

Submit To Appropriate District Office State Lease - 6 copies Fee Lease - 5 copies District I 1625 N French Dr., Hobbs, NM 88240 District II 1301 W Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 1220 S St Francis Dr., Santa Fe, NM 87505	State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505	Form C-105 Revised June 10, 2003
		WELL API NO. 30-015-36032
		5. Indicate Type of Lease STATE ☒ FEE ☐
		State Oil & Gas Lease No.
WELL COMPLETION OR RECOMPLETION REPORT AND LOG		
1a Type of Well OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER _____ b Type of Completion NEW ☒ WORK ☐ DEEPEN ☐ PLUG ☐ DIFF ☐ WELL OVER BACK RESVR ☐ OTHER _____		7 Lease Name or Unit Agreement Name WILD CAP STATE
2. Name of Operator MARBOB ENERGY CORPORATION		8 Well No. 3H
3 Address of Operator P.O. BOX 227, ARTESIA, NM 88211-0227		9 Pool name or Wildcat GREENWOOD; BONE SPRING
4 Well Location (SUR) Unit Letter <u>J</u> <u>2300</u> Feet From The <u>SOUTH</u> Line and <u>1650</u> Feet From The <u>EAST</u> Line Section <u>36</u> Township <u>19S</u> Range <u>31E</u> NMPM <u>EDDY</u> County (BHL) Unit Letter <u>O</u> <u>330</u> Feet From The <u>SOUTH</u> Line and <u>1650</u> Feet From The <u>EAST</u> Line Section <u>36</u> Township <u>19S</u> Range <u>31E</u> NMPM <u>EDDY</u> County		
10 Date Spudded 2/9/08	11 Date T D Reached 4/5/08	12. Date Compl. (Ready to Prod.) 7/11/08
13 Elevations (DF& RKB, RT, GR, etc.) 3492' GR		14. Elev Casinghead
15 Total Depth 11153'	16 Plug Back T D 11100'	17. If Multiple Compl. How Many Zones? 0-11153'
18 Intervals Drilled By 0-11153'		19 Producing Interval(s), of this completion - Top, Bottom, Name 9566-11070' BONE SPRING
20 Was Directional Survey Made YES		21. Type Electric and Other Logs Run DLL, DSN
22 Was Well Cored NO		
23. CASING RECORD (Report all strings set in well)		
CASING SIZE	WEIGHT LB /FT	DEPTH SET
13 3/8"	54#	942'
10 3/4"	45.5#	3128'
8 5/8"	32#	3893'
5 1/2"	17#	11153'
24. LINER RECORD		25. TUBING RECORD
SIZE	TOP	BOTTOM
26 Perforation record (interval, size, and number) 9566-11070' (35)		27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.
		DEPTH INTERVAL
		AMOUNT AND KIND MATERIAL USED
		9566-11070' ACDZ W/5500 GAL NEFE 15% HCL; FRAC W/360567 GAL FLUID & 520740# SAND
28 PRODUCTION		
Date First Production 7/13/08	Production Method (Flowing, gas lift, pumping - Size and type pump) PUMPING	Well Status (Prod. or Shut-in) PRODUCING
Date of Test 7/18/08	Hours Tested 24	Choke Size
Prod'n For Test Period	Oil - Bbl 110	Gas - MCF 85
Water - Bbl 341	Gas - Oil Ratio	
Flow Tubing Press	Casing Pressure	Calculated 24-Hour Rate
Oil - Bbl	Gas - MCF	Water - Bbl
Oil Gravity - API - (Corr)		
29 Disposition of Gas (Sold, used for fuel, vented, etc.) SOLD		Test Witnessed By TITO AGUIRRE
30 List Attachments LOGS, DEVIATION REPORT, DIRECTIONAL SURVEY		
31 I hereby certify that the information shown on both sides of this form as true and complete to the best of my knowledge and belief		
Signature 	Printed Name: STORMI DAVIS	Title: PRODUCTION ASSISTANT Date 7/22/08
E-mail Address: SDAVIS@MARBOB.COM		

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 25 through 29 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	T. Canyon	T. Ojo Alamo	T. Penn. "B"
T. Salt 932'	T. Strawn	T. Kirtland-Fruitland	T. Penn. "C"
B. Salt 2643'	T. Atoka	T. Pictured Cliffs	T. Penn. "D"
T. Yates 2788'	T. Miss	T. Cliff House	T. Leadville
T. 7 Rivers	T. Devonian	T. Menefee	T. Madison
T. Queen	T. Silurian	T. Point Lookout	T. Elbert
T. Grayburg	T. Montoya	T. Mancos	T. McCracken
T. San Andres	T. Simpson	T. Gallup	T. Ignacio Otzte
T. Glorieta	T. McKee	Base Greenhorn	T. Granite
T. Paddock	T. Ellenburger	T. Dakota	T.
T. Blinebry	T. Gr. Wash	T. Morrison	T.
T. Tubb	T. Delaware 4350'	T. Todilto	T.
T. Drinkard	T. Bone Spring 7224'	T. Entrada	T.
T. Abo	T. Rustler 817'	T. Wingate	T.
T. Wolfcamp	T. Capitan 3176'	T. Chinle	T.
T. Penn	T. Penrose	T. Permian	T.
T. Cisco (Bough C)	T. Yeso	T. Penn "A"	T.

OIL OR GAS SANDS OR ZONES

No. 1, from.....to.....

No. 3, from.....to.....

No. 2, from.....to.....

No. 4, from..... to.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....

No. 2, from.....to.....feet.....

No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology

From	To	Thickness In Feet	Lithology

OPERATOR: Marbob Energy Corp.
WELL/LEASE: Wildcap State # 3
COUNTY: Eddy Co., NM Sec 36, T19S, R31E

STATE OF NEW MEXICO DEVIATION REPORT

<u>Depth</u>	<u>Deviation</u>	<u>Depth</u>	<u>Deviation</u>
404	1/2		
917	2/5		
1,346	0		
1,697	1/2		
2,138	3		
2,234	0		
2,297	3		
2,456	2 3/4		
2,583	3		
2,804	3 3/4		

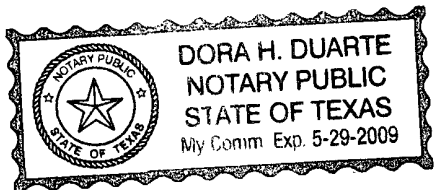
Patriot Drilling, LLC



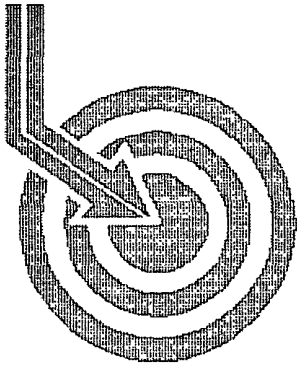
M. Leroy Peterson, Executive Vice-
President

The foregoing instrument was acknowledged before me on this 22nd day of April, 2008 by M. Leroy Peterson, Executive Vice-President of Patriot Drilling, LLC.

My Commission Expires: 5/29/2009



Dora H. Duarte
Notary Public for Midland Co., Texas



Scientific Drilling

APR 18 2008

MARBOB ENERGY

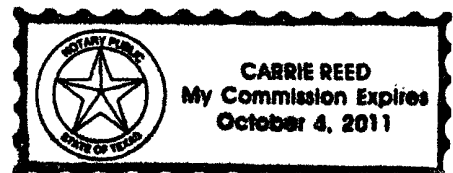
Field: Greenwood
Site: Eddy County, NM
Well: Wildcap State #3H
Wellpath: VH - Job #32K0308189
Survey: 03/23/08

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

.....*E. Wharton*.....Company Representative

Notorized this date 17th of April, 2008.

Carrie Reed
Notary Signature
County of Midland
State of Texas





Scientific Drilling International Survey Report

Company: MARBOB ENERGY	Date: 04/16/2008	Time: 12:35:01	Page: 1
Field: Greenwood	Co-ordinate(NE) Reference:	Site: Eddy County, NM; Grid North	
Site: Eddy County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Wildcap State #3H	Section (VS) Reference:	Well (0.00N,0.00E,63.85Azi)	
Wellpath: VH - Job #32K0308189	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 03/23/08	Start Date: 03/23/2008
Company: Scientific Drilling Internatio	Engineer: Melendez w/P&M
Tool: Keeper;Keeper Gyro	Tied-to: From Surface

