

30-015-35056

SCIENTIFIC DRILLING CONTROLS

KEEPER GYRO SURVEY

Directional Survey Report

for

MARBOB
MARBOB

Well Number	:	TEA FEDERAL 1-H
Well Location	:	EDDY CO N.M.
Job Number	:	32K1006828
Location Latitude	:	32.841
Survey Date	:	12-OCT-2006
S.D.C. Personnel	:	ANGEL GUEBARA
Length Units	:	Feet
North Reference	:	GRID North
Grid Correction	:	-0.23 Degrees
Survey Depth Zero	:	RKB
Proposal Direction	:	87.95
Calculation Method	:	Minimum Curvature

Remarks : The OUTFRONT Survey will be called definitive

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Outrun Survey
for
MARBOB

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Well No.: TEA FEDERAL 1-H

Date : 12-OCT-2006

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GRID

Proposal : 87.95

Depth (Feet)	T.V.D. (Feet)	V.S. (Feet)	Inc Deg.	Azimuth Deg.	Latitude (Feet)	Departure (Feet)	D-leg /100
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0.00	0.00	0.00	0.00	359.77	0.00	0.00	0.00
100.00	100.00	-0.04	0.05	246.73	-0.02	-0.04	0.05
200.00	200.00	-0.04	0.06	54.30	-0.00	-0.04	0.11
300.00	300.00	0.16	0.25	42.84	0.19	0.15	0.19
400.00	400.00	0.40	0.12	50.15	0.41	0.38	0.13
500.00	500.00	0.33	0.19	248.10	0.42	0.31	0.31
600.00	600.00	0.04	0.20	224.90	0.23	0.03	0.08
700.00	700.00	-0.15	0.54	185.33	-0.36	-0.14	0.40
800.00	799.99	-0.14	0.58	169.92	-1.33	-0.09	0.16
900.00	899.99	0.02	0.48	165.75	-2.24	0.10	0.11
1000.00	999.98	0.28	0.58	157.59	-3.11	0.40	0.12
1100.00	1099.98	0.65	0.38	143.33	-3.84	0.79	0.23
1200.00	1199.98	1.17	0.39	77.30	-4.03	1.31	0.42
1300.00	1299.97	1.68	0.27	45.50	-3.79	1.81	0.21
1400.00	1399.97	1.91	0.21	16.28	-3.45	2.03	0.13
1500.00	1499.97	2.02	0.21	15.36	-3.10	2.13	0.00
1600.00	1599.97	2.09	0.27	0.90	-2.69	2.18	0.08
1700.00	1699.97	1.97	0.30	327.75	-2.23	2.05	0.17
1800.00	1799.97	1.70	0.19	305.16	-1.91	1.77	0.14
1900.00	1899.97	1.41	0.20	288.11	-1.76	1.47	0.06
2000.00	1999.97	1.19	0.09	314.96	-1.65	1.25	0.12
2100.00	2099.97	0.94	0.23	281.99	-1.56	1.00	0.16
2200.00	2199.97	0.71	0.06	222.80	-1.55	0.77	0.21
2300.00	2299.97	0.57	0.12	279.91	-1.57	0.63	0.10
2400.00	2399.97	0.24	0.27	247.86	-1.64	0.30	0.18
2500.00	2499.97	-0.23	0.33	240.15	-1.88	-0.16	0.07
2600.00	2599.96	-0.74	0.36	232.94	-2.21	-0.67	0.05
2700.00	2699.96	-1.20	0.34	220.09	-2.63	-1.11	0.08
2800.00	2799.96	-1.58	0.42	208.36	-3.18	-1.47	0.11
2900.00	2899.96	-2.01	0.41	219.42	-3.77	-1.87	0.08
3000.00	2999.95	-2.38	0.42	199.38	-4.40	-2.22	0.14
3100.00	3099.95	-2.65	0.44	199.75	-5.10	-2.47	0.02
3200.00	3199.95	-2.92	0.44	196.72	-5.83	-2.71	0.02
3300.00	3299.95	-3.18	0.45	197.80	-6.56	-2.94	0.01
3400.00	3399.94	-3.44	0.47	195.52	-7.34	-3.17	0.03
3500.00	3499.94	-3.70	0.35	205.19	-8.02	-3.41	0.14
3600.00	3599.94	-4.04	0.41	212.73	-8.59	-3.74	0.08
3700.00	3699.94	-4.48	0.31	238.17	-9.04	-4.16	0.19
3800.00	3799.93	-4.90	0.35	214.27	-9.43	-4.56	0.14
3900.00	3899.93	-5.20	0.31	205.93	-9.93	-4.85	0.06

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Date : 12-OCT-2006

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Proposal : 87.95

Depth (Feet)	T.V.D. (Feet)	V.S. (Feet)	Inc Deg.	Azimuth Deg.	Latitude (Feet)	Departure (Feet)	D-leg /100
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4000.00	3999.93	-5.52	0.27	232.76	-10.31	-5.16	0.14
4100.00	4099.93	-5.98	0.32	250.09	-10.55	-5.61	0.10
4200.00	4199.93	-6.63	0.46	248.13	-10.80	-6.25	0.14
4300.00	4299.92	-7.69	0.79	275.43	-10.88	-7.31	0.44
4303.00	4302.92	-7.72	0.35	252.34	-10.88	-7.34	16.37

The Horizontal Displacement (in Feet) at
Measured Depth 4303.00 is 13.12 in a Direction of 213.99 Degrees