

OCD-ARTESIA

Form 3160-4
(April 2004)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

FORM APPROVED
OMB NO. 1004-0137
Expires: March 31, 2007

1a. Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry ☐ Other		5. Lease Serial No. NMNM97116	
b. Type of Completion: ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr., Other _____		6. If Indian, Allottee or Tribe Name	
2. Name of Operator Marbob Energy Corporation		7. Unit or CA Agreement Name and No.	
3. Address PO Box 227 Artesia, NM 88211-0227		8. Lease Name and Well No. Little Federal #1	
3a. Phone No. (include area code) 505-748-3303		9. AFI Well No. 30-015-33960 C1	
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface 555 FSL 1017 FEL, Unit P At top prod. interval reported below At total depth 1882 FSL 683 FEL, Unit I		10. Field and Pool, or Exploratory Happy Valley; Morrow	
14. Date Spudded 08/26/2005		11. Sec., T., R., M., on Block and Survey or Area Sec. 29-T21S-R26E	
15. Date T.D. Reached 09/29/2005		12. County or Parish Eddy	
16. Date Completed 11/20/2005 ☐ D & A ☒ Ready to Prod.		13. State NM	
17. Elevations (DF, RKB, RT, GL)* 3274' GL			
18. Total Depth: MD 11500' TVD 11269'		19. Plug Back T.D.: MD 11135' TVD 11135'	
20. Depth Bridge Plug Set: MD TVD			
21. Type Electric & Other Mechanical Logs Run (Submit copy of each) DLL, CSNG		22. Was well cored? ☒ No ☐ Yes (Submit analysis) Was DST run? ☒ No ☐ Yes (Submit report) Directional Survey? ☐ No ☒ Yes (Submit copy)	

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cement Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
26"	20"	94#	0	301'		750 sx		75'	None
12 1/4"	9 5/8"	36#	0	1775'		1100 sx		0	None
8 3/4"	7"	23#	0	8535'		1250 sx		0	None
6 1/8"	4 1/2"	11.5#	0	11500'		300 sx		7850'	None

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2 3/8"	10562'							

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Morrow	11264'	11270'	11264' - 11270'		42	
B) Morrow	11013'	11096'	11013' - 11096'		17	
C)						
D)						

26. Perforation Record

27. Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval	Amount and Type of Material
11264' - 11270'	Acid w/ 750 gal Clay Safe H Acid
11264' - 11270'	Frac w/ 72456# Proppant & 696 Bbls Fluid
11013' - 11096'	Acid w/ 1500 gal Clay Safe H Acid

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
12/22/2005	12/27/2005	24	→	0	16	1			Flowing
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	Producing
			→						

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	Producing
			→						

ACCEPTED FOR RECORD

JAN 24 2006

ALEXIS C. SWOBODA
PETROLEUM ENGINEER

*(See instructions and spaces for additional data on page 2)

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

29. Disposition of Gas (Sold, used for fuel, vented, etc.)

Sold

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

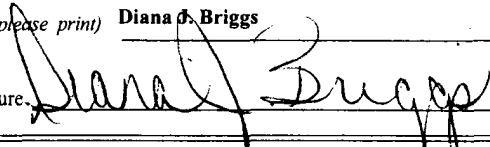
Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
				Capitan Delaware Bone Spring Wolfcamp Strawn Atoka Morrow	635' 2094' 4523' 8366' 9881' 10417' 11065'

32. Additional remarks (include plugging procedure):

33. Indicate which items have been attached by placing a check in the appropriate boxes:

- ☒ Electrical/Mechanical Logs (1 full set req'd.)
 ☐ Geologic Report
 ☐ DST Report
 ☒ Directional Survey
☐ Sundry Notice for plugging and cement verification
 ☐ Core Analysis
 ☐ Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name (please print) **Diana J. Briggs**Title **Production Analyst**Signature Date **01/18/2006**

