

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

JAN 27 2009

FORM APPROVED
OMB NO 1004-0137
Expires July 31, 2010



WELL COMPLETION OR RECOMPLETION REPORT AND LOG

LEASE DESIGNATION AND SERIAL NO

NMNM113927

1a Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other b. Type of Completion ☒ New Well ☐ Workover ☐ Deepen ☐ Plug Back ☐ Diff Resvr. Other _____						6 INDIAN ALLOTTEE OR TRIBE NAME 7 UNIT AGREEMENT			
2 Name of Operator Marbob Energy Corporations						8 FARM OR LEASE NAME Noose Federal #4H			
3 Address P.O. Box 227 Artesia, NM 88211-0227				3a Phone No (include area code) 575-748-3303		9 API WELL NO 30-015-36537			
4 Location of Well (Report location clearly and in accordance with Federal requirements)* At surface 330' FNL & 485' FWL, Unit D (NWNW) At top prod Interval reported below 836' FNL & 441' FWL, Unit D (NWNW) At total depth 2304' FNL & 334' FWL, Unit E (SWNW)						10 FIELD NAME North Seven Rivers; Glorieta-Yeso 11. SEC T. R. M. OR BLOCK AND SURVEY OR AREA 35 T 19S R 25E 12 COUNTY OR PARISH Eddy 13. STATE NM			
14 Date Spudded 9/28/08		15 Date T.D. Reached 10/8/08		16. Date Completed 12/5/08 ☐ D & A ☒ Ready to Prod		17. ELEVATIONS (DF, RKB, RT, GR, etc.)* 3507' GR KB			
18. Total Depth MD 4422' TVD 2668'		19. Plug back T.D. MD 4406' TVD 2665'		20. Depth Bridge Plug Set. MD TVD					
21. Type Electric & other Logs Run (Submit a copy of each) None						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
12 1/4"	8 5/8" J55	24#	0	1010'		1358 sx		0	None
7 7/8"	5 1/2" J55	17#	0	4417'		575 sx		0	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 7/8"	2120'	N/A							
25 Producing Intervals					26 Perforation Record				
Formation		Top	Bottom	Perforated Interval		Size	No of Holes	Perf Status	
A) Yeso		2950'	4400'	2950-4400'			35	Open	
B)									
C)									
D)									
27. Acid, Fracture Treatment, Cement Squeeze, Etc									
Depth Interval			Amount and Type of Material						
2950-4400'			Acid w/1500 gal 15% NEFE acid; Frac w/826677 gal fluid & 435363# sand						
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
12/6/08	12/11/08	24	→	6	6	403	N/A		Pumping
Choke Size	Tbg Press Flwg SI	Csg Press	24 Hr Rate	Oil Bbl	Gas MCF	Water Bbl	Gas Oil Ratio	Well Status	
N/A	N/A		→						
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
			→						PETROLEUM GEOLOGIST
Choke Size	Tbg Press Flwg SI	Csg Press	24 Hr Rate	Oil Bbl	Gas MCF	Water Bbl	Gas Oil Ratio	Well Status	
			→						Accepted for record - NMOCD

* 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 Measured Depth
San Andres Yeso	870' 2475'	2429' 4422'		San Andres Glorieta Yeso	870' 2430' 2475'
					TD 4422'

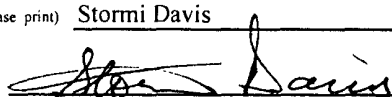
32 Additional remarks (include plugging procedure).

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

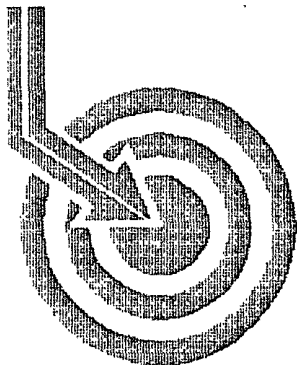
- ☐ Electrical/ Mechanical Logs (1 full set required)
 ☐ Geologic Report
 ☐ DST Report
 ☒ Directional Survey
- ☐ Sundry Notice for plugging and cement verification
 ☐ Core Analysis
 ☐ Other

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) Stormi Davis Title Production Assistant

Signature  Date 12/23/08

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



Scientific Drilling

MARBOB ENERGY

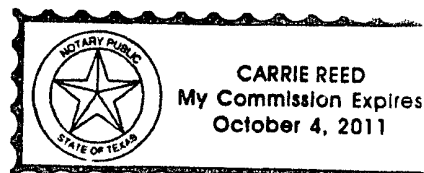
Field: North Seven Rivers Hill
Site: Eddy County, NM
Well: Moose Federal #4H
Wellpath: VH - Job #32K1008780
Survey: 10/04/08

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

.....*L. Wharton*.....Company Representative

Notorized this date me of October, 2008.