Survey

MD ft	Incl deg	Azlm 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	0.27	235.48	100.00	-0.23	-0.13	-0.19	0.27	0.24	235.48
200.00	0.51	237.59	200.00	-0.91	-0.51	-0.76	0.24	0.92	236.50
300.00	0.50	236.57	299.99	-1.78	-0.98	-1.50	0.01	1.80	236.79
400.00	0.49	255.68	399.99	-2.64	-1.33	-2.28	0.16	2.64	239.76
500.00	0.18	239.69	499.99	-3.21	-1.52	-2.83	0.32	3.21	241.85
600.00	0.36	268.56	599.99	-3.65	-1.60	-3.28	0.22	3.65	243.97
700.00	0.42	334.32	699.98	-3.93	-1.28	-3.75	0.43	3.97	251.17
800.00	0.47	39.20	799.98	-3.56	-0.63	-3.65	0.48	3.71	260.18
900.00	0.31	279.20	899.98	-3.41	-0.27	-3.66	0.68	3.67	265.77
1000.00	0.57	64.77	999.98	-3.13	-0.02	-3.48	0.84	3.48	269.74
1100.00	0.40	161.73	1099.98	-2.68	-0.14	-2.92	0.73	2.92	267.35
1200.00	0.46	55.03	1199.98	-2.33	-0.24	-2.48	0.69	2.49	264.55
1300.00	0.21	127.77	1299.97	-1.85	-0.12	-2.01	0.45	2.01	266.61
1400.00	0.57	75.25	1399.97	-1.29	-0.10	-1.38	0.47	1.39	265.68
1500.00	0.98	46.03	1499.96	0.02	0.62	-0.29	0.56	0.68	335.14
1600.00	0.29	127.97	1599.96	0.94	1.05	0.53	0.98	1.18	26.68
1700.00	1.21	41.87	1699.95	2.03	1.68	1.43	1.22	2.21	40.41
1800.00	1.74	72.25	1799.92	4.51	2.93	3.58	0.93	4.63	50.70
1900.00	2.09	60.29	1899.86	7.83	4.30	6.61	0.53	7.89	56.97
2000.00	3.07	76.98	1999.76	12.26	5.81	10.81	1.23	12.27	61.75
2100.00	2.84	64.45	2099.63	17.35	7.48	15.65	0.68	17.35	64.46
2200.00	3.50	68.02	2199.48	22.87	9.69	20.72	0.69	22.87	64.93
2300.00	3.12	72.30	2299.31	28.60	11.66	26.14	0.45	28.62	65.96
2400.00	4.00	59.78	2399.12	34.77	14.24	31.75	1.17	34.80	65.84
2500.00	3.85	69.88	2498.88	41.59	17.15	37.91	0.71	41.61	65.66
2600.00	2.82	76.55	2598.71	47.33	18.88	43.46	1.10	47.38	66.52
2700.00	3.48	80.68	2698.56	52.64	19.94	48.85	0.70	52.76	67.79
2800.00	3.62	86.56	2798.37	58.45	20.62	54.99	0.39	58.73	69.44
2900.00	3.48	92.84	2898.18	64.02	20.66	61.17	0.41	64.57	71.34
3000.00	3.65	97.25	2997.98	69.33	20.11	67.36	0.32	70.30	73.38
3100.00	1.97	111.02	3097.86	73.16	19.09	72.13	1.80	74.61	75.17
3200.00	2.12	106.15	3197.80	75.69	17.96	75.51	0.23	77.61	76.62
3300.00	2.23	104.68	3297.73	78.54	16.96	79.17	0.12	80.96	77.91
3400.00	2.11	95.10	3397.65	81.58	16.30	82.88	0.38	84.47	78.87
3500.00	1.75	82.21	3497.60	84.60	16.34	86.23	0.56	87.76	79.27
3600.00	2.90	77.38	3597.51	88.51	17.10	90.21	1.17	91.82	79.27
3700.00	4.00	77.32	3697.33	94.36	18.42	96.08	1.10	97.83	79.15
3800.00	5.00	73.79	3797.02	102.05	20.40	103.67	1.04	105.66	78.87
3900.00	5.45	72.15	3896.61	111.04	23.07	112.37	0.47	114.72	78.40
4000.00	5.52	72.72	3996.15	120.49	25.96	121.49	0.09	124.23	77.94
4100.00	5.04	72.23	4095.72	129.59	28.73	130.26	0.48	133.39	77.56
4200.00	4.25	72.77	4195.39	137.60	31.17	137.98	0.79	141.46	77.27
4300.00	3.72	70.77	4295.15	144.48	33.33	144.59	0.55	148.38	77.02
4400.00	3.36	72.65	4394.96	150.59	35.27	150.45	0.38	154.53	76.80
4500.00	3.03	66.78	4494.81	156.13	37.19	155.67	0.46	160.05	76.56
4600.00	2.64	61.42	4594.68	161.07	39.33	160.12	0.47	164.88	76.20
4700.00	2.39	53.93	4694.59	165.42	41.66	163.83	0.41	169.05	75.73
4800.00	1.98	56.93	4794.51	169.19	43.83	166.96	0.43	172.62	75.29



Scientific Drilling International Survey Report

Company: MARBOB ENERGY	Date: 04/16/2008	Time: 12:35:01	Page: 2
Field: Greenwood	Co-ordinate(NE) Reference:	Site: Eddy County, NM, Grid North	
Site: Eddy County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Wildcap State #3H	Section (VS) Reference:	Well (0.00N,0.00E,63.85Azi)	
Wellpath: VH - Job #32K0308189	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey

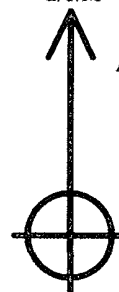
MD ft	Incl deg	Azlm deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
4900.00	1.69	49.16	4894.46	172.33	45.74	169.53	0.38	175.59	74.90
5000.00	1.58	40.72	4994.42	175.03	47.75	171.54	0.26	178.06	74.45
5100.00	1.50	36.53	5094.39	177.46	49.85	173.22	0.14	180.25	73.95
5200.00	1.26	36.02	5194.36	179.59	51.79	174.65	0.24	182.16	73.48
5300.00	1.32	30.56	5294.33	181.53	53.67	175.88	0.14	183.88	73.03
5400.00	1.05	33.87	5394.31	183.29	55.42	176.97	0.28	185.45	72.61
5500.00	0.60	41.35	5494.30	184.56	56.57	177.83	0.46	186.61	72.35
5600.00	0.35	351.10	5594.30	185.14	57.27	178.13	0.46	187.11	72.18
5700.00	0.45	10.94	5694.30	185.47	57.96	178.16	0.17	187.35	71.98
5800.00	0.52	2.69	5794.29	185.92	58.80	178.25	0.10	187.70	71.75
5900.00	0.62	1.58	5894.29	186.39	59.79	178.29	0.10	188.05	71.46
6000.00	0.63	4.81	5994.28	186.93	60.88	178.35	0.04	188.45	71.15
6100.00	0.56	5.64	6094.28	187.47	61.91	178.44	0.07	188.88	70.87
6200.00	0.50	1.49	6194.27	187.93	62.84	178.50	0.07	189.24	70.61
6300.00	0.75	346.31	6294.26	188.27	63.91	178.36	0.30	189.46	70.29
6400.00	0.61	342.12	6394.26	188.49	65.05	178.04	0.15	189.55	69.93
6500.00	0.78	308.19	6494.25	188.27	65.98	177.34	0.44	189.22	69.59
6600.00	0.68	302.15	6594.24	187.66	66.71	176.31	0.13	188.51	69.27
6700.00	0.70	301.04	6694.24	187.02	67.34	175.28	0.02	187.77	68.98
6800.00	0.62	291.23	6794.23	186.32	67.86	174.25	0.14	187.00	68.72
6900.00	0.72	285.50	6894.22	185.49	68.22	173.14	0.12	186.10	68.50
7000.00	0.85	278.75	6994.21	184.41	68.50	171.80	0.16	184.96	68.26
7100.00	0.82	278.06	7094.20	183.21	68.71	170.36	0.03	183.70	68.03
7200.00	1.15	275.92	7194.19	181.77	68.92	168.66	0.33	182.19	67.77
7300.00	1.28	270.68	7294.16	179.92	69.03	166.54	0.17	180.28	67.49
7400.00	1.66	251.80	7394.13	177.49	68.59	164.05	0.61	177.81	67.31
7500.00	2.03	259.27	7494.08	174.35	67.81	160.93	0.44	174.64	67.15
7600.00	1.80	266.60	7594.02	171.19	67.39	157.62	0.34	171.43	66.85
7700.00	2.19	270.00	7693.96	168.03	67.30	154.15	0.41	168.20	66.42
7800.00	2.56	270.77	7793.88	164.32	67.33	150.00	0.37	164.42	65.83
7900.00	2.74	255.83	7893.77	159.99	66.77	145.45	0.71	160.05	65.34
8000.00	2.56	250.69	7993.67	155.44	65.45	141.03	0.30	155.47	65.10
8100.00	1.07	237.00	8093.61	152.29	64.20	138.14	1.54	152.33	65.07
8200.00	1.03	239.29	8193.60	150.47	63.23	136.58	0.06	150.51	65.16
8300.00	0.83	223.44	8293.58	148.89	62.25	135.31	0.32	148.94	65.30
8400.00	0.65	228.91	8393.57	147.67	61.35	134.38	0.19	147.72	65.46
8500.00	0.35	224.52	8493.57	146.83	60.76	133.74	0.30	146.90	65.57
8600.00	0.43	199.46	8593.57	146.27	60.19	133.40	0.19	146.35	65.72
8700.00	0.90	246.53	8693.56	145.22	59.52	132.56	0.68	145.31	65.82
8800.00	0.53	205.34	8793.55	144.07	58.79	131.64	0.61	144.17	65.93
8900.00	0.34	222.06	8893.55	143.44	58.15	131.24	0.23	143.55	66.10
9000.00	0.72	268.94	8993.55	142.59	57.92	130.42	0.55	142.70	66.05
9100.00	0.84	279.66	9093.54	141.43	58.03	129.06	0.19	141.51	65.79
9200.00	0.72	275.81	9193.53	140.30	58.22	127.72	0.13	140.36	65.49
9300.00	0.88	253.22	9293.52	139.01	58.06	126.36	0.35	139.06	65.32
9400.00	1.06	255.19	9393.51	137.35	57.60	124.73	0.18	137.39	65.21
9500.00	1.16	255.79	9493.49	135.45	57.12	122.85	0.10	135.48	65.07
9600.00	0.52	233.49	9593.48	134.01	56.60	121.51	0.71	134.04	65.02
9700.00	0.52	268.26	9693.47	133.15	56.31	120.69	0.31	133.18	64.99
9800.00	0.48	303.29	9793.47	132.53	56.53	119.88	0.30	132.54	64.75
9900.00	1.21	332.97	9893.46	132.30	57.70	119.05	0.83	132.30	64.14
10000.00	0.50	182.02	9993.45	132.08	58.21	118.56	1.66	132.08	63.85



Scientific
Drilling

Field: Greenwood
Site: Eddy County, NM
Well: Wildcap State #3H
Wellpath: VH - Job #32K0308189
Survey: 03/23/08