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

OCT 12 2005

OPERATOR Marbob Energy
 WELL/LEASE Little Roundy Round Fed #1
 COUNTY Eddy, NM

507-0102

STATE OF NEW MEXICO
 DEVIATION REPORT

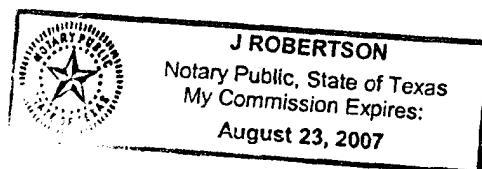
200	0.25	7,452	15.56	9,109	18.55
315	0.50	7,482	16.27	9,491	22.42
647	0.75	7,515	16.53	9,807	18.99
1,127	0.50	7,546	16.80	9,934	20.58
1,565	0.50	7,577	17.15	9,997	19.96
2,049	1.25	7,609	17.94	10,029	21.28
2,299	1.00	7,648	18.91	10,188	20.84
2,486	1.00	7,642	19.35	10,252	18.91
2,799	1.25	7,703	19.96	10,314	20.93
3,047	0.50	7,733	19.96	10,377	20.84
3,300	1.00	7,763	19.61	11,040	15.30
3,549	1.25	7,794	19.96	11,103	14.33
3,740	1.50	7,826	20.40	11,357	10.64
3,959	1.25	7,857	19.96	11,500	10.50
4,208	1.25	7,889	20.31		
4,398	1.75	7,920	20.58		
4,586	1.25	7,952	20.40		
4,836	0.75	7,983	20.40		
5,180	0.75	8,014	20.14		
5,213	1.00	8,046	20.31		
5,493	0.75	8,077	20.75		
5,806	0.75	8,108	20.95		
5,994	1.00	8,139	20.93		
6,181	1.25	8,202	20.49		
6,492	1.25	8,233	20.49		
6,701	0.53	8,264	20.22		
6,735	0.18	8,296	19.79		
6,764	0.97	8,327	19.79		
6,795	2.11	8,358	19.70		
6,827	3.43	8,390	19.61		
6,921	5.45	8,421	19.17		
6,952	5.89	8,452	17.94		
6,984	6.60	8,538	18.82		
7,077	9.06	8,633	20.58		
7,108	9.67	8,696	19.08		
7,139	10.20	8,728	18.73		
7,264	12.13	8,855	20.14		
7,296	12.13	8,918	22.07		
7,327	12.22	8,982	22.51		
7,421	14.68	9,046	21.72		

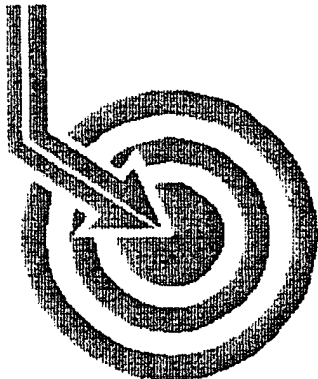
BY: Steve Moore

STATE OF TEXAS
 COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me on October 10, 2005, by Steve Moore on behalf of Patterson - UTI Drilling Company, LP, LLLP.

J Robertson
 Notary Public for Midland County, Texas
 My Commission Expires: 8/23/07





Scientific Drilling

MARBOB ENERGY

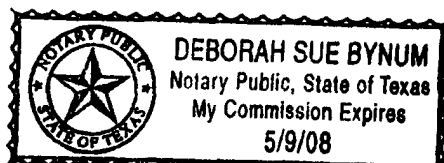
Field: Happy Valley
Site: Eddy County, NM
Well: Little Roundy Round Fed #1
Wellpath: VH - Job #32K0905670
Survey: 09/09/05

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

.....*Deborah Sue Bynum*.....Company Representative

Notorized this date 16th of October, 2005.

Deborah Sue Bynum
Notary Signature
County of Midland
State of Texas





Scientific Drilling International Survey Report

Company: MARBOB ENERGY **Date:** 10/16/2005 **Time:** 17:49:33 **Page:** 1
Field: Happy Valley **Co-ordinate(NE) Reference:** Site: Eddy County, NM, Grid North
Site: Eddy County, NM **Vertical (TVD) Reference:** SITE 0.0
Well: Little Roundy Round Fed #1 **Section (VS) Reference:** Well (0.00N,0.00E,262.68Azi)
Wellpath: VH - Job #32K0905670 **Survey Calculation Method:** Minimum Curvature **Db:** Sybase

Survey: 09/09/05 **Start Date:** 9/9/2005
Company: Scientific Drilling Internatio **Engineer:** Gonzales/Rowe w/Gray
Tool: Keeper;Keeper Gyro **Tied-to:** From Surface

Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.12	7.97	100.00	-0.03	0.10	0.01	0.12	0.10	7.97
200.00	0.56	124.31	200.00	-0.42	-0.07	0.43	0.62	0.44	98.94
300.00	0.57	111.51	299.99	-1.22	-0.53	1.30	0.13	1.40	112.04
400.00	0.48	143.17	399.99	-1.86	-1.04	2.01	0.30	2.27	117.40
500.00	0.24	210.27	499.99	-1.94	-1.56	2.16	0.45	2.66	125.85
600.00	0.18	247.65	599.99	-1.66	-1.80	1.91	0.15	2.62	133.34
700.00	0.13	242.66	699.99	-1.40	-1.91	1.66	0.05	2.53	139.01
800.00	0.25	222.72	799.99	-1.13	-2.12	1.41	0.14	2.55	146.38
900.00	0.34	254.43	899.99	-0.67	-2.36	0.98	0.18	2.56	157.51
1000.00	0.38	263.78	999.98	-0.04	-2.48	0.36	0.07	2.51	171.66
1100.00	0.47	246.69	1099.98	0.68	-2.68	-0.34	0.15	2.70	187.29
1200.00	0.58	243.77	1199.98	1.55	-3.06	-1.17	0.11	3.28	200.96
1300.00	0.84	245.09	1299.97	2.73	-3.60	-2.29	0.26	4.27	212.51
1400.00	1.06	248.41	1399.95	4.33	-4.25	-3.82	0.23	5.71	221.96
1500.00	1.06	255.51	1499.94	6.14	-4.82	-5.57	0.13	7.37	229.16
1600.00	0.87	259.30	1599.92	7.82	-5.19	-7.21	0.20	8.89	234.27
1700.00	0.74	259.58	1699.91	9.22	-5.45	-8.60	0.13	10.18	237.63
1800.00	0.93	253.76	1799.90	10.67	-5.79	-10.01	0.21	11.56	239.95
1900.00	0.83	259.96	1899.89	12.19	-6.14	-11.50	0.14	13.04	241.89
2000.00	0.78	271.56	1999.88	13.59	-6.25	-12.90	0.17	14.33	244.13
2100.00	0.74	281.26	2099.87	14.87	-6.11	-14.21	0.13	15.47	246.74
2200.00	0.80	280.02	2199.86	16.15	-5.86	-15.53	0.06	16.60	249.33
2300.00	0.83	293.82	2299.85	17.44	-5.45	-16.88	0.20	17.74	252.12
2400.00	0.93	308.63	2399.84	18.62	-4.65	-18.18	0.25	18.76	255.66
2500.00	0.94	302.19	2499.83	19.82	-3.70	-19.51	0.11	19.85	259.25
2600.00	0.71	326.62	2599.82	20.72	-2.75	-20.54	0.42	20.72	262.38
2700.00	0.75	321.22	2699.81	21.34	-1.72	-21.29	0.08	21.36	265.38
2800.00	0.63	319.30	2799.80	21.98	-0.79	-22.06	0.12	22.07	267.94
2900.00	0.59	313.89	2899.80	22.61	-0.02	-22.79	0.07	22.79	269.95
3000.00	0.65	290.06	2999.79	23.43	0.53	-23.69	0.26	23.70	271.28
3100.00	0.63	281.02	3099.79	24.46	0.83	-24.77	0.10	24.78	271.92
3200.00	0.64	283.16	3199.78	25.50	1.06	-25.85	0.03	25.87	272.35
3300.00	0.89	267.59	3299.77	26.80	1.16	-27.17	0.32	27.19	272.44
3400.00	0.99	266.45	3399.76	28.43	1.07	-28.81	0.10	28.83	272.13
3500.00	1.06	262.63	3499.74	30.22	0.90	-30.59	0.10	30.60	271.68
3600.00	1.00	263.63	3599.72	32.02	0.68	-32.37	0.06	32.38	271.21
3700.00	1.17	256.56	3699.71	33.91	0.35	-34.23	0.22	34.23	270.58
3800.00	0.78	259.73	3799.69	35.60	-0.01	-35.89	0.39	35.89	269.98
3900.00	0.84	261.95	3899.68	37.01	-0.23	-37.29	0.07	37.29	269.64
4000.00	0.75	275.08	3999.67	38.39	-0.28	-38.67	0.20	38.67	269.59
4100.00	1.06	258.28	4099.66	39.95	-0.41	-40.22	0.40	40.23	269.42
4200.00	1.20	267.24	4199.64	41.91	-0.65	-42.18	0.23	42.18	269.12
4300.00	1.34	268.20	4299.62	44.12	-0.73	-44.39	0.14	44.40	269.05
4400.00	1.28	270.43	4399.59	46.39	-0.76	-46.68	0.08	46.68	269.06
4500.00	1.08	280.93	4499.57	48.39	-0.57	-48.72	0.29	48.72	269.32
4600.00	1.34	264.99	4599.55	50.46	-0.50	-50.81	0.42	50.81	269.44
4700.00	0.80	276.78	4699.53	52.30	-0.52	-52.67	0.58	52.67	269.44
4800.00	0.72	280.75	4799.52	53.58	-0.32	-53.98	0.10	53.98	269.66



Scientific Drilling International Survey Report

Company: MARBOB ENERGY	Date: 10/16/2005	Time: 17:49:33	Page: 2
Field: Happy Valley	Co-ordinate(NE) Reference:	Site: Eddy County, NM, Grid North	
Site: Eddy County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Little Roundy Round Fed #1	Section (VS) Reference:	Well (0.00N,0.00E,262.68Azi)	
Wellpath: VH - Job #32K0905670	Survey Calculation Method:	Minimum Curvature	Db: Sybase