Carrie Reed
Notary Signature
County of Midland
State of Texas





Scientific Drilling International Survey Report

Company: MARBOB ENERGY	Date: 10/28/2008	Time: 16:12:10	Page: 1
Field: North Seven Rivers Hill	Co-ordinate(NE) Reference:	Site: Eddy County, NM, Grid North	
Site: Eddy County, NM	Vertical (TVD) Reference:	SITE 0.0	
Well: Noose Federal #4H	Section (VS) Reference:	Well (0.00N,0.00E,184.48Azi)	
Wellpath: VH - Job #32K1008780	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 10/04/08 KSRG 0'-1910'	Start Date: 10/04/2008
Company: Scientific Drilling Internatio	Engineer: Madrid w/GeoGyro
Tool: Keeper, Keeper Gyro	Tied-to: From Surface

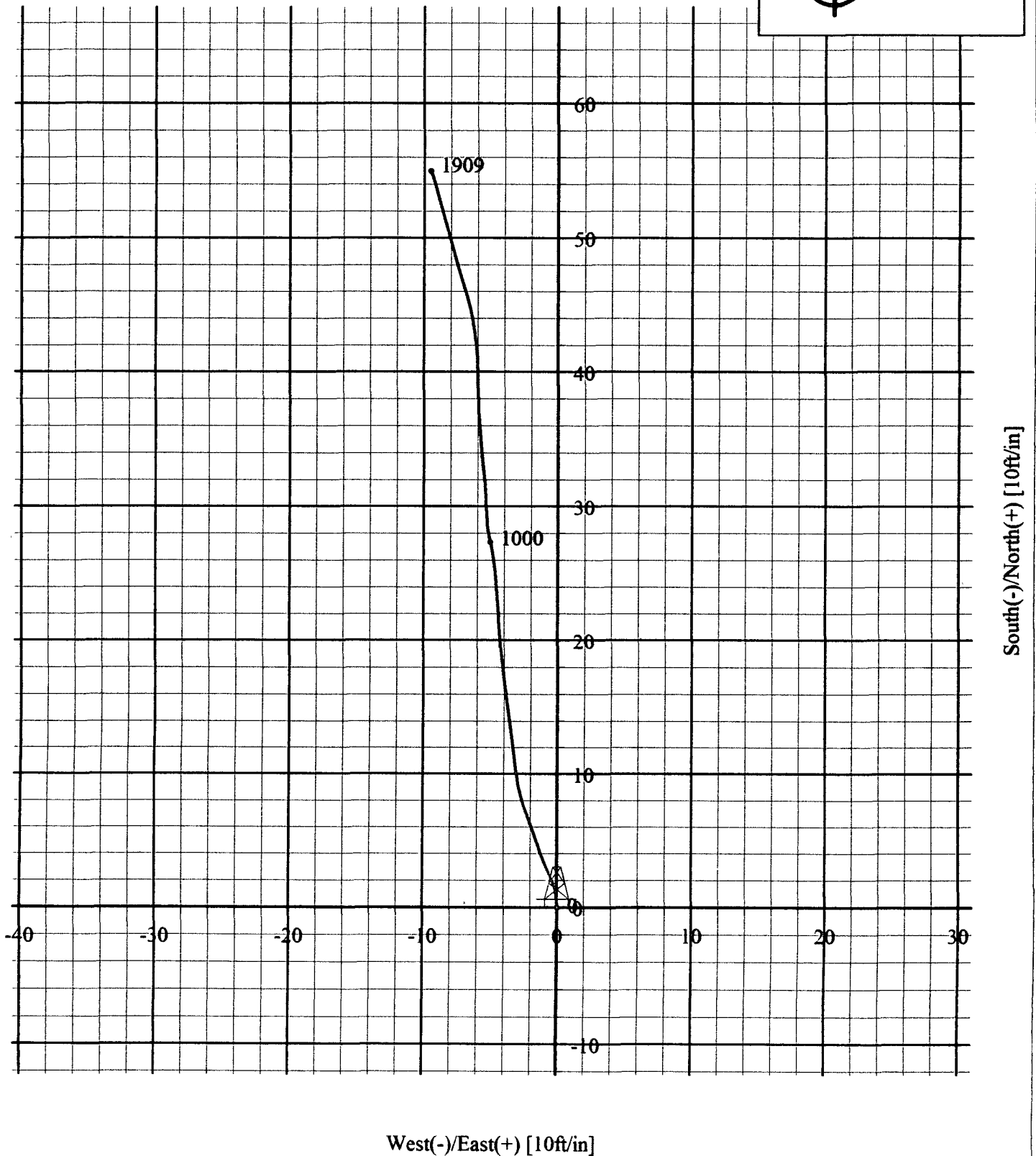
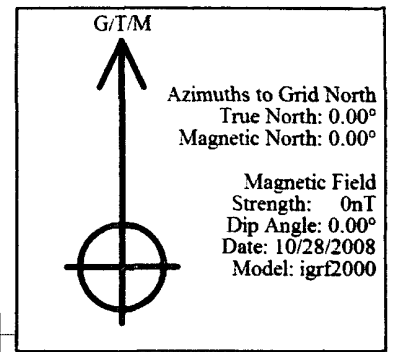
Survey