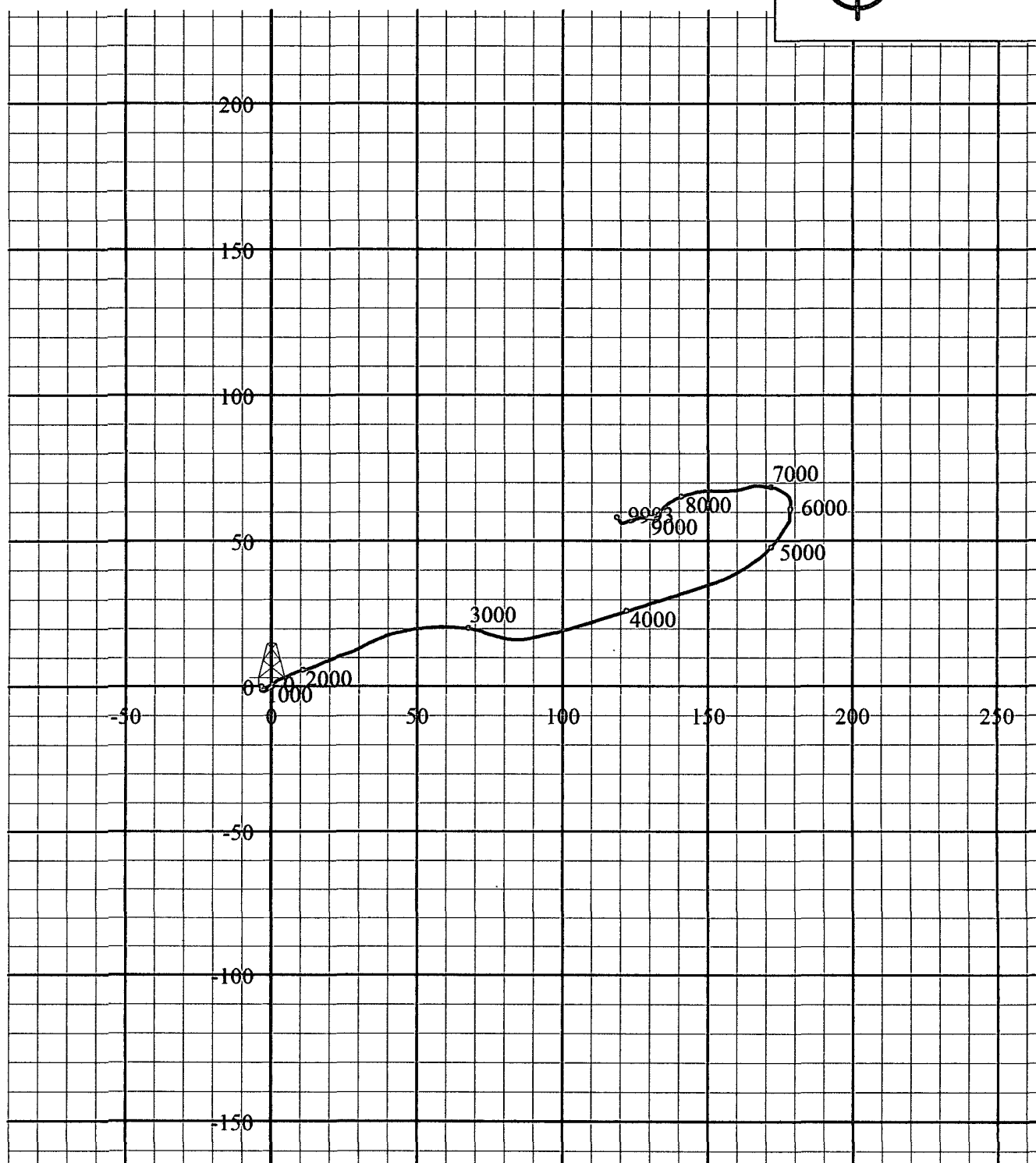
G/T/M



Azimuths to Grid North
True North: 0.00°
Magnetic North: 0.00°

Magnetic Field
Strength: 0nT
Dip Angle: 0.00°
Date: 04/16/2008
Model: igrf2000

South(-)/North(+) [50ft/in]



West(-)/East(+) [50ft/in]



DIRECTIONAL SURVEY REPORT

MARBOB ENERGY

WILDCAP STATE #3H

LEA COUNTY, NEW MEXICO

PREPARED BY: CODY MEBANE

Pathfinder Energy Services, Inc.
6213 W. County Road 112 • Midland, TX • 79706
(432)681-6000

DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) CHRIS CARSON
B) JOHN PIKE
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 02/15/08 TO 02/17/08
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: LEA COUNTY, NM
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:

MARBOB ENERGY CORPORATION.
WILDCAP STATE #3H
LEA COUNTY, NM
RIG: PATRIOT 6
9. SURVEY CERTIFIED FROM: 2802 TO 3522 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 38.91 FEET ON A BEARING OF 95.32 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 3570 FEET, ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.


CODY MEBANE
M/LWD SERVICE COORDINATOR

PATHFINDER

ENERGY SERVICES

DIRECTIONAL SURVEY INFORMATION

Prepared By: CODY MEBANE

Name of Client: MARBOB ENERGY

Attention: _____

☒ Directional Only Job OR ☐ Logging Job

Name(s) of Persons Performing Surveys:

A) CHRIS CARSON D) _____
B) JOHN PIKE E) _____
C) _____ F) _____

Positions of Said Persons: Surveyors / Field Engineers: Other _____

Date(s) Survey was Performed: From 15-Feb To 17-Feb

Type of Survey Performed: (Specify if other than MWD) _____

IDENTIFICATION OF WELL:

Client:	<u>Marbob Energy</u>	Rig Name:	<u>Patriot 6</u>
Well No.:	<u>Wildcap State #3H</u>	API No.:	<u>30-015-36032</u>
Location:	<u>Lea County</u>	Job No.:	<u>101007180 WT-WT</u>
State:	<u>NM</u>		

TEXAS RAILROAD COMMISSION INFORMATION:

Field: _____

Abstract No.: _____
Well Plat Survey Co.: _____

Surveys Performed From 2802 Feet TO 3522 Feet

MMS / ASCII / LAS Diskette Filename: _____

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOW THE WELL TO BE DISPLACED AT 38.91
FEET ON A BEARING OF 95.32 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT
A PROJECTED DEPTH OF 3570 FEET, ARE TRUE AND
CORRECT TO THE BEST OF MY KNOWLEDGE.

PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 02/15/2008
Date Completed: 02/16/2008

MARBOB ENERGY
WILDCAP STATE #3H
EDDY COUNTY COUNTY, NEW MEXICO
Rig: PATRIOT 6
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers: CHRIS CARSON

Survey Horiz. Reference: WELLHEAD
Ref Coordinates: LAT: 32.36.57.2760 N LON: 103.49.8.4144 W
GRID Reference: NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 658365.3031 Y: 588162.6507
North Aligned To: GRID NORTH
Total Magnetic Correction: 7.84° EAST TO GRID
Vertical Section Plane: 0.00
Survey Vert. Reference: 12.00' Rotary Table To Ground
Altitude: 3492.00' Ground To MSL

Measured Depth	3570.00	(feet)
Inclination	1.76	(deg)
Azimuth	90.46	(deg)
True Vertical Depth	3569.01	(feet)
Vertical Section	-3.61	(feet)
Survey X cord	658404.03	(feet)
Survey Y cord	588159.17	(feet)
Survey Lat	32.61589992 N	(deg)
Survey Lon	103.81887830 W	(deg)
Rectangular Corr. N/S	3.61 S	(feet)
Rectangular Corr. E/W	38.75 E	(feet)
Closure Distance	38.91	(feet)
Direction of Closure	95.32	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

MARBOB ENERGY
WILDCAP STATE #3H
EDDY COUNTY COUNTY, NEW MEXICO
Rig: PATRIOT 6
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers: CHRIS CARSON

Survey Horiz. Reference: WELLHEAD
Ref Coordinates: LAT: 32.36.57.2760 N LON: 103.49.8.4144 W
Reference: NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 658365.3031 Y: 588162.6507
North Aligned To: GRID NORTH
Total Magnetic Correction: 7.84° EAST TO GRID
Vertical Section Plane: 0.00
Survey Vert. Reference: 12.00' Rotary Table To Ground
Altitude: 3492.00' Ground To MSL

Survey Calculations by RX4 using Minimum Curvature

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)	DLS (dg/100ft)	
ASSUMING STRAIGHT HOLE @ 2698' MD.										
2698.00	0.00	0.00	2698.00	0.00	0.00	0.00	0.00	0.00@ 0.00	0.00	
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.										
2802.00	3.78	82.46	2801.92	104.00	0.45	0.45 N	3.40 E	3.43@ 82.46	3.63	
2866.00	3.43	85.10	2865.80	64.00	0.89	0.89 N	7.40 E	7.45@ 83.14	0.61	
2929.00	3.61	89.14	2928.68	63.00	1.08	1.08 N	11.26 E	11.31@ 84.52	0.49	
2993.00	3.61	91.16	2992.55	64.00	1.07	1.07 N	15.29 E	15.33@ 85.99	0.20	
3024.00	3.78	93.53	3023.49	31.00	0.99	0.99 N	17.28 E	17.31@ 86.73	0.74	
3056.00	3.87	97.93	3055.42	32.00	0.77	0.77 N	19.41 E	19.42@ 87.72	0.96	
3087.00	3.25	106.10	3086.36	31.00	0.39	0.39 N	21.29 E	21.29@ 88.96	2.58	
3118.00	2.46	111.99	3117.32	31.00	-0.11	0.11 S	22.75 E	22.75@ 90.27	2.72	
3149.00	1.85	113.40	3148.30	31.00	-0.55	0.55 S	23.82 E	23.83@ 91.33	1.98	
3180.00	1.93	111.73	3179.28	31.00	-0.95	0.95 S	24.77 E	24.79@ 92.19	0.31	
3211.00	1.93	111.20	3210.26	31.00	-1.33	1.33 S	25.74 E	25.77@ 92.96	0.06	
3242.00	2.02	110.23	3241.24	31.00	-1.71	1.71 S	26.74 E	26.79@ 93.65	0.31	
3273.00	2.20	109.27	3272.22	31.00	-2.09	2.09 S	27.81 E	27.89@ 94.30	0.59	
3304.00	2.29	106.80	3303.20	31.00	-2.47	2.47 S	28.97 E	29.07@ 94.87	0.43	
3335.00	2.37	102.06	3334.17	31.00	-2.78	2.78 S	30.19 E	30.32@ 95.26	0.67	
3367.00	2.37	99.07	3366.15	32.00	-3.02	3.02 S	31.49 E	31.63@ 95.48	0.39	
3398.00	2.29	97.58	3397.12	31.00	-3.21	3.21 S	32.74 E	32.89@ 95.59	0.32	
3429.00	2.46	98.19	3428.09	31.00	-3.38	3.38 S	34.01 E	34.18@ 95.68	0.55	
3460.00	2.20	97.66	3459.07	31.00	-3.56	3.56 S	35.26 E	35.43@ 95.76	0.84	
3491.00	1.76	87.47	3490.05	31.00	-3.61	3.61 S	36.32 E	36.50@ 95.68	1.81	
3522.00	1.76	90.46	3521.03	31.00	-3.60	3.60 S	37.27 E	37.45@ 95.51	0.30	

PathFinder Energy Services, Inc.

