPE-3362)

CLOSURE DIRECTION 104.26

SUR			TRUE					DLS/
NU	MD	INC	AZM	TVD	N-S	E-W	SECT	100
34	6440.00	90.31	106.30	5668.12	-208.96	869.02	893.71	4.28
35	6469.00	91.56	107.70	5667.65	-217.43	896.75	922.68	6.47
36	6500.00	91.39	107.80	5666.85	-226.88	926.26	953.61	0.64
37	6532.00	92.28	108.30	5665.83	-236.79	956.67	985.52	3.19
38	6563.00	92.54	108.10	5664.52	-246.47	986.09	1016.42	1.06
39	6595.00	92.44	108.10	5663.13	-256.40	1016.48	1048.32	0.31
BIT	6622.00	92.44	108.10	5661.98	-264.78	1042.12	1075.23	0.00

Survey No.'s 1 thru 39 DMI Steering Tool Records.

Survey No. 40 is a projection to bit-depth.

Bottom Hole location from Surface Location.

Horizontal Displacement = 1075.23 feet

Displacement Bearing = South 75.74 East (TRUE)

(3)

BECFIELD SURVEY CALCULATION PROGRAM

>

OPERATOR: MERIDIAN OIL CO. START: 08-06-92
 WELL: HUERFANO UNIT #218 RE-ENTRY FINISH: 08-11-92
 LOCATION: SAN JUAN COUNTY, NEW MEXICO BECFIELD DIR.COORDINATOR
 MIKE LYON, TERRY PEARCY

Survey number 0 is assumed vertical.

11.7 DEG. APPLIED = TRUE

JOB No. 92-081

<

>

MINIMUM CURVATURE CALCULATIONS(SPE-3362)

CLOSURE DIRECTION 104.52

SUR			TRUE					DLS/
NU	MD	INC	AZM	TVD	N-S	E-W	SECT	100
0	5383.00	0.00	0.00	5383.00	0.00	0.00	0.00	0.00
1	5410.00	2.46	112.00	5409.99	-0.22	0.54	0.57	9.11
2	5442.00	10.35	105.90	5441.77	-1.26	3.94	4.13	24.71
3	5473.00	18.70	113.95	5471.75	-4.05	11.18	11.84	27.65
4	5504.00	25.37	107.60	5500.48	-8.08	22.06	23.38	22.82
5	5535.00	30.00	98.30	5527.93	-11.21	36.08	37.73	20.39
6	5568.00	37.66	104.50	5555.33	-14.93	54.03	56.05	25.43
7	5599.00	45.10	102.50	5578.58	-19.69	73.95	76.52	24.37
8	5629.00	51.02	102.20	5598.62	-24.45	95.74	98.81	19.75
9	5660.00	57.08	101.80	5616.81	-29.67	120.27	123.87	19.58
10	5691.00	63.41	102.70	5632.19	-35.38	146.56	150.75	20.57
11	5720.00	70.88	102.90	5643.44	-41.30	172.60	177.44	25.77
12	5751.00	75.54	102.90	5652.40	-47.92	201.52	207.10	15.03
13	5782.00	80.16	101.00	5658.92	-54.19	231.16	237.36	16.06
14	5814.00	83.82	102.90	5663.38	-60.75	262.16	269.01	12.86
15	5847.00	89.10	97.70	5665.42	-66.63	294.54	301.84	22.43
16	5878.00	89.77	97.90	5665.72	-70.84	325.25	332.62	2.26
17	5910.00	84.78	99.30	5667.24	-75.62	356.84	364.41	16.19
18	5946.00	87.47	101.40	5669.68	-82.07	392.17	400.22	9.47
19	5977.00	85.84	103.10	5671.49	-88.64	422.41	431.14	7.59
20	6008.00	85.94	103.80	5673.71	-95.83	452.49	462.06	2.28
21	6040.00	86.19	104.20	5675.90	-103.55	483.46	493.98	1.47
22	6071.00	88.46	104.50	5677.35	-111.22	513.46	524.95	7.39
23	6102.00	89.43	103.90	5677.92	-118.83	543.51	555.94	3.68
24	6133.00	88.97	105.00	5678.35	-126.56	573.52	586.94	3.85
25	6164.00	88.78	104.10	5678.96	-134.35	603.52	617.93	2.97
26	6195.00	88.46	105.60	5679.71	-142.29	633.48	648.92	4.95
27	6224.00	87.79	105.10	5680.66	-149.96	661.43	677.90	2.88
28	6257.00	87.50	106.60	5682.01	-158.97	693.15	710.86	4.63
29	6288.00	85.32	106.80	5683.95	-167.86	722.78	741.78	7.06
30	6319.00	85.45	107.50	5686.45	-176.97	752.30	772.64	2.29
31	6348.00	85.11	107.30	5688.84	-185.61	779.88	801.51	1.36
32	6379.00	85.18	108.90	5691.46	-195.21	809.24	832.34	5.15
33	6411.00	84.25	108.90	5694.41	-205.53	839.39	864.11	2.91

BECFIELD SURVEY CALCULATION PROGRAM

>

OPERATOR: MERIDIAN OIL CO.
WELL: HUERFANO UNIT #218 RE-ENTRY
LOCATION: SAN JUAN COUNTY, NEW MEXICO

START: 08-06-92
FINISH: 08-11-92
BECFIELD DIR.COORDINATOR
MIKE LYON, TERRY PEARCY

Survey number 0 is assumed vertical.

11.7 DEG. APPLIED = TRUE
JOB No. 92-081

<

MINIMUM CURVATURE CALCULATIONS(SPE-3362)

>

CLOSURE DIRECTION 104.52

SUR			TRUE					DLS/
NU	MD	INC	AZM	TVD	N-S	E-W	SECT	100
34	6441.00	82.48	109.00	5697.87	-215.21	867.57	393.82	5.91
35	6473.00	81.39	110.00	5702.36	-225.78	897.44	925.38	4.60
36	6504.00	80.42	109.00	5707.26	-236.00	926.29	955.87	4.47
37	6527.00	79.30	110.10	5711.31	-243.58	947.62	978.43	6.77
38	6545.00	78.00	110.10	5714.85	-249.64	964.20	995.99	7.22

Survey No.'s 1 thru 37 DMI Steering Tool Records.

Survey No. 38 is a projection to bit-depth.

Bottom Hole location from Surface Location.

Horizontal Displacement = 995.99 feet

Displacement Bearing = South 75.48 East (TRUE)