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	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.81	356.49	100.00	-0.70	0.71	-0.04	0.81	0.71	356.49
200.00	1.25	333.88	199.98	-2.34	2.39	-0.57	0.59	2.46	346.66
300.00	1.56	341.71	299.95	-4.53	4.66	-1.47	0.36	4.89	342.45
400.00	1.62	339.17	399.91	-7.07	7.28	-2.40	0.09	7.66	341.72
500.00	1.97	352.81	499.86	-10.03	10.30	-3.12	0.55	10.76	343.14
600.00	2.25	352.36	599.80	-13.63	13.95	-3.60	0.28	14.41	345.54
700.00	2.10	352.62	699.72	-17.34	17.72	-4.09	0.15	18.18	346.99
800.00	2.04	356.95	799.66	-20.90	21.31	-4.42	0.17	21.76	348.27
900.00	1.72	355.15	899.60	-24.14	24.58	-4.65	0.33	25.02	349.30
1000.00	1.48	347.15	999.57	-26.86	27.34	-5.06	0.33	27.80	349.51
1100.00	1.27	358.98	1099.54	-29.19	29.70	-5.37	0.35	30.19	349.76
1200.00	1.85	353.86	1199.50	-31.88	32.42	-5.56	0.60	32.89	350.27
1300.00	2.00	355.42	1299.44	-35.19	35.76	-5.87	0.16	36.24	350.68
1400.00	2.17	0.19	1399.38	-38.80	39.39	-6.00	0.24	39.85	351.33
1500.00	1.98	351.66	1499.31	-42.38	43.00	-6.25	0.36	43.45	351.73
1600.00	1.86	342.61	1599.26	-45.57	46.25	-6.98	0.33	46.78	351.41
1700.00	1.71	344.46	1699.21	-48.48	49.24	-7.87	0.16	49.87	350.92
1800.00	1.68	344.73	1799.16	-51.26	52.09	-8.65	0.03	52.81	350.57
1900.00	1.48	342.81	1899.12	-53.84	54.74	-9.42	0.21	55.55	350.23
1910.00	1.67	336.59	1909.12	-54.09	55.00	-9.52	2.55	55.81	350.18



Scientific
Drilling

Field: North Seven Rivers Hill
Site: Eddy County, NM
Well: Moose Federal #4H
Wellpath: VH - Job #32K1008780
Survey: 10/04/08



DIRECTIONAL SURVEY REPORT

MARBOB ENERGY

NOOSE FED #4H

EDDY COUNTY, NEW MEXICO

PREPARED BY: FRANCISCO SINISTERRA

DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) J EIMERS
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 10/4/08 TO 10/8/08
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.
NOOSE FED #4H
EDDY COUNTY, NM
RIG: PERMIAN 4
9. SURVEY CERTIFIED FROM: 2019 TO 4373 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 1979.45 FEET ON A BEARING OF 184.36 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 4422 FEET, ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.