Survey Report

MARBOB ENERGY
WILDCAP STATE #3H
EDDY COUNTY COUNTY, NEW MEXICO
RIG:PATRIOT 6

Page 02/02

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
STRAIGHT LINE PROJECTION TO BIT @ 3570' MD.										
3570.00	1.76	90.46	3569.01	48.00	-3.61	3.61 S	38.75 E	38.91@	95.32	0.00



DIRECTIONAL SURVEY REPORT

MARBOB ENERGY

WILDCAP STATE #3H - PILOT

EDDY COUNTY, NEW MEXICO

PREPARED BY: CODY MEBANE

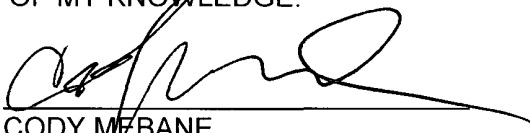
Pathfinder Energy Services, Inc.
6213 W. County Road 112 • Midland, TX • 79706
(432)681-6000

DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) KEITH WINDHAM
B) KYLE TABOR
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 3/14/08 TO 3/22/08
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: LEA COUNTY, NM
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:

MARBOB ENERGY CORPORATION.
WILDCAP STATE #3H - PILOT
EDDY COUNTY, NM
RIG: PATRIOT 6
9. SURVEY CERTIFIED FROM: 8016 TO 10104 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 23.33 FEET ON A BEARING OF 260.70 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 10151 FEET, ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.


CODY MEABANE
M/LWD SERVICE COORDINATOR

PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 03/15/2008
Date Completed: 03/22/2008

MARBOB ENERGY
WILDCAP STATE #3H PILOT
EDDY COUNTY, NEW MEXICO
Rig: PATRIOT #6
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers: S. ROBERTSON
K. TABOR

Survey Horiz. Reference: WELLHEAD
Ref Coordinates: LAT: 32.36.57.2775 N LON: 103.49.8.4144 W
GRID Reference: NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 658365.3000 Y: 588162.8000
North Aligned To: GRID NORTH
Total Magnetic Correction: 7.82° EAST TO GRID
Vertical Section Plane: 179.61
Survey Vert. Reference: 17.00' Kelly Bushing To Ground
Altitude: 3492.00' Ground To MSL

Measured Depth	10151.00	(feet)
Inclination	0.79	(deg)
Azimuth	176.22	(deg)
True Vertical Depth	10150.79	(feet)
Vertical Section	3.61	(feet)
Survey X cord	658342.27	(feet)
Survey Y cord	588159.03	(feet)
Survey Lat	32.61590035 N	(deg)
Survey Lon	103.81907885 W	(deg)
Rectangular Corr. N/S	3.77 S	(feet)
Rectangular Corr. E/W	23.03 W	(feet)
Closure Distance	23.33	(feet)
Direction of Closure	260.70	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

MARBOB ENERGY
WILDCAP STATE #3H PILOT
EDDY COUNTY, NEW MEXICO
Rig: PATRIOT #6
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers: S.ROBERTSON
K.TABOR

Page 01/01
Tie-in Date: 03/15/2008
Date Completed: 03/22/2008

Survey Horiz. Reference: WELLHEAD
Ref Coordinates: LAT: 32.36.57.2775 N LON: 103.49.8.4144 W
Reference: NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 658365.3000 Y: 588162.8000
North Aligned To: GRID NORTH
Total Magnetic Correction: 7.82° EAST TO GRID
Vertical Section Plane: 179.61
Survey Vert. Reference: 17.00' Kelly Bushing To Ground
Altitude: 3492.00' Ground To MSL

Survey Calculations by PathCalc v1.97 using Minimum Curvature

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)	DLS (dg/100ft)	
NO TIE-IN PROVIDED, TIE-IN ASSUMING VERTICAL @ 8016'MD.										
8016.00	0.00	0.00	8016.00	0.00	0.00	0.00	0.00	0.00@ 0.00	0.00	
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.										
8079.00	1.32	243.81	8078.99	63.00	0.32	0.32 S	0.65 W	0.73@ 243.81	2.10	
8133.00	0.97	242.49	8132.98	54.00	0.79	0.81 S	1.61 W	1.80@ 243.48	0.65	
8260.00	1.06	236.60	8259.96	127.00	1.92	1.95 S	3.55 W	4.05@ 241.22	0.11	
8385.00	0.79	238.18	8384.95	125.00	3.00	3.04 S	5.25 W	6.06@ 239.91	0.22	
8511.00	0.53	237.30	8510.94	126.00	3.77	3.81 S	6.47 W	7.51@ 239.51	0.21	
8638.00	0.26	204.87	8637.94	127.00	4.34	4.39 S	7.09 W	8.34@ 238.23	0.27	
8764.00	1.23	270.44	8763.92	126.00	4.58	4.64 S	8.56 W	9.74@ 241.55	0.91	
8827.00	0.35	222.54	8826.92	63.00	4.71	4.78 S	9.37 W	10.52@ 242.98	1.63	
8954.00	0.44	224.21	8953.92	127.00	5.34	5.41 S	9.97 W	11.35@ 241.51	0.07	
9078.00	1.06	282.57	9077.91	124.00	5.43	5.50 S	11.42 W	12.68@ 244.27	0.73	
9140.00	0.88	281.34	9139.90	62.00	5.20	5.29 S	12.45 W	13.53@ 247.00	0.29	
9327.00	0.97	269.12	9326.87	187.00	4.92	5.03 S	15.44 W	16.24@ 251.96	0.12	
9390.00	0.79	262.97	9389.87	63.00	4.98	5.09 S	16.40 W	17.18@ 252.77	0.32	
9514.00	1.32	275.54	9513.84	124.00	4.93	5.06 S	18.67 W	19.35@ 254.85	0.46	
9577.00	0.53	255.06	9576.84	63.00	4.93	5.06 S	19.68 W	20.32@ 255.58	1.34	
9671.00	0.35	254.88	9670.83	94.00	5.11	5.25 S	20.38 W	21.04@ 255.56	0.19	
9794.00	0.62	301.64	9793.83	123.00	4.85	5.00 S	21.30 W	21.88@ 256.80	0.37	
9920.00	1.32	339.61	9919.81	126.00	3.13	3.28 S	22.39 W	22.63@ 261.67	0.73	
10072.00	0.79	183.78	10071.80	152.00	2.53	2.68 S	23.07 W	23.23@ 263.37	1.36	
10104.00	0.79	176.22	10103.80	32.00	2.97	3.12 S	23.07 W	23.28@ 262.29	0.33	
STRAIGHT LINE PROJECTION TO BIT @ 10151' MD.										
10151.00	0.79	176.22	10150.79	47.00	3.61	3.77 S	23.03 W	23.33@ 260.70	0.00	



DIRECTIONAL SURVEY REPORT

MARBOB ENERGY

WILDCAP STATE #3H – ST 01

EDDY COUNTY, NEW MEXICO

PREPARED BY: CODY MEBANE

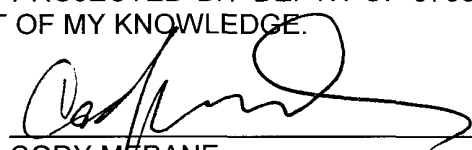
Pathfinder Energy Services, Inc.
6213 W. County Road 112 • Midland, TX • 79706
(432)681-6000

DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) S.ROBERTSON
B) KYLE TABOR
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 3/22/08 TO 3/28/08
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: EDDY COUNTY, NM
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:

MARBOB ENERGY CORPORATION.
WILDCAP STATE #3H – ST01
EDDY COUNTY, NM
RIG: PATRIOT 6
9. SURVEY CERTIFIED FROM: 8809 TO 9714 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 609.31 FEET ON A BEARING OF 168.74 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 9758 FEET, ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.


CODY MEANE
M/LWD SERVICE COORDINATOR

PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 03/25/2008
Date Completed: 03/28/2008

MARBOB ENERGY
WILDCAP ST #3H ST01
EDDY COUNTY, NEW MEXICO
Rig: PATRIOT 6
PathFinder Office Supervisor: CODY MEBANE
PathFinder Field Engineers: S. ROBERTSON
K. TABOR

Survey Horiz. Reference: WELLHEAD
Ref Coordinates: LAT: 32.36.57.2760 N LON: 103.49.8.4144 W
GRID Reference: NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 658365.3031 Y: 588162.6507
North Aligned To: GRID NORTH
Total Magnetic Correction: 7.82° EAST TO GRID
Vertical Section Plane: 179.61
Survey Vert. Reference: 17.00' Kelly Bushing To Ground
Altitude: 3492.00' Ground To MSL

Measured Depth	9758.00	(feet)
Inclination	89.25	(deg)
Azimuth	181.74	(deg)
True Vertical Depth	9315.60	(feet)
Vertical Section	598.36	(feet)
Survey X cord	658484.33	(feet)
Survey Y cord	587565.08	(feet)
Survey Lat	32.61426588 N	(deg)
Survey Lon	103.81862685 W	(deg)
Rectangular Corr. N/S	597.57 S	(feet)
Rectangular Corr. E/W	119.02 E	(feet)
Closure Distance	609.31	(feet)
Direction of Closure	168.74	(deg)
Dogleg Severity	0.01	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

Page 01/02
Tie-in Date: 03/25/2008
Date Completed: 03/28/2008

MARBOB ENERGY
WILDCAP ST #3H ST01
EDDY COUNTY, NEW MEXICO
Rig:PATRIOT 6
PathFinder Office Supervisor: CODY MEBANE
PathFinder Field Engineers: S.ROBERTSON
K.TABOR

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.36.57.2760 N LON:103.49.8.4144 W
Reference:NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 658365.3031 Y: 588162.6507
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.82° EAST TO GRID
Vertical Section Plane: 179.61
Survey Vert. Reference: 17.00' Kelly Bushing To Ground
Altitude:3492.00' Ground To MSL