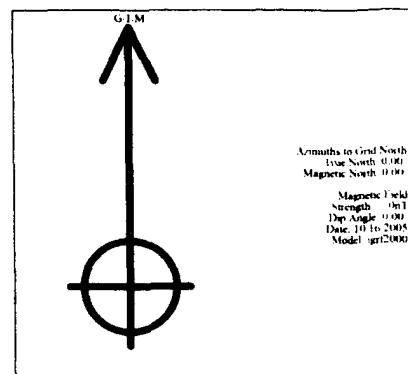
Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
4900.00	0.90	276.36	4899.51	54.94	-0.11	-55.38	0.19	55.38	269.88
5000.00	0.92	274.86	4999.50	56.49	0.04	-56.96	0.03	56.96	270.04
5100.00	0.70	280.69	5099.49	57.85	0.22	-58.36	0.23	58.36	270.22
5200.00	1.44	251.37	5199.47	59.66	-0.07	-60.15	0.90	60.15	269.94
5300.00	1.31	251.97	5299.44	62.02	-0.82	-62.42	0.13	62.43	269.25
5400.00	1.10	247.85	5399.42	64.07	-1.54	-64.40	0.23	64.42	268.63
5500.00	1.26	253.54	5499.40	66.08	-2.21	-66.34	0.20	66.38	268.09
5600.00	1.13	266.16	5599.38	68.15	-2.59	-68.38	0.29	68.43	267.83
5700.00	1.01	257.10	5699.36	70.02	-2.85	-70.22	0.21	70.28	267.68
5800.00	1.15	250.50	5799.34	71.87	-3.38	-72.03	0.19	72.11	267.31
5900.00	1.22	249.47	5899.32	73.89	-4.09	-73.97	0.07	74.09	266.83
6000.00	1.44	254.86	5999.29	76.17	-4.79	-76.18	0.25	76.33	266.40
6100.00	1.45	247.34	6099.26	78.64	-5.61	-78.56	0.19	78.76	265.92
6200.00	1.35	242.51	6199.23	80.96	-6.64	-80.78	0.15	81.05	265.30
6300.00	0.86	241.29	6299.21	82.77	-7.54	-82.48	0.49	82.82	264.77
6400.00	1.21	234.59	6399.20	84.40	-8.52	-84.00	0.37	84.43	264.21
6500.00	0.83	230.84	6499.18	85.94	-9.58	-85.42	0.39	85.96	263.60
6600.00	0.59	220.06	6599.17	86.94	-10.44	-86.31	0.27	86.94	263.11
6680.00	0.64	205.68	6679.17	87.49	-11.15	-86.77	0.20	87.49	262.68