FRANCISCO SINISTERRA
M/LWD SERVICE COORDINATOR

PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 10/03/2008
Date Completed: 10/08/2008

MARBOB ENERGY
NOOSE FED #4H
EDDY COUNTY, NEW MEXICO
Rig:PERMIAN 4
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers:J. EIMERS
B. BLAKEMORE

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.37.24.1440 N LON:104.27.43.1509 W
GRID Reference:NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 460390.4000 Y: 590518.6000
North Aligned To:GRID NORTH
Total Magnetic Correction: 8.40° EAST TO GRID
Vertical Section Plane: 184.48
Survey Vert. Reference: 14.00' Kelly Bushing To Ground
Altitude:3507.00' Ground To MSL

Measured Depth	4422.00	(feet)
Inclination	88.81	(deg)
Azimuth	181.36	(deg)
True Vertical Depth	2668.18	(feet)
Vertical Section	1979.45	(feet)
Survey X cord	460239.79	(feet)
Survey Y cord	588544.87	(feet)
Survey Lat	32.61794742 N	(deg)
Survey Lon	104.46246777 W	(deg)
Rectangular Corr. N/S	1973.71 S	(feet)
Rectangular Corr. E/W	150.60 W	(feet)
Closure Distance	1979.45	(feet)
Direction of Closure	184.36	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

MARBOB ENERGY

NOOSE FED #4H

EDDY COUNTY, NEW MEXICO

Rig:PERMIAN 4

PathFinder Office Supervisor: FRANCISCO SINISTERRA

PathFinder Field Engineers: J. EIMERS

B. BLAKEMORE

Survey Horiz. Reference:WELLHEAD

Ref Coordinates: LAT:32.37.24.1440 N LON:104.27.43.1509 W

Reference:NAD27 new mexico east Transverse Mercator

Ref GRID Coord: X: 460390.4000 Y: 590518.6000

North Aligned To:GRID NORTH

Total Magnetic Correction: 8.40° EAST TO GRID

Vertical Section Plane: 184.48

Survey Vert. Reference: 14.00' Kelly Bushing To Ground

Altitude:3507.00' Ground To MSL

Survey Calculations by RX5 V5.11i 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-IN TO SCIENTIFIC GYRO SURVEY @ 1910'MD.										
1910.00	1.67	336.59	1909.12	0.00	-54.09	55.00 N	9.52 W	55.82@	350.18	0.00
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.										
2019.00	1.32	334.15	2018.08	109.00	-56.58	57.59 N	10.70 W	58.57@	349.48	0.33
2051.00	1.23	329.25	2050.07	32.00	-57.17	58.21 N	11.03 W	59.25@	349.27	0.44
2082.00	2.29	228.97	2081.06	31.00	-57.00	58.09 N	11.67 W	59.25@	348.64	8.99
2114.00	5.89	200.20	2112.98	32.00	-54.97	56.13 N	12.72 W	57.56@	347.23	12.61
2146.00	10.29	192.98	2144.66	32.00	-50.56	51.80 N	13.93 W	53.64@	344.95	14.08
2178.00	15.12	190.89	2175.86	32.00	-43.58	44.92 N	15.36 W	47.47@	341.12	15.16
2209.00	19.87	191.34	2205.42	31.00	-34.33	35.78 N	17.16 W	39.68@	334.37	15.33
2241.00	23.74	190.24	2235.13	32.00	-22.51	24.10 N	19.38 W	30.93@	321.20	12.16
2273.00	27.26	188.35	2264.00	32.00	-8.79	10.51 N	21.59 W	24.01@	295.95	11.29
2305.00	30.69	186.81	2291.99	32.00	6.69	4.86 S	23.62 W	24.12@	258.38	10.97
2337.00	34.29	186.03	2318.98	32.00	23.86	21.94 S	25.54 W	33.67@	229.34	11.33
2369.00	37.64	184.92	2344.88	32.00	42.65	40.64 S	27.32 W	48.97@	213.91	10.67
2401.00	40.10	184.12	2369.79	32.00	62.73	60.66 S	28.90 W	67.19@	205.48	7.85
2432.00	42.38	188.75	2393.11	31.00	83.14	80.95 S	31.21 W	86.76@	201.08	12.29
2463.00	45.46	181.22	2415.45	31.00	104.61	102.34 S	33.04 W	107.54@	197.89	19.55
2495.00	47.04	181.21	2437.58	32.00	127.69	125.45 S	33.53 W	129.85@	194.96	4.94
2527.00	47.04	181.04	2459.38	32.00	151.07	148.87 S	33.99 W	152.70@	192.86	0.39
2559.00	46.69	180.97	2481.26	32.00	174.37	172.21 S	34.40 W	175.62@	191.29	1.11
2591.00	46.34	180.32	2503.28	32.00	197.54	195.43 S	34.66 W	198.48@	190.06	1.84
2622.00	45.81	180.42	2524.79	31.00	219.81	217.76 S	34.80 W	220.52@	189.08	1.73
2654.00	48.19	180.83	2546.61	32.00	243.16	241.16 S	35.06 W	243.69@	188.27	7.50