Survey Calculations by PathCalc v1.97 using Minimum Curvature

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
TIE INTO SCIENTIFIC DRILLING AT 8800' MD.										
8800.00	0.53	205.06	8793.54	0.00	-58.53	59.43 N	131.35 E	144.17@	65.66	0.61
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.										
8809.00	0.97	196.61	8802.54	9.00	-58.42	59.32 N	131.31 E	144.09@	65.69	5.03
8840.00	2.20	192.87	8833.53	31.00	-57.59	58.49 N	131.10 E	143.56@	65.96	3.98
8871.00	4.84	184.77	8864.47	31.00	-55.71	56.60 N	130.86 E	142.58@	66.61	8.64
8902.00	8.53	183.22	8895.25	31.00	-52.11	53.00 N	130.62 E	140.97@	67.91	11.92
8933.00	12.40	184.98	8925.73	31.00	-46.50	47.39 N	130.21 E	138.56@	70.00	12.53
8965.00	16.62	183.45	8956.70	32.00	-38.51	39.40 N	129.63 E	135.49@	73.10	13.24
8996.00	20.40	182.72	8986.09	31.00	-28.69	29.57 N	129.11 E	132.45@	77.10	12.22
9027.00	24.36	180.50	9014.75	31.00	-16.90	17.78 N	128.80 E	130.02@	82.14	13.06
9058.00	28.31	178.40	9042.53	31.00	-3.15	4.03 N	128.95 E	129.01@	88.21	13.09
9089.00	32.62	177.93	9069.24	31.00	12.56	11.68 S	129.45 E	129.98@	95.15	13.92
9120.00	37.64	177.01	9094.59	31.00	30.38	29.49 S	130.25 E	133.55@	102.76	16.28
9152.00	41.33	177.24	9119.28	32.00	50.70	49.81 S	131.27 E	140.40@	110.78	11.54
9183.00	43.44	178.17	9142.18	31.00	71.59	70.69 S	132.10 E	149.83@	118.15	7.10
9214.00	45.20	179.01	9164.36	31.00	93.24	92.34 S	132.63 E	161.61@	124.85	5.98
9245.00	48.28	179.79	9185.60	31.00	115.81	114.91 S	132.86 E	175.66@	130.86	10.10
9276.00	51.88	178.92	9205.49	31.00	139.58	138.68 S	133.14 E	192.24@	136.17	11.81
9307.00	56.10	180.64	9223.71	31.00	164.65	163.75 S	133.22 E	211.10@	140.87	14.33
9338.00	60.76	181.18	9239.94	31.00	191.05	190.15 S	132.80 E	231.93@	145.07	15.11
9369.00	64.37	182.04	9254.22	31.00	218.54	217.65 S	132.02 E	254.56@	148.76	11.90
9400.00	66.48	181.99	9267.11	31.00	246.71	245.82 S	131.03 E	278.56@	151.94	6.81
9431.00	69.29	182.39	9278.78	31.00	275.39	274.52 S	129.93 E	303.71@	154.67	9.14

PathFinder Energy Services, Inc.

Survey Report

MARBOB ENERGY
WILDCAP ST #3H ST01
EDDY COUNTY, NEW MEXICO
RIG:PATRIOT 6

Page 02/02

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
9463.00	73.69	182.49	9288.93	32.00	305.69	304.83 S	128.64 E	330.86@	157.12	13.75
9494.00	79.23	182.69	9296.19	31.00	335.78	334.92 S	127.28 E	358.29@	159.19	17.88
9526.00	81.34	182.14	9301.59	32.00	367.28	366.43 S	125.95 E	387.48@	161.03	6.81
9557.00	81.07	181.74	9306.33	31.00	397.89	397.05 S	124.91 E	416.24@	162.54	1.54
9588.00	83.98	181.41	9310.36	31.00	428.61	427.77 S	124.07 E	445.40@	163.83	9.45
9619.00	87.32	181.86	9312.71	31.00	459.49	458.67 S	123.19 E	474.92@	164.97	10.87
9651.00	88.46	181.76	9313.89	32.00	491.45	490.63 S	122.18 E	505.61@	166.02	3.58
9682.00	89.08	181.56	9314.56	31.00	522.42	521.61 S	121.28 E	535.52@	166.91	2.10
9714.00	89.25	181.74	9315.02	32.00	554.40	553.59 S	120.36 E	566.52@	167.73	0.77
STRAIGHT LINE PROJECTION TO BIT @ 9758' MD.										
9758.00	89.25	181.74	9315.60	44.00	598.36	597.57 S	119.02 E	609.31@	168.74	0.01



DIRECTIONAL SURVEY REPORT

MARBOB ENERGY

WILDCAP STATE #3H – ST 02

EDDY COUNTY, NEW MEXICO

PREPARED BY: CODY MEBANE

Pathfinder Energy Services, Inc.
6213 W. County Road 112 • Midland, TX • 79706
(432)681-6000

DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) S.ROBERTSON
B) KYLE TABOR
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 3/30/08 TO 4/5/08
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: EDDY COUNTY, NM
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:

MARBOB ENERGY CORPORATION.
WILDCAP STATE #3H – ST02
EDDY COUNTY, NM
RIG: PATRIOT 6
9. SURVEY CERTIFIED FROM: 8800 TO 11101 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE
DISPLACED AT 2005.26 FEET ON A BEARING OF 175.25 DEGREES FROM THE
CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 11153 FEET,
ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.



CODY MEBANE
M/LWD SERVICE COORDINATOR

PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 03/30/2008
Date Completed: 04/05/2008

MARBOB ENERGY
WILDCAP STATE #3H ST02
EDDY COUNTY, NEW MEXICO
Rig: PATRIOT 6
PathFinder Office Supervisor: CODY MEBANE
PathFinder Field Engineers: S. ROBERTSON

Survey Horiz. Reference: WELLHEAD
Ref Coordinates: LAT: 32.36.57.2760 N LON: 103.49.8.4144 W
GRID Reference: NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 658365.3031 Y: 588162.6507
North Aligned To: GRID NORTH
Total Magnetic Correction: 7.82° EAST TO GRID
Vertical Section Plane: 179.61
Survey Vert. Reference: 17.00' Rotary Bushing To Ground
Altitude: 3492.00' Ground To MSL

Measured Depth	11153.00	(feet)
Inclination	87.49	(deg)
Azimuth	174.69	(deg)
True Vertical Depth	9354.11	(feet)
Vertical Section	1999.45	(feet)
Survey X cord	658531.42	(feet)
Survey Y cord	586164.29	(feet)
Survey Lat	32.61041486 N	(deg)
Survey Lon	103.81849594 W	(deg)
Rectangular Corr. N/S	1998.36 S	(feet)
Rectangular Corr. E/W	166.12 E	(feet)
Closure Distance	2005.26	(feet)
Direction of Closure	175.25	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

MARBOB ENERGY
WILDCAP STATE #3H ST02
EDDY COUNTY, NEW MEXICO
Rig: PATRIOT 6
PathFinder Office Supervisor: CODY MEBANE
PathFinder Field Engineers: S.ROBERTSON

Page 01/02
Tie-in Date: 03/30/2008
Date Completed: 04/05/2008

Survey Horiz. Reference: WELLHEAD
Ref Coordinates: LAT: 32.36.57.2760 N LON: 103.49.8.4144 W
Reference: NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 658365.3031 Y: 588162.6507
North Aligned To: GRID NORTH
Total Magnetic Correction: 7.82° EAST TO GRID
Vertical Section Plane: 179.61
Survey Vert. Reference: 17.00' Rotary Bushing To Ground
Altitude: 3492.00' Ground To MSL

Survey Calculations by PathCalc v1.97 using Minimum Curvature

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
TIED INTO SCIENTIFIC GYRO SURVEY.										
8800.00	0.53	205.06	8793.54	0.00	-58.53	59.43 N	131.35 E	144.17@	65.66	0.61
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.										
8811.00	1.76	198.39	8804.54	11.00	-58.33	59.22 N	131.28 E	144.02@	65.72	11.23
8843.00	5.19	182.86	8836.47	32.00	-56.42	57.31 N	131.05 E	143.03@	66.38	11.02
8874.00	9.15	178.79	8867.23	31.00	-52.55	53.44 N	131.03 E	141.51@	67.81	12.87
8905.00	12.93	178.28	8897.65	31.00	-46.62	47.51 N	131.19 E	139.52@	70.09	12.20
8936.00	16.44	179.47	8927.63	31.00	-38.76	39.66 N	131.33 E	137.19@	73.20	11.36
8967.00	20.75	181.24	8957.00	31.00	-28.88	29.77 N	131.25 E	134.59@	77.22	14.02
8998.00	25.06	181.96	8985.55	31.00	-16.83	17.72 N	130.91 E	132.10@	82.29	13.93
9030.00	27.44	182.26	9014.25	32.00	-2.69	3.57 N	130.39 E	130.44@	88.43	7.45
9062.00	28.23	181.71	9042.55	32.00	12.24	11.36 S	129.87 E	130.37@	95.00	2.60
9093.00	29.99	180.62	9069.63	31.00	27.32	26.43 S	129.57 E	132.24@	101.53	5.93
9125.00	33.24	181.07	9096.88	32.00	44.08	43.21 S	129.32 E	136.34@	108.47	10.18
9157.00	37.90	182.55	9122.90	32.00	62.68	61.80 S	128.72 E	142.78@	115.65	14.81
9188.00	42.38	183.46	9146.59	31.00	82.62	81.75 S	127.66 E	151.59@	122.64	14.57
9220.00	46.69	184.20	9169.40	32.00	105.00	104.14 S	126.16 E	163.59@	129.54	13.57
9251.00	50.21	184.97	9189.96	31.00	128.11	127.26 S	124.30 E	177.89@	135.68	11.51
9282.00	53.55	184.56	9209.09	31.00	152.39	151.56 S	122.27 E	194.74@	141.10	10.82
9314.00	57.16	183.71	9227.28	32.00	178.63	177.82 S	120.38 E	214.73@	145.90	11.49
9346.00	61.38	183.54	9243.63	32.00	206.06	205.26 S	118.64 E	237.08@	149.97	13.20
9377.00	66.21	184.62	9257.31	31.00	233.78	233.00 S	116.66 E	260.57@	153.40	15.89
9409.00	71.58	185.81	9268.83	32.00	263.48	262.71 S	113.94 E	286.36@	156.55	17.14
9441.00	75.53	185.84	9277.89	32.00	293.99	293.24 S	110.83 E	313.48@	159.30	12.34

PathFinder Energy Services, Inc.