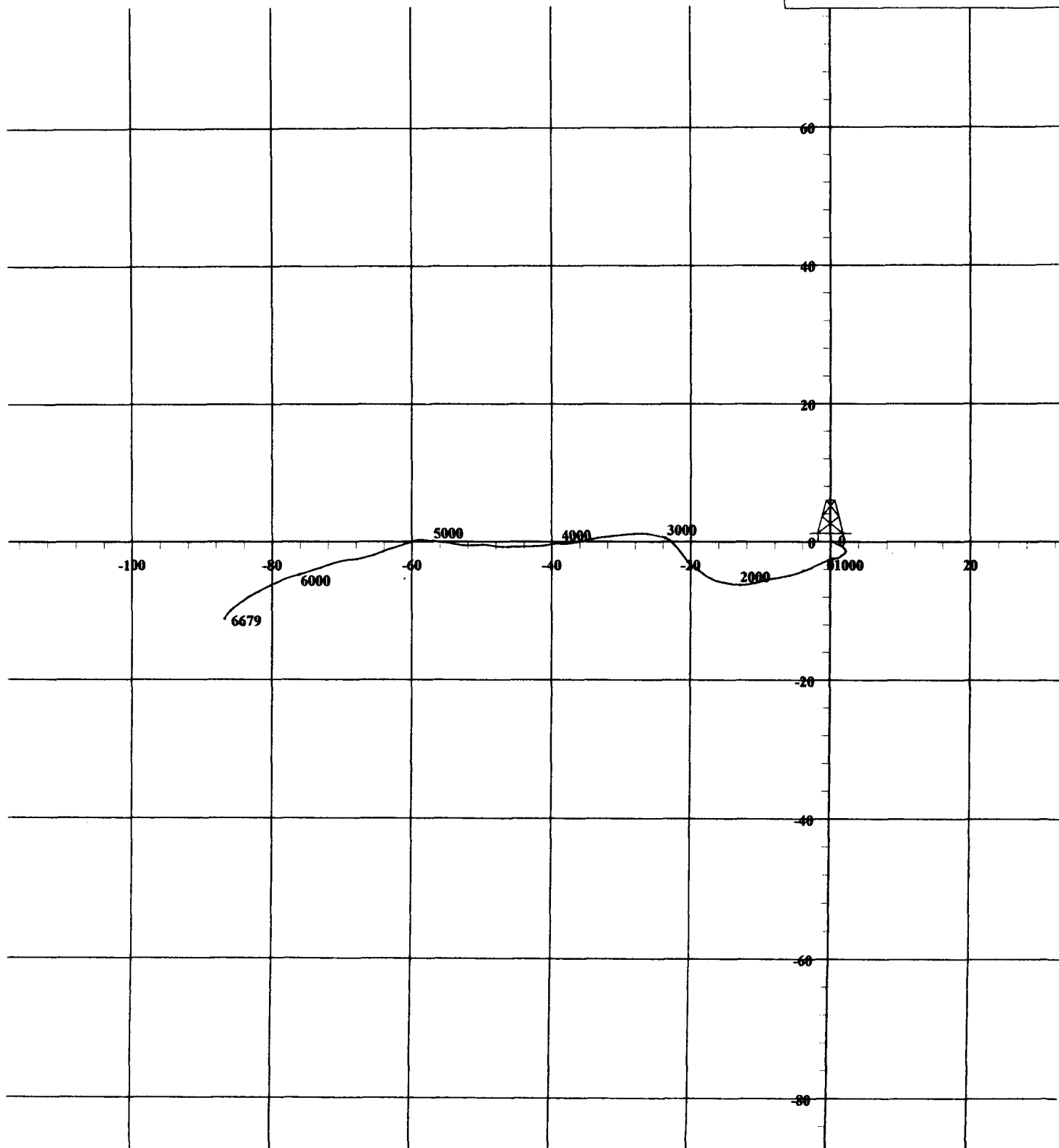


Scientific
Drilling

Field: Happy Valley
Site: Eddy County, NM
Well: Little Roundy Round Fed #1
Wellpath: VH - Job #32K0905670
Survey: 09/09/05



South(-)/North(+) [20ft/in]



West(-)/East(+) [20ft/in]

PathFinder

Survey Report

Company: Marbob Energy	Date: 10/3/2005	Time: 09:49:22	Page: 1
Field: Little Roundy Round Federal #1	Co-ordinate(NE) Reference:	Site: Section 29, T21-S, R26-E	
Site: Section 29, T21-S, R26-E	Vertical (TVD) Reference:	SITE 0.0	
Well: Little Roundy Round Federal #1	Section (VS) Reference:	Well (0.00N,0.00E,14.06Azi)	
Wellpath: Original Hole	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Field: Little Roundy Round Federal #1
Eddy County, New Mexico

Map System: US State Plane Coordinate System 1927
Geo Datum: NAD27 (Clarke 1866)
Sys Datum: Mean Sea Level

Map Zone: New Mexico, Eastern Zone
Coordinate System: Site Centre
Geomagnetic Model: igrf2005

Site: Section 29, T21-S, R26-E

Eddy County, New Mexico

Site Position:	Northing: 525639.87 ft	Latitude: 32 26 42.340 N
From: Geographic	Easting: 507507.40 ft	Longitude: 104 18 32.390 W
Position Uncertainty: 0.00 ft		North Reference: True
Ground Level: 3274.00 ft		Grid Convergence: 0.01 deg

Well: Little Roundy Round Federal #1

Slot Name:

Well Position:	+N/-S 0.00 ft	Northing: 525639.87 ft	Latitude: 32 26 42.340 N
	+E/-W 0.00 ft	Easting: 507507.40 ft	Longitude: 104 18 32.390 W
Position Uncertainty: 0.00 ft			

Wellpath: Original Hole

Current Datum: SITE	Height 0.00 ft	Drilled From: Surface
Magnetic Data: 9/12/2005		Tie-on Depth: 0.00 ft
Field Strength: 49279 nT		Above System Datum: Mean Sea Level
Vertical Section: Depth From (TVD)	+N/-S	Declination: 8.61 deg
ft	ft	Mag Dip Angle: 60.40 deg
		+E/-W
		ft
		Direction
		deg
0.00	0.00	0.00
		14.06

Survey: Pathfinder MWD Surveys

Start Date: 9/12/2005

Company: PathFinder Energy Services
Tool:

Engineer: Ron McIntyre
Tied-to: User Defined

Survey: Pathfinder MWD Surveys

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
6680.00	0.64	205.68	6679.16	-11.15	-86.77	-31.90	0.00	0.00	0.00	Tie-In to SDI Gyro Begin PathFinder MWD Survey
6701.00	0.53	216.31	6700.16	-11.33	-86.88	-32.11	0.73	-0.52	50.62	
6733.00	0.18	134.04	6732.16	-11.49	-86.93	-32.27	1.68	-1.09	-257.09	
6764.00	0.97	52.30	6763.16	-11.36	-86.69	-32.09	3.10	2.55	-263.68	
6795.00	2.11	42.37	6794.15	-10.78	-86.09	-31.38	3.76	3.68	-32.03	
6827.00	3.43	35.25	6826.11	-9.56	-85.15	-29.97	4.25	4.12	-22.25	
6858.00	4.22	31.38	6857.04	-7.83	-84.02	-28.01	2.68	2.55	-12.48	
6890.00	5.01	28.66	6888.93	-5.60	-82.73	-25.54	2.56	2.47	-8.50	
6921.00	5.45	28.48	6919.80	-3.12	-81.38	-22.80	1.42	1.42	-0.58	
6952.00	5.89	27.08	6950.65	-0.41	-79.96	-19.83	1.49	1.42	-4.52	
6984.00	6.60	23.56	6982.46	2.74	-78.47	-16.41	2.52	2.22	-11.00	
7015.00	7.39	21.98	7013.23	6.22	-77.01	-12.68	2.62	2.55	-5.10	
7046.00	8.27	21.01	7043.94	10.15	-75.47	-8.49	2.87	2.84	-3.13	
7077.00	9.06	21.19	7074.59	14.51	-73.79	-3.86	2.55	2.55	0.58	
7108.00	9.67	20.49	7105.18	19.22	-71.99	1.15	2.00	1.97	-2.26	
7139.00	10.20	18.64	7135.71	24.26	-70.21	6.47	2.00	1.71	-5.97	
7170.00	10.82	16.71	7166.19	29.65	-68.49	12.12	2.30	2.00	-6.23	
7201.00	10.90	15.12	7196.64	35.27	-66.89	17.95	1.00	0.26	-5.13	
7233.00	11.61	14.16	7228.02	41.31	-65.31	24.20	2.29	2.22	-3.00	
7264.00	12.13	16.53	7258.36	47.46	-63.62	30.57	2.30	1.68	7.65	
7296.00	12.13	18.29	7289.64	53.87	-61.61	37.28	1.16	0.00	5.50	
7327.00	12.22	17.94	7319.95	60.09	-59.58	43.81	0.38	0.29	-1.13	
7358.00	12.75	17.58	7350.21	66.47	-57.54	50.49	1.73	1.71	-1.16	
7390.00	13.72	18.02	7381.36	73.44	-55.29	57.80	3.05	3.03	1.37	

PathFinder

Survey Report

Company: Marbob Energy
Field: Little Roundy Round Federal #1
Site: Section 29, T21-S, R26-E
Well: Little Roundy Round Federal #1
Wellpath: Original Hole

Date: 10/3/2005 **Time:** 09:49:22 **Page:** 2
Co-ordinate(NE) Reference: Site: Section 29, T21-S, R26-E
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,14.06Azi)
Survey Calculation Method: Minimum Curvature **Db:** Sybase