PathFinder Energy Services, Inc.

Survey Report

MARBOB ENERGY
NOOSE FED #4H
EDDY COUNTY, NEW MEXICO
RIG:PERMIAN 4

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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)
2686.00	51.44	181.00	2567.26	32.00	267.56	265.60 S	35.45 W	267.95@	187.60	10.16
2717.00	54.26	181.13	2585.98	31.00	292.22	290.30 S	35.91 W	292.51@	187.05	9.10
2749.00	58.21	182.25	2603.76	32.00	318.78	316.88 S	36.70 W	319.00@	186.61	12.68
2781.00	62.96	182.19	2619.47	32.00	346.63	344.73 S	37.78 W	346.79@	186.25	14.84
2813.00	67.62	181.50	2632.84	32.00	375.66	373.78 S	38.71 W	375.78@	185.91	14.69
2845.00	72.19	180.81	2643.83	32.00	405.65	403.81 S	39.31 W	405.72@	185.56	14.42
2877.00	75.97	181.63	2652.61	32.00	436.37	434.57 S	39.97 W	436.41@	185.26	12.07
2909.00	79.14	183.23	2659.51	32.00	467.59	465.79 S	41.30 W	467.62@	185.07	11.04
2941.00	83.27	184.52	2664.40	32.00	499.21	497.33 S	43.44 W	499.23@	184.99	13.51
2973.00	87.85	185.36	2666.88	32.00	531.10	529.11 S	46.18 W	531.12@	184.99	14.55
3005.00	90.40	185.44	2667.36	32.00	563.09	560.96 S	49.20 W	563.11@	185.01	7.97
3036.00	90.66	185.39	2667.08	31.00	594.08	591.82 S	52.12 W	594.11@	185.03	0.85
3068.00	90.48	185.57	2666.76	32.00	626.08	623.67 S	55.18 W	626.11@	185.06	0.80
3100.00	90.66	185.26	2666.44	32.00	658.07	655.53 S	58.20 W	658.11@	185.07	1.12
3132.00	90.84	185.47	2666.02	32.00	690.07	687.39 S	61.19 W	690.10@	185.09	0.86
3164.00	90.75	185.55	2665.58	32.00	722.06	719.24 S	64.26 W	722.10@	185.11	0.38
3196.00	90.66	185.38	2665.18	32.00	754.05	751.09 S	67.31 W	754.10@	185.12	0.60
3227.00	90.04	184.26	2664.99	31.00	785.05	781.98 S	69.91 W	785.10@	185.11	4.13
3259.00	89.78	183.98	2665.04	32.00	817.05	813.89 S	72.21 W	817.09@	185.07	1.19
3290.00	89.78	184.28	2665.16	31.00	848.05	844.81 S	74.44 W	848.09@	185.04	0.97
3321.00	89.69	184.35	2665.31	31.00	879.05	875.73 S	76.78 W	879.08@	185.01	0.37
3353.00	89.43	184.42	2665.55	32.00	911.05	907.63 S	79.22 W	911.08@	184.99	0.84
3386.00	89.43	184.49	2665.88	33.00	944.04	940.53 S	81.79 W	944.08@	184.97	0.21
3416.00	89.25	184.42	2666.23	30.00	974.04	970.44 S	84.12 W	974.08@	184.95	0.64
3448.00	89.52	184.57	2666.57	32.00	1006.04	1002.34 S	86.62 W	1006.07@	184.94	0.97
3480.00	90.40	184.94	2666.59	32.00	1038.04	1034.23 S	89.28 W	1038.07@	184.93	2.98
3512.00	90.57	185.30	2666.32	32.00	1070.04	1066.10 S	92.13 W	1070.07@	184.94	1.24

PathFinder Energy Services, Inc.