Survey Report

MARBOB ENERGY
WILDCAP STATE #3H ST02
EDDY COUNTY, NEW MEXICO
RIG:PATRIOT 6

Page 02/02

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
9472.00	77.21	185.35	9285.20	31.00	323.95	323.22 S	107.89 E	340.75@	161.54	5.63
9503.00	80.99	184.90	9291.06	31.00	354.24	353.54 S	105.17 E	368.85@	163.43	12.28
9535.00	83.98	184.53	9295.24	32.00	385.84	385.15 S	102.56 E	398.57@	165.09	9.41
9566.00	85.21	183.75	9298.16	31.00	416.60	415.93 S	100.34 E	427.86@	166.44	4.69
9597.00	88.11	183.86	9299.97	31.00	447.47	446.81 S	98.28 E	457.49@	167.59	9.36
9629.00	89.08	183.82	9300.75	32.00	479.37	478.72 S	96.14 E	488.28@	168.64	3.03
9660.00	90.92	183.46	9300.75	31.00	510.29	509.66 S	94.17 E	518.29@	169.53	6.05
9691.00	91.28	183.13	9300.16	31.00	541.22	540.60 S	92.39 E	548.44@	170.30	1.58
9785.00	89.25	181.22	9299.72	94.00	635.12	634.53 S	88.82 E	640.71@	172.03	2.97
9878.00	87.76	180.67	9302.15	93.00	728.06	727.48 S	87.29 E	732.70@	173.16	1.71
9973.00	87.32	179.96	9306.23	95.00	822.96	822.39 S	86.77 E	826.95@	173.98	0.88
10068.00	87.93	178.76	9310.16	95.00	917.88	917.30 S	87.83 E	921.49@	174.53	1.42
10150.00	87.67	178.38	9313.31	82.00	999.80	999.21 S	89.87 E	1003.25@	174.86	0.56
10245.00	87.41	176.68	9317.39	95.00	1094.65	1094.03 S	93.96 E	1098.06@	175.09	1.81
10340.00	87.32	174.90	9321.76	95.00	1189.33	1188.67 S	100.93 E	1192.95@	175.15	1.87
10434.00	87.85	174.90	9325.72	94.00	1282.93	1282.22 S	109.28 E	1286.87@	175.13	0.56
10528.00	88.11	174.62	9329.03	94.00	1376.54	1375.77 S	117.86 E	1380.81@	175.10	0.41
10623.00	87.49	175.68	9332.68	95.00	1471.18	1470.35 S	125.89 E	1475.73@	175.11	1.29
10719.00	87.85	176.13	9336.58	96.00	1566.90	1566.03 S	132.74 E	1571.65@	175.16	0.60
10815.00	87.49	176.35	9340.48	96.00	1662.65	1661.74 S	139.03 E	1667.55@	175.22	0.44
10909.00	88.11	175.86	9344.09	94.00	1756.41	1755.46 S	145.41 E	1761.47@	175.26	0.84
11004.00	87.58	175.22	9347.66	95.00	1851.10	1850.10 S	152.79 E	1856.40@	175.28	0.87
11101.00	87.49	174.69	9351.84	97.00	1947.69	1946.64 S	161.31 E	1953.31@	175.26	0.55
STRAIGHT LINE PROJECTION TO BIT DEPTH @ 11153'MD.										
11153.00	87.49	174.69	9354.11	52.00	1999.45	1998.36 S	166.12 E	2005.26@	175.25	0.00

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

MARBOB ENERGY
WILDCAP STATE #3H
EDDY COUNTY, NEW MEXICO
Rig: PATRIOT 6

Thu Mar 06 16:25:45 2008

Coordinates

Latitude: 32.615910 N (32 deg. 36 min. 57.2775 sec.)
Longitude: 103.819004 W (-103 deg. 49 min. 8.4144 sec.)
Elevation: 3492.00 feet.
Calculation Date: Feb/14/2008

Magnetic Calculations

Model: IGRF2005
Dip Angle: 60.6017 degrees
Total Magnetic Field: 0.49182 gauss
Magnetic Declination: 8.116548 degrees
Horizontal Intensity: 0.241425 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 8.116548 Degr.

Transverse Mercator Grid Calculations NAD27

Grid System: Transverse Mercator: new mexico east
Ellipsoid: Clarke 1866
X: 658365.3000 feet
Y: 588162.8000 feet
True to Grid: (convergence) -0.277231 degrees
Magnetic to Grid: 7.839316 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.839316 Degr.

Marbob

Wildcap State #3H

Wildcap State #3H

Wildcap State #3H

Original Hole

Survey: Gyro Survey

Pathfinder Standard X & Y Report

10 April, 2008

WHS

Pathfinder Standard X & Y Report

Company: Marbob
Project: Wildcap State #3H
Site: Wildcap State #3H
Well: Wildcap State #3H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Wildcap State #3H
TVD Reference: EST:RKB @ 3492.00ft
MD Reference: EST:RKB @ 3492.00ft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.16 Single User Db

Project: Wildcap State #3H

Map System: US State Plane 1927 (Exact solution)
Geo Datum: NAD 1927 (NADCON CONUS)
Map Zone: New Mexico East 3001

System Datum: Mean Sea Level

Site: Wildcap State #3H

Site Position:	Northing:	588,162.800 ft	Latitude:	32° 36' 57.277 N
From: Map	Easting:	658,365.300 ft	Longitude:	103° 49' 8.414 W
Position Uncertainty: 0.00 ft	Slot Radius:	"	Grid Convergence:	0.28 °

Well: Wildcap State #3H

Well Position	+N/-S	0.00 ft	Northing:	588,162.800 ft	Latitude:	32° 36' 57.277 N
	+E/-W	0.00 ft	Easting:	658,365.300 ft	Longitude:	103° 49' 8.414 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	3,492.00 ft

Wellbore: Original Hole

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	3/24/2008	8.10	60.60	49,171

Design: Original Hole

Audit Notes:

Version: 10 **Phase:** ACTUAL **Tie On Depth:** 0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	179.61

WHS

Pathfinder Standard X & Y Report

Company: Marbob
Project: Wildcap State #3H
Site: Wildcap State #3H
Well: Wildcap State #3H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Wildcap State #3H
TVD Reference: EST RKB @ 3492.00ft
MD Reference: EST RKB @ 3492.00ft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.16 Single User Db

Survey Program		Date 4/10/2008			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
100.00	8,800.00	Gyro Survey (Original Hole)	CB-GYRO-MS	Camera based gyro multishot	
8,809.00	9,714.00	MWD (Original Hole)	MWD	MWD - Standard	

Survey										
MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	TFace (°)	
0.00	0.00	0.00	0.00	-3,492.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.27	235.20	100.00	-3,392.00	-0.13	-0.19	0.13	0.27	235.20	
200.00	0.51	237.31	200.00	-3,292.00	-0.51	-0.76	0.50	0.24	4.48	
300.00	0.50	236.29	299.99	-3,192.01	-0.99	-1.50	0.98	0.01	-138.55	
400.00	0.49	255.40	399.99	-3,092.01	-1.34	-2.28	1.33	0.16	102.99	
500.00	0.18	239.41	499.99	-2,992.01	-1.53	-2.82	1.51	0.32	-171.11	
600.00	0.36	268.28	599.99	-2,892.01	-1.62	-3.27	1.60	0.22	52.11	
700.00	0.42	334.04	699.98	-2,792.02	-1.30	-3.75	1.27	0.43	116.09	
800.00	0.47	38.92	799.98	-2,692.02	-0.65	-3.65	0.63	0.48	117.39	
900.00	0.31	278.92	899.98	-2,592.02	-0.29	-3.66	0.26	0.68	-156.75	
1,000.00	0.57	64.49	999.98	-2,492.02	-0.03	-3.48	0.01	0.84	157.55	
1,100.00	0.40	161.45	1,099.98	-2,392.02	-0.15	-2.92	0.13	0.73	147.30	
1,200.00	0.46	54.75	1,199.98	-2,292.02	-0.25	-2.48	0.23	0.69	-140.38	
1,300.00	0.21	127.49	1,299.97	-2,192.03	-0.13	-2.01	0.12	0.45	153.24	
1,400.00	0.57	74.97	1,399.97	-2,092.03	-0.11	-1.38	0.10	0.47	-73.17	
1,500.00	0.98	45.75	1,499.96	-1,992.04	0.61	-0.29	-0.62	0.56	-59.19	
1,600.00	0.29	127.69	1,599.96	-1,892.04	1.06	0.52	-1.05	0.98	163.00	
1,700.00	1.21	41.59	1,699.95	-1,792.05	1.69	1.43	-1.68	1.22	-99.76	
1,800.00	1.74	71.97	1,799.92	-1,692.08	2.95	3.57	-2.93	0.93	71.69	
1,900.00	2.09	60.01	1,899.86	-1,592.14	4.33	6.59	-4.29	0.53	-54.87	
2,000.00	3.07	76.70	1,999.76	-1,492.24	5.86	10.78	-5.79	1.23	46.01	

WHS

Pathfinder Standard X & Y Report

Company: Marbob
Project: Wildcap State #3H
Site: Wildcap State #3H
Well: Wildcap State #3H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Wildcap State #3H
TVD Reference: EST RKB @ 3492.00ft
MD Reference: EST RKB @ 3492.00ft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.16 Single User Db

Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	TFace (°)
2,100.00	2.84	64.17	2,099.63	-1,392.37	7.56	15.61	-7.45	0.68	-115.78
2,200.00	3.50	67.74	2,199.48	-1,292.52	9.79	20.67	-9.65	0.69	18.44
2,300.00	3.12	72.02	2,299.31	-1,192.69	11.79	26.08	-11.61	0.45	149.09
2,400.00	4.00	59.50	2,399.12	-1,092.88	14.40	31.68	-14.18	1.17	-47.82
2,500.00	3.85	69.60	2,498.88	-993.12	17.34	37.83	-17.08	0.71	107.25
2,600.00	2.82	76.27	2,598.71	-893.29	19.09	43.37	-18.80	1.10	162.67
2,700.00	3.48	80.40	2,698.56	-793.44	20.18	48.75	-19.85	0.70	21.05
2,800.00	3.62	86.28	2,798.37	-693.63	20.89	54.89	-20.52	0.39	71.92
2,900.00	3.48	92.56	2,898.18	-593.82	20.96	61.07	-20.55	0.41	112.92
3,000.00	3.65	96.97	2,997.98	-494.02	20.44	67.26	-19.98	0.32	60.42
3,100.00	1.97	110.74	3,097.86	-394.14	19.45	72.03	-18.96	1.80	164.89
3,200.00	2.12	105.87	3,197.80	-294.20	18.33	75.42	-17.82	0.23	-51.65
3,300.00	2.23	104.40	3,297.73	-194.27	17.34	79.08	-16.80	0.12	-27.63
3,400.00	2.11	94.82	3,397.65	-94.35	16.70	82.80	-16.14	0.38	-113.05
3,500.00	1.75	81.93	3,497.60	5.60	16.76	86.15	-16.18	0.56	-135.99
3,600.00	2.90	77.10	3,597.51	105.51	17.54	90.12	-16.93	1.17	-12.09
3,700.00	4.00	77.04	3,697.33	205.33	18.89	95.99	-18.24	1.10	-0.22
3,800.00	5.00	73.51	3,797.02	305.02	20.91	103.57	-20.20	1.04	-17.25
3,900.00	5.45	71.87	3,896.61	404.61	23.62	112.26	-22.86	0.47	-19.18
4,000.00	5.52	72.44	3,996.15	504.15	26.55	121.36	-25.73	0.09	38.18
4,100.00	5.04	71.95	4,095.72	603.72	29.36	130.12	-28.48	0.48	-174.88
4,200.00	4.25	72.49	4,195.39	703.39	31.84	137.83	-30.90	0.79	177.10
4,300.00	3.72	70.49	4,295.15	803.15	34.04	144.42	-33.05	0.55	-166.30
4,400.00	3.36	72.37	4,394.96	902.96	36.01	150.27	-34.99	0.38	163.06
4,500.00	3.03	66.50	4,494.81	1,002.81	37.95	155.49	-36.89	0.46	-138.15
4,600.00	2.64	61.14	4,594.68	1,102.68	40.12	159.93	-39.03	0.47	-148.45
4,700.00	2.39	53.65	4,694.59	1,202.59	42.46	163.63	-41.35	0.41	-130.96

WHS

Pathfinder Standard X & Y Report

Company: Marbob
Project: Wildcap State #3H
Site: Wildcap State #3H
Well: Wildcap State #3H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Wildcap State #3H
TVD Reference: EST RKB @ 3492.00ft
MD Reference: EST RKB @ 3492.00ft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.16 Single User Db

Survey										
MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	TFace (°)	
4,800.00	1.98	56.65	4,794.51	1,302.51	44.65	166.75	-43.51	0.43	165.91	
4,900.00	1.69	48.88	4,894.46	1,402.46	46.57	169.30	-45.41	0.38	-143.21	
5,000.00	1.58	40.44	4,994.42	1,502.42	48.59	171.31	-47.42	0.26	-118.73	
5,100.00	1.50	36.25	5,094.39	1,602.39	50.69	172.98	-49.51	0.14	-127.47	
5,200.00	1.26	35.74	5,194.36	1,702.36	52.64	174.39	-51.45	0.24	-177.33	
5,300.00	1.32	30.28	5,294.33	1,802.33	54.53	175.61	-53.33	0.14	-66.73	
5,400.00	1.05	33.59	5,394.31	1,902.31	56.29	176.70	-55.08	0.28	167.42	
5,500.00	0.60	41.07	5,494.30	2,002.30	57.44	177.55	-56.23	0.46	170.26	
5,600.00	0.35	350.82	5,594.30	2,102.30	58.14	177.85	-56.93	0.46	-144.42	
5,700.00	0.45	10.66	5,694.30	2,202.30	58.83	177.87	-57.61	0.17	64.36	
5,800.00	0.52	2.41	5,794.29	2,302.29	59.67	177.96	-58.45	0.10	-49.11	
5,900.00	0.62	1.30	5,894.29	2,402.29	60.66	177.99	-59.45	0.10	-6.86	
6,000.00	0.63	4.53	5,994.28	2,502.28	61.75	178.05	-60.54	0.04	75.77	
6,100.00	0.56	5.36	6,094.28	2,602.28	62.78	178.14	-61.57	0.07	173.40	
6,200.00	0.50	1.21	6,194.27	2,702.27	63.71	178.19	-62.49	0.07	-149.45	
6,300.00	0.75	346.03	6,294.26	2,802.26	64.78	178.05	-63.56	0.30	-41.26	
6,400.00	0.61	341.84	6,394.26	2,902.26	65.92	177.72	-64.71	0.15	-162.53	
6,500.00	0.78	307.91	6,494.25	3,002.25	66.84	177.02	-65.64	0.44	-85.12	
6,600.00	0.68	301.87	6,594.24	3,102.24	67.57	175.98	-66.38	0.13	-145.41	
6,700.00	0.70	300.76	6,694.24	3,202.24	68.20	174.95	-67.01	0.02	-34.31	
6,800.00	0.62	290.95	6,794.23	3,302.23	68.71	173.92	-67.52	0.14	-130.14	
6,900.00	0.72	285.22	6,894.22	3,402.22	69.06	172.81	-67.89	0.12	-36.71	
7,000.00	0.85	278.47	6,994.21	3,502.21	69.34	171.47	-68.17	0.16	-38.83	
7,100.00	0.82	277.78	7,094.20	3,602.20	69.54	170.02	-68.39	0.03	-161.81	
7,200.00	1.15	275.64	7,194.19	3,702.19	69.74	168.32	-68.59	0.33	-7.43	
7,300.00	1.28	270.40	7,294.16	3,802.16	69.85	166.20	-68.71	0.17	-43.16	
7,400.00	1.66	251.52	7,394.13	3,902.13	69.40	163.71	-68.28	0.61	-61.57	

WHS

Pathfinder Standard X & Y Report

Company: Marbob
 Project: Wildcap State #3H
 Site: Wildcap State #3H
 Well: Wildcap State #3H
 Wellbore: Original Hole
 Design: Original Hole

Local Co-ordinate Reference: Well Wildcap State #3H
 TVD Reference: EST RKB @ 3492.00ft
 MD Reference: EST RKB @ 3492.00ft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 2003.16 Single User Db

Survey										
MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	TFace (°)	
7,500.00	2.03	258.99	7,494.08	4,002.08	68.60	160.60	-67.50	0.44	36.79	
7,600.00	1.80	266.32	7,594.02	4,102.02	68.16	157.29	-67.09	0.34	136.82	
7,700.00	2.19	269.72	7,693.96	4,201.96	68.05	153.82	-67.00	0.41	18.59	
7,800.00	2.56	270.49	7,793.88	4,301.88	68.06	149.67	-67.04	0.37	5.31	
7,900.00	2.74	255.55	7,893.77	4,401.77	67.48	145.12	-66.49	0.71	-82.94	
8,000.00	2.56	250.41	7,993.67	4,501.67	66.14	140.70	-65.18	0.30	-129.69	
8,100.00	1.07	236.72	8,093.61	4,601.61	64.87	137.82	-63.94	1.54	-170.54	
8,200.00	1.03	239.01	8,193.60	4,701.60	63.90	136.27	-62.97	0.06	134.77	
8,300.00	0.83	223.16	8,293.58	4,801.58	62.91	135.00	-61.99	0.32	-135.61	
8,400.00	0.65	228.63	8,393.57	4,901.57	62.01	134.08	-61.09	0.19	161.29	
8,500.00	0.35	224.24	8,493.57	5,001.57	61.41	133.44	-60.50	0.30	-174.91	
8,600.00	0.43	199.18	8,593.57	5,101.57	60.84	133.11	-59.93	0.19	-77.76	
8,700.00	0.90	246.25	8,693.56	5,201.56	60.17	132.26	-59.27	0.68	74.48	
8,800.00	0.53	205.06	8,793.55	5,301.55	59.43	131.35	-58.54	0.61	-145.14	
8,900.00	0.34	221.78	8,893.55	5,401.55	58.79	130.96	-57.90	0.23	154.42	
9,000.00	0.72	268.66	8,993.55	5,501.55	58.56	130.13	-57.67	0.55	73.85	
9,100.00	0.84	279.38	9,093.54	5,601.54	58.66	128.78	-57.78	0.19	56.01	
9,200.00	0.72	275.53	9,193.53	5,701.53	58.84	127.43	-57.97	0.13	-158.32	
9,300.00	0.88	252.94	9,293.52	5,801.52	58.68	126.07	-57.82	0.35	-74.70	
9,400.00	1.06	254.91	9,393.51	5,901.51	58.21	124.44	-57.36	0.18	11.48	
9,500.00	1.16	255.51	9,493.49	6,001.49	57.72	122.57	-56.88	0.10	6.93	
9,600.00	0.52	233.21	9,593.48	6,101.48	57.19	121.23	-56.36	0.71	-163.79	
9,700.00	0.52	267.98	9,693.47	6,201.47	56.90	120.41	-56.08	0.31	107.38	
9,800.00	0.48	303.01	9,793.47	6,301.47	57.12	119.61	-56.30	0.30	114.74	
9,900.00	1.21	332.69	9,893.46	6,401.46	58.28	118.77	-57.47	0.83	46.36	
10,000.00	0.50	181.74	9,993.45	6,501.45	58.78	118.27	-57.98	1.66	-171.61	

WHS

Pathfinder Standard X & Y Report

Company: Marbob
Project: Wildcap State #3H
Site: Wildcap State #3H
Well: Wildcap State #3H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Wildcap State #3H
TVD Reference: EST RKB @ 3492.00ft
MD Reference: EST RKB @ 3492.00ft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.16 Single User Db

Targets

Target Name	hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL		0.00	0.00	9,335.00	-1,969.50	13.40	586,193.300	658,378.700	32° 36' 37.788 N	103° 49' 8.369 W
- survey misses by 2031.05ft at 9352.76ft MD (9346.27 TVD, 58.43 N, 125.25 E) - Point										