Survey: Pathfinder MWD Surveys

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
7421.00	14.68	18.29	7411.41	80.67	-52.92	65.39	3.10	3.10	0.87	
7452.00	15.56	19.34	7441.34	88.32	-50.32	73.45	2.97	2.84	3.39	
7483.00	16.27	20.57	7471.15	96.31	-47.41	81.90	2.54	2.29	3.97	
7515.00	16.53	22.42	7501.85	104.72	-44.10	90.86	1.82	0.81	5.78	
7546.00	16.80	22.16	7531.55	112.94	-40.73	99.66	0.90	0.87	-0.84	
7577.00	17.15	22.07	7561.20	121.33	-37.32	108.62	1.13	1.13	-0.29	
7609.00	17.94	21.36	7591.71	130.29	-33.75	118.18	2.56	2.47	-2.22	
7640.00	18.91	20.40	7621.12	139.44	-30.26	127.91	3.28	3.13	-3.10	
7672.00	19.35	19.25	7651.35	149.31	-26.71	138.34	1.81	1.37	-3.59	
7703.00	19.96	18.20	7680.55	159.18	-23.36	148.73	2.27	1.97	-3.39	
7733.00	19.96	18.20	7708.74	168.91	-20.16	158.95	0.00	0.00	0.00	
7763.00	19.61	17.15	7736.97	178.59	-17.08	169.08	1.66	-1.17	-3.50	
7794.00	19.96	16.88	7766.14	188.62	-14.01	179.56	1.17	1.13	-0.87	
7826.00	20.40	16.97	7796.18	199.18	-10.80	190.59	1.38	1.37	0.28	
7857.00	19.96	18.55	7825.28	209.37	-7.54	201.26	2.26	-1.42	5.10	
7889.00	20.31	18.02	7855.32	219.83	-4.08	212.24	1.23	1.09	-1.66	
7920.00	20.58	18.46	7884.37	230.11	-0.69	223.04	1.00	0.87	1.42	
7952.00	20.40	18.46	7914.34	240.74	2.86	234.21	0.56	-0.56	0.00	
7983.00	20.40	17.94	7943.40	251.00	6.23	244.99	0.58	0.00	-1.68	
8014.00	20.14	18.38	7972.48	261.21	9.58	255.70	0.97	-0.84	1.42	
8046.00	20.31	17.76	8002.51	271.72	13.01	266.74	0.85	0.53	-1.94	
8077.00	20.75	17.50	8031.54	282.08	16.30	277.59	1.45	1.42	-0.84	
8108.00	20.93	16.88	8060.51	292.62	19.56	288.60	0.92	0.58	-2.00	
8139.00	20.93	16.97	8089.46	303.21	22.78	299.66	0.10	0.00	0.29	
8170.00	20.75	17.06	8118.44	313.76	26.01	310.67	0.59	-0.58	0.29	
8202.00	20.49	17.32	8148.39	324.53	29.34	321.93	0.86	-0.81	0.81	
8233.00	20.49	16.62	8177.42	334.90	32.51	332.76	0.79	0.00	-2.26	
8264.00	20.22	16.35	8206.49	345.24	35.57	343.54	0.92	-0.87	-0.87	
8296.00	19.79	16.35	8236.56	355.75	38.65	354.48	1.34	-1.34	0.00	
8327.00	19.79	16.88	8265.73	365.81	41.65	364.96	0.58	0.00	1.71	
8358.00	19.70	17.76	8294.90	375.80	44.77	375.42	1.00	-0.29	2.84	
8390.00	19.61	19.17	8325.04	386.01	48.18	386.15	1.51	-0.28	4.41	
8421.00	19.17	19.43	8354.28	395.73	51.58	396.40	1.45	-1.42	0.84	
8452.00	17.94	18.20	8383.67	405.06	54.76	406.23	4.16	-3.97	-3.97	
8484.00	17.50	17.58	8414.15	414.33	57.76	415.94	1.50	-1.37	-1.94	
8538.00	18.82	17.32	8465.46	430.39	62.80	432.75	2.45	2.44	-0.48	
8570.00	20.40	16.71	8495.60	440.66	65.94	443.47	4.98	4.94	-1.91	
8601.00	20.31	15.65	8524.67	451.01	68.95	454.25	1.22	-0.29	-3.42	
8633.00	20.58	15.04	8554.65	461.79	71.90	465.42	1.07	0.84	-1.91	
8664.00	20.58	16.18	8583.67	472.28	74.84	476.31	1.29	0.00	3.68	
8696.00	19.08	17.76	8613.78	482.67	78.00	487.15	4.98	-4.69	4.94	
8728.00	18.73	19.61	8644.05	492.49	81.32	497.49	2.17	-1.09	5.78	
8791.00	21.10	18.90	8703.28	512.75	88.39	518.86	3.78	3.76	-1.13	
8855.00	20.14	18.46	8763.18	534.10	95.61	541.32	1.52	-1.50	-0.69	
8918.00	22.07	17.23	8821.95	555.69	102.55	563.96	3.14	3.06	-1.95	
8982.00	22.53	17.76	8881.16	578.85	109.85	588.20	0.78	0.72	0.83	
9046.00	21.72	18.90	8940.45	601.74	117.43	612.23	1.43	-1.27	1.78	
9109.00	18.55	19.17	8999.59	622.24	124.50	633.84	5.03	-5.03	0.43	
9173.00	16.44	16.44	9060.63	640.54	130.40	653.03	3.54	-3.30	-4.27	
9236.00	16.62	12.05	9121.03	657.90	134.81	670.94	2.00	0.29	-6.97	
9300.00	18.55	19.08	9182.04	676.48	140.05	690.23	4.48	3.02	10.98	
9363.00	19.17	19.17	9241.66	695.72	146.72	710.52	0.99	0.98	0.14	
9427.00	19.79	15.12	9302.00	716.10	153.00	731.82	2.32	0.97	-6.33	

PathFinder

Survey Report

Company: Marbob Energy	Date: 10/3/2005	Time: 09:49:22	Page: 3
Field: Little Roundy Round Federal #1	Co-ordinate(NE) Reference:	Site: Section 29, T21-S, R26-E	
Site: Section 29, T21-S, R26-E	Vertical (TVD) Reference:	SITE 0.0	
Well: Little Roundy Round Federal #1	Section (VS) Reference:	Well (0.00N,0.00E,14.06Azi)	
Wellpath: Original Hole	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: Pathfinder MWD Surveys