Survey Report

MARBOB ENERGY
NOOSE FED #4H
EDDY COUNTY, NEW MEXICO
RIG:PERMIAN 4

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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)
3544.00	90.75	185.53	2665.95	32.00	1102.03	1097.95 S	95.15 W	1102.07@	184.95	0.91
3575.00	91.01	185.50	2665.48	31.00	1133.02	1128.80 S	98.13 W	1133.06@	184.97	0.84
3607.00	90.84	185.67	2664.96	32.00	1165.01	1160.65 S	101.24 W	1165.06@	184.99	0.75
3639.00	89.69	185.30	2664.81	32.00	1197.01	1192.50 S	104.30 W	1197.05@	185.00	3.78
3671.00	89.52	185.21	2665.03	32.00	1229.00	1224.37 S	107.23 W	1229.05@	185.01	0.60
3703.00	89.25	185.33	2665.38	32.00	1261.00	1256.23 S	110.17 W	1261.05@	185.01	0.92
3735.00	88.99	185.02	2665.87	32.00	1292.99	1288.09 S	113.06 W	1293.05@	185.02	1.26
3767.00	89.96	184.24	2666.16	32.00	1324.99	1319.99 S	115.64 W	1325.04@	185.01	3.89
3799.00	91.45	184.77	2665.77	32.00	1356.98	1351.89 S	118.15 W	1357.04@	184.99	4.94
3830.00	92.59	185.82	2664.67	31.00	1387.96	1382.73 S	121.01 W	1388.02@	185.00	5.00
3862.00	92.77	185.97	2663.18	32.00	1419.92	1414.53 S	124.30 W	1419.98@	185.02	0.73
3894.00	91.45	184.36	2662.00	32.00	1451.89	1446.38 S	127.18 W	1451.96@	185.02	6.50
3926.00	91.45	184.08	2661.19	32.00	1483.88	1478.28 S	129.53 W	1483.94@	185.01	0.87
3958.00	89.78	182.58	2660.85	32.00	1515.87	1510.22 S	131.39 W	1515.93@	184.97	7.02
3990.00	89.52	182.89	2661.04	32.00	1547.85	1542.18 S	132.91 W	1547.90@	184.93	1.26
4021.00	89.34	182.78	2661.35	31.00	1578.84	1573.14 S	134.45 W	1578.88@	184.88	0.68
4053.00	89.43	182.80	2661.69	32.00	1610.82	1605.10 S	136.01 W	1610.86@	184.84	0.29
4085.00	89.34	182.40	2662.04	32.00	1642.81	1637.07 S	137.46 W	1642.83@	184.80	1.28
4117.00	90.13	183.06	2662.19	32.00	1674.79	1669.03 S	138.98 W	1674.81@	184.76	3.22
4149.00	89.78	183.32	2662.21	32.00	1706.78	1700.98 S	140.76 W	1706.80@	184.73	1.36
4181.00	89.08	182.98	2662.53	32.00	1738.77	1732.93 S	142.52 W	1738.78@	184.70	2.43
4213.00	88.55	182.48	2663.19	32.00	1770.75	1764.89 S	144.04 W	1770.76@	184.67	2.28
4244.00	87.93	182.47	2664.14	31.00	1801.71	1795.85 S	145.38 W	1801.72@	184.63	2.00
4276.00	87.85	182.22	2665.32	32.00	1833.67	1827.80 S	146.69 W	1833.67@	184.59	0.82
4308.00	89.25	181.59	2666.13	32.00	1865.63	1859.77 S	147.75 W	1865.63@	184.54	4.80
4340.00	89.16	181.49	2666.58	32.00	1897.58	1891.75 S	148.61 W	1897.58@	184.49	0.42
4373.00	88.81	181.36	2667.16	33.00	1930.53	1924.74 S	149.43 W	1930.53@	184.44	1.13

PathFinder Energy Services, Inc.