Checked By: _____ Approved By: _____ Date: _____

KEEPER GYRO SURVEY

Directional Survey Report

[illegible]

Well Number	:	WILD CAP ST NO.3H
Well Location	:	EDDY COUNTY, NEW MEXICO
Job Number	:	32K0308189
Location Latitude	:	32.615
Survey Date	:	23-MAR-2008
S.D.C. Personnel	:	VICTOR MELENDEZ JR
Length Units	:	Feet
North Reference	:	TRUE North
Grid Correction	:	0.00 Degrees
Survey Depth Zero	:	RKB
Proposal Direction	:	
Calculation Method	:	Minimum Curvature

Remarks : The OUTRUN Survey will be called definitive

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0  S C I E N T I F I C      D R I L L I N G      C O N T R O L S      0

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Outrun Survey
for
MARBOB

Page 1

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Well No.: WILD CAP ST NO.3H      Date : 23-MAR-2008
Job No. : 32K0308189              TRUE Proposal : 0.00
Depth    T.V.D.    V.S.    Inc    Azimuth    Latitude    Departure    D-leg
( Feet ) ( Feet )   ( Feet ) Deg.    Deg.    ( Feet )   ( Feet ) /100
iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii
     0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
    100.00    100.00     -0.13     0.27    235.48     -0.13     -0.19     0.27
    200.00    200.00     -0.51     0.51    237.59     -0.51     -0.76     0.24
    300.00    299.99     -0.98     0.50    236.57     -0.98     -1.50     0.01
    400.00    399.99     -1.33     0.49    255.68     -1.33     -2.28     0.16
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WILD CAP ST NO.3H							
500.00	499.99	-1.52	0.18	239.69	-1.52	-2.83	0.32
600.00	599.99	-1.60	0.36	268.56	-1.60	-3.28	0.22
700.00	699.98	-1.28	0.42	334.32	-1.28	-3.75	0.43
800.00	799.98	-0.63	0.47	39.20	-0.63	-3.65	0.48
900.00	899.98	-0.27	0.31	279.20	-0.27	-3.66	0.68
1000.00	999.98	-0.02	0.57	64.77	-0.02	-3.48	0.84
1100.00	1099.98	-0.14	0.40	161.73	-0.14	-2.92	0.73
1200.00	1199.97	-0.24	0.46	55.03	-0.24	-2.48	0.69
1300.00	1299.97	-0.12	0.21	127.77	-0.12	-2.01	0.45
1400.00	1399.97	-0.10	0.57	75.25	-0.10	-1.38	0.47
1500.00	1499.96	0.62	0.98	46.03	0.62	-0.28	0.56
1600.00	1599.95	1.05	0.29	127.97	1.05	0.53	0.98
1700.00	1699.95	1.68	1.21	41.87	1.68	1.43	1.22
1800.00	1799.91	2.93	1.74	72.25	2.93	3.58	0.93
1900.00	1899.86	4.30	2.09	60.29	4.30	6.61	0.53
2000.00	1999.76	5.81	3.07	76.98	5.81	10.81	1.23
2100.00	2099.62	7.48	2.84	64.45	7.48	15.65	0.68
2200.00	2199.47	9.69	3.50	68.02	9.69	20.72	0.69
2300.00	2299.30	11.66	3.12	72.30	11.66	26.14	0.45
2400.00	2399.11	14.24	4.00	59.78	14.24	31.75	1.17
2500.00	2498.88	17.15	3.85	69.88	17.15	37.91	0.71
2600.00	2598.71	18.88	2.82	76.55	18.88	43.46	1.10
2700.00	2698.56	19.94	3.48	80.68	19.94	48.84	0.70
2800.00	2798.36	20.62	3.62	86.56	20.62	54.99	0.39
2900.00	2898.17	20.66	3.48	92.84	20.66	61.17	0.41
3000.00	2997.98	20.11	3.65	97.25	20.11	67.36	0.32
3100.00	3097.86	19.09	1.97	111.02	19.09	72.12	1.80
3200.00	3197.79	17.96	2.12	106.15	17.96	75.51	0.23
3300.00	3297.72	16.95	2.23	104.68	16.95	79.17	0.12
3400.00	3397.65	16.30	2.11	95.10	16.30	82.88	0.38
3500.00	3497.59	16.34	1.75	82.21	16.34	86.23	0.56
3600.00	3597.51	17.10	2.90	77.38	17.10	90.21	1.17
3700.00	3697.32	18.42	4.00	77.32	18.42	96.08	1.10
3800.00	3797.01	20.40	5.00	73.79	20.40	103.67	1.04
3900.00	3896.60	23.07	5.45	72.15	23.07	112.37	0.47
4000.00	3996.14	25.96	5.52	72.72	25.96	121.48	0.09
4100.00	4095.72	28.73	5.04	72.23	28.73	130.26	0.48
4200.00	4195.39	31.17	4.25	72.77	31.17	137.98	0.79
4300.00	4295.14	33.33	3.72	70.77	33.33	144.59	0.55
4400.00	4394.95	35.27	3.36	72.65	35.27	150.45	0.38
4500.00	4494.80	37.19	3.03	66.78	37.19	155.67	0.46
4600.00	4594.67	39.33	2.64	61.42	39.33	160.12	0.47
4700.00	4694.58	41.66	2.39	53.93	41.66	163.83	0.41
4800.00	4794.50	43.83	1.98	56.93	43.83	166.96	0.43
4900.00	4894.45	45.74	1.69	49.16	45.74	169.53	0.38
5000.00	4994.41	47.75	1.58	40.72	47.75	171.54	0.26
5100.00	5094.38	49.85	1.50	36.53	49.85	173.22	0.14
5200.00	5194.35	51.79	1.26	36.02	51.79	174.65	0.24
5300.00	5294.32	53.67	1.32	30.56	53.67	175.88	0.14
5400.00	5394.30	55.42	1.05	33.87	55.42	176.97	0.28
5500.00	5494.29	56.58	0.60	41.35	56.58	177.83	0.46
5600.00	5594.28	57.27	0.35	351.10	57.27	178.13	0.46
5700.00	5694.28	57.96	0.45	10.94	57.96	178.16	0.17

State of New Mexico
Energy, Minerals and Natural Resources

Oil Conservation Division

1220 S. St Francis Dr.

Santa Fe, NM 87505

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address MARBOB ENERGY CORP PO Box 227 Artesia, NM 88211		2. OGRID Number 14049
		3. API Number 30-015-36032
4. Property Code 36931	5. Property Name WILDCAP STATE	6. Well No. 003H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
J	36	19S	31E	J	2300	S	1650	E	EDDY

8. Pool Information

GREENWOOD;BONE SPRING	29290
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Additional Well Information

9. Work Type New Well	10. Well Type OIL	11. Cable/Rotary	12. Lease Type State	13. Ground Level Elevation 3492
14. Multiple N	15. Proposed Depth	16. Formation Bone Spring	17. Contractor	18. Spud Date 2/9/2008
Depth to Ground water 130		Distance from nearest fresh water well		Distance to nearest surface water
Pit: Liner: Synthetic ☐ miles thick Clay ☐ Pit Volume: bbls Drilling Method: Closed Loop System ☒ Fresh Water ☐ Brine ☐ Diesel/Oil-based ☐ Gas/Air ☐				

19. Proposed Casing and Cement Program

Type	Hole Size	Casing Type	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13 375	54.5	950	650	0
Int1	12.25	9 625	36	4000	1200	700
Prod	7.875	5.5	17	10200	700	4500

Casing/Cement Program: Additional Comments

We propose to drill 17 1/2 inch hole to 950 feet with fresh water run 13 3/8 54.5# J-55 csg and cement to surface. Drill 12 1/4 inch hole to 4000 feet with brine water run 9 5/8 inch 36 pound J-55 casing and cement with 1200 sk est TOC 700 ft. Drill 7 7/8 inch hole to 10200 feet log well then plug back to 8800 feet then drill a horizontal well to new bhl run 5 1/2 17 pound N80 cement with 700 sk est toc 3800 feet.

Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
DoubleRam	3000	3000	Cameron

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines ☐ a general permit ☐ or an (attached) alternative OCD-approved plan ☐ .		OIL CONSERVATION DIVISION	
Printed Name: Electronically filed by Diana Briggs		Approved By: Bryan Arant	
Title: Production Analyst		Title: Geologist	
Email Address: production@marbob.com		Approved Date: 1/10/2008 Expiration Date: 1/10/2009	
Date: 1/9/2008	Phone: 505-748-3303	Conditions of Approval Attached	

- **District I**
1625 N. French Dr., Hobbs, NM 88240
Phone (505) 393-6161 Fax (505) 393-0720

State of New Mexico
Energy, Minerals and Natural Resources

Form C-102
Permit 67229

District II
1301 W. Grand Ave., Artesia, NM 88210
Phone (505) 748-1283 Fax (505) 748-9720

Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone (505) 334-6178 Fax (505) 334-6170

District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3470 Fax (505) 476-3462

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-015-36032	2. Pool Code 29290	3. Pool Name GREENWOOD BONE SPRING
4. Property Code 36931	5. Property Name WILDCAP STATE	6. Well No. 003H
7. OGRID No. 14049	8. Operator Name MARBOB ENERGY CORP	9. Elevation 3492

10. Surface Location

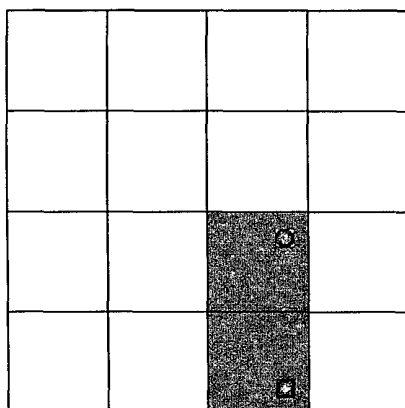
UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
J	36	19S	31E	J	2300	S	1650	E	EDDY

11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
O	36	19S	31E	O	330	S	1650	E	EDDY

12. Dedicated Acres 80.00	13. Joint or Infill	14. Consolidation Code	15. Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

E-Signed By: Diana Briggs
Title: Production Analyst
Date: 1/9/2008

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Surveyed By: Gary Eidson
Date of Survey: 12/29/2007
Certificate Number: 12641