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
9490.00	22.42	15.21	9360.77	738.00	158.93	754.50	4.17	4.17	0.14	
9553.00	20.84	18.46	9419.33	760.22	165.63	777.68	3.15	-2.51	5.16	
9615.00	20.84	21.45	9477.28	780.95	173.16	799.62	1.72	0.00	4.82	
9679.00	20.31	16.62	9537.20	802.19	180.50	822.00	2.78	-0.83	-7.55	
9744.00	20.22	10.64	9598.18	824.04	185.80	844.49	3.19	-0.14	-9.20	
9807.00	18.99	11.34	9657.53	844.79	189.82	865.60	1.99	-1.95	1.11	
9870.00	21.02	10.38	9716.72	865.96	193.88	887.11	3.26	3.22	-1.52	
9934.00	20.58	10.03	9776.55	888.32	197.90	909.79	0.71	-0.69	-0.55	
9997.00	19.96	10.29	9835.65	909.81	201.75	931.56	0.99	-0.98	0.41	
10061.00	21.81	11.43	9895.44	932.21	206.06	954.34	2.96	2.89	1.78	
10125.00	20.84	12.14	9955.06	954.99	210.81	977.60	1.57	-1.52	1.11	
10188.00	20.84	11.34	10013.94	976.94	215.37	999.99	0.45	0.00	-1.27	
10252.00	18.91	12.75	10074.12	998.22	219.90	1021.73	3.11	-3.02	2.20	
10314.00	20.93	12.66	10132.41	1018.82	224.54	1042.85	3.26	3.26	-0.15	
10377.00	20.84	13.10	10191.27	1040.72	229.55	1065.30	0.29	-0.14	0.70	
10440.00	21.37	13.81	10250.05	1062.78	234.83	1087.99	0.93	0.84	1.13	
10503.00	20.22	17.23	10308.94	1084.33	240.79	1110.34	2.65	-1.83	5.43	
10566.00	19.52	18.38	10368.19	1104.71	247.34	1131.70	1.27	-1.11	1.83	
10629.00	18.20	19.87	10427.81	1123.95	254.00	1151.99	2.23	-2.10	2.37	
10693.00	18.38	19.43	10488.58	1142.87	260.75	1171.98	0.35	0.28	-0.69	
10756.00	18.82	15.48	10548.29	1162.03	266.77	1192.03	2.12	0.70	-6.27	
10819.00	18.38	15.91	10608.00	1181.38	272.21	1212.11	0.73	-0.70	0.68	
10927.00	17.06	17.23	10710.87	1212.88	281.57	1244.95	1.28	-1.22	1.22	
11040.00	15.30	20.75	10819.39	1242.66	291.76	1276.31	1.78	-1.56	3.12	
11103.00	14.33	21.80	10880.30	1257.67	297.60	1292.29	1.60	-1.54	1.67	
11167.00	13.10	24.35	10942.47	1271.63	303.53	1307.28	2.14	-1.92	3.98	
11231.00	11.78	27.87	11004.97	1284.02	309.58	1320.76	2.38	-2.06	5.50	
11294.00	11.08	30.68	11066.72	1294.91	315.67	1332.80	1.42	-1.11	4.46	
11357.00	10.64	27.08	11128.59	1305.29	321.41	1344.27	1.28	-0.70	-5.71	
11421.00	10.29	28.83	11191.53	1315.56	326.86	1355.56	0.74	-0.55	2.73	
11457.00	9.67	31.47	11226.98	1320.96	329.98	1361.55	2.14	-1.72	7.33	Last Pathfinder MWD Survey Projection to TD
11500.00	9.67	31.47	11269.37	1327.12	333.75	1368.44	0.00	0.00	0.00	

Annotation

MD ft	TVD ft	
6680.00	6679.16	Tie-In to SDI Gyro
6701.00	6700.16	Begin Pathfinder MWD Surveys
11457.00	11226.98	Last Pathfinder MWD Survey
11500.00	11269.37	Projection to TD

Marbob Energy Corporation

Little Roundy Round Federal #1 Eddy County, New Mexico Section 29, T21S & R26E Final Plot

PATHFINDER
ENERGY SERVICES

COMPANY DETAILS

Marbob Energy
2208 W. Main St.
Artesia, New Mexico

Calculation Method: Minimum Curvature
Error System: Systematic Ellipse
Scan Method: Closest Approach 3D
Error Surface: 1 Elliptical Conic
Warning Method: Error Ratio

FORMATION TOP DETAILS

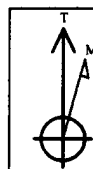
No.	TVDPath	MDPath	Formation
1	8305.00	8368.72	Wolfcamp Top

FIELD DETAILS

Little Roundy Round Federal #1
Eddy County, New Mexico
Geodetic System: US State Plane Coordinate System 1927
Ellipsoid: NAD27 (Clarke 1866)
Zone: New Mexico, Eastern Zone
Magnetic Model: igr2005
System Datum: Mean Sea Level
Local North: True North

CASING DETAILS

No.	TVD	MD	Name	Size
1	8457.88	8530.00	7" Casing Point	7.000



Azimuths to True North
Magnetic North: 8.61°

Magnetic Field
Strength: 49279nT
Dip Angle: 60.40°
Date: 9/12/2005
Model: igr2005