Survey Report

MARBOB ENERGY
NOOSE FED #4H
EDDY COUNTY, NEW MEXICO
RIG:PERMIAN 4

Page 04/03

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 @ 4422'MD.								
4422.00	88.81	181.36	2668.18	49.00	1979.45	1973.71 S 150.60 W	1979.45@ 184.36	0.00

HOUSE FID 14H

Directional Survey Record

For

MARBOB ENERGY

Well Name	#	HOUSE FID 14H
Well Location	#	ETDY COUNTY, NEW MEXICO
Job Number	#	22F1000700
Location Latitude	#	32.420
Survey Date	#	6-OCT-2007
C.O.C. Personnel	#	ANGEL MACIEL
Length Unit	#	Feet
North Reference	#	US10 North
Drill Connection	#	0.0" Tugress
Traverse Depth Error	#	5K0
Proposed Direction	#	134.00
Calculation Method	#	BRILLIANT

Remarks: 1. 10' N 10' W, well is a 10' depth well

[illegible]

The Journal of Law, Economics, & Organization, V16 N1, Spring 2000
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000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	100.00	-0.00	0.00	100.00	0.00	-0.00	0.00
200.00	200.00	-0.00	0.00	200.00	0.00	-0.00	0.00
300.00	300.00	-0.00	0.00	300.00	0.00	-0.00	0.00
400.00	400.00	-0.00	0.00	400.00	0.00	-0.00	0.00
500.00	500.00	-0.00	0.00	500.00	0.00	-0.00	0.00
600.00	600.00	-0.00	0.00	600.00	0.00	-0.00	0.00
700.00	700.00	-0.00	0.00	700.00	0.00	-0.00	0.00
800.00	800.00	-0.00	0.00	800.00	0.00	-0.00	0.00
900.00	900.00	-0.00	0.00	900.00	0.00	-0.00	0.00
1000.00	1000.00	-0.00	0.00	1000.00	0.00	-0.00	0.00
1100.00	1100.00	-0.00	0.00	1100.00	0.00	-0.00	0.00
1200.00	1200.00	-0.00	0.00	1200.00	0.00	-0.00	0.00
1300.00	1300.00	-0.00	0.00	1300.00	0.00	-0.00	0.00
1400.00	1400.00	-0.00	0.00	1400.00	0.00	-0.00	0.00
1500.00	1500.00	-0.00	0.00	1500.00	0.00	-0.00	0.00
1600.00	1600.00	-0.00	0.00	1600.00	0.00	-0.00	0.00
1700.00	1700.00	-0.00	0.00	1700.00	0.00	-0.00	0.00
1800.00	1800.00	-0.00	0.00	1800.00	0.00	-0.00	0.00
1900.00	1900.00	-0.00	0.00	1900.00	0.00	-0.00	0.00
2000.00	2000.00	-0.00	0.00	2000.00	0.00	-0.00	0.00
2100.00	2100.00	-0.00	0.00	2100.00	0.00	-0.00	0.00
2200.00	2200.00	-0.00	0.00	2200.00	0.00	-0.00	0.00
2300.00	2300.00	-0.00	0.00	2300.00	0.00	-0.00	0.00
2400.00	2400.00	-0.00	0.00	2400.00	0.00	-0.00	0.00
2500.00	2500.00	-0.00	0.00	2500.00	0.00	-0.00	0.00
2600.00	2600.00	-0.00	0.00	2600.00	0.00	-0.00	0.00
2700.00	2700.00	-0.00	0.00	2700.00	0.00	-0.00	0.00
2800.00	2800.00	-0.00	0.00	2800.00	0.00	-0.00	0.00
2900.00	2900.00	-0.00	0.00	2900.00	0.00	-0.00	0.00
3000.00	3000.00	-0.00	0.00	3000.00	0.00	-0.00	0.00
3100.00	3100.00	-0.00	0.00	3100.00	0.00	-0.00	0.00
3200.00	3200.00	-0.00	0.00	3200.00	0.00	-0.00	0.00
3300.00	3300.00	-0.00	0.00	3300.00	0.00	-0.00	0.00
3400.00	3400.00	-0.00	0.00	3400.00	0.00	-0.00	0.00
3500.00	3500.00	-0.00	0.00	3500.00	0.00	-0.00	0.00
3600.00	3600.00	-0.00	0.00	3600.00	0.00	-0.00	0.00
3700.00	3700.00	-0.00	0.00	3700.00	0.00	-0.00	0.00
3800.00	3800.00	-0.00	0.00	3800.00	0.00	-0.00	0.00
3900.00	3900.00	-0.00	0.00	3900.00	0.00	-0.00	0.00
4000.00	4000.00	-0.00	0.00	4000.00	0.00	-0.00	0.00
4100.00	4100.00	-0.00	0.00	4100.00	0.00	-0.00	0.00
4200.00	4200.00	-0.00	0.00	4200.00	0.00	-0.00	0.00
4300.00	4300.00	-0.00	0.00	4300.00	0.00	-0.00	0.00
4400.00	4400.00	-0.00	0.00	4400.00	0.00	-0.00	0.00
4500.00	4500.00	-0.00	0.00	4500.00	0.00	-0.00	0.00
4600.00	4600.00	-0.00	0.00	4600.00	0.00	-0.00	0.00
4700.00	4700.00	-0.0					

Measured Depth = 121.00 m 395.51 ft 310.01 m 310.01 m 310.01 m

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

MARBOB ENERGY
NOOSE FED #4H
LEA COUNTY, NEW MEXICO
Rig:PERMIAN 4

Tue Sep 30 15:31:16 2008

Coordinates

Latitude: 32.623373 N (32 deg. 37 min. 24.1440 sec.)
Longitude: 104.461986 W (-104 deg. 27 min. 43.1509 sec.)
Elevation: 3507.00 feet.
Calculation Date: Sep/30/2008

Magnetic Calculations

Model: IGRF2005
Dip Angle: 60.4781 degrees
Total Magnetic Field: 0.49077 gauss
Magnetic Declination: 8.333566 degrees
Horizontal Intensity: 0.241830 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 8.333566 Degr.

Transverse Mercator Grid Calculations NAD27

Grid System: Transverse Mercator: new mexico east
Ellipsoid: Clarke 1866
X: 460390.4000 feet
Y: 590518.6000 feet
True to Grid: (convergence) 0.069359 degrees
Magnetic to Grid: 8.402925 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 8.402925 Degr.

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

MARBOB ENERGY
NOOSE FED #4H
NORTH SEVEN RIVERS; GLORIETA-YESO
Rig:PERMIAN 4

FIELD COPY

Sat Oct 04 19:53:00 2008

Coordinates

Latitude: 32.623373 N (32 deg. 37 min. 24.1440 sec.)
Longitude: 104.461986 W (-104 deg. 27 min. 43.1509 sec.)
Elevation: 3524.00 feet.
Calculation Date: Oct/04/2008.

Magnetic Calculations

Model: IGRF2005
Dip Angle: 60.4780 degrees
Total Magnetic Field: 0.49050 gauss
Magnetic Declination: 8.330439 degrees
Horizontal Intensity: 0.241695 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 8.330439 Degr.

Transverse Mercator Grid Calculations NAD27

U.T.M. Zone: 18N
False Easting: 500000.000000
False Northing: 0.000000
V. 460300 4000 feet
V. 590518 6000 feet
True to Grid: (convergence) 0.069359 degrees
Magnetic to Grid: 8.399797 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 8.399797 Degr.

DISTRICT I
1225 N. FRANCIS DR., HOUSTON, NM 88240

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1225 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code 97565	Pool Name NORTH SEVEN RIVERS; GLORIETA-YESO
Property Code	Property Name NOOSE FEDERAL	Well Number 4 H
GRID No. 14049	Operator Name MARBOB ENERGY CORPORATION	Elevation 3507'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	35	19-S	25-E		330	NORTH	485	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	35	19-S	25-E		2310	NORTH	330	WEST	EDDY
Dedicated Acres 80	Joint or Infill	Consolidation Code	Order No.						

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

SEE DETAIL Penetration Point: 438' FNL & 477' FWL BHL 485' 330' 2310' 3492.8' 3493.7' 3516.6' 3504.0' 600' 600' GEODETIC COORDINATES NAD 27 NME. Y=590518.6 N X=460390.4 E LAT.=32.623373° N LONG.=104.461986° W	OPERATOR CERTIFICATION I hereby certify that the information 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 or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <u>Nancy Agnew</u> 3/3/08 Signature Date Nancy Agnew Printed Name 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. FEBRUARY 8, 2008 Date Surveyed DSS Signature & Seal of Professional Surveyor <u>Ronald J. Eidson</u> 2/24/08 08.11.0072 Certificate No. GARY G. EIDSON 12841 RONALD J. EIDSON 3236
--	--

MTS-08-416
EA-08-857

Form 3160-3
(February 2005)

AUG - 6 2008
OCD-ARTESIA

OCD-ARTESIA

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

S

FORM APPROVED
OMB No 1004-0137
Expires March 31, 2007

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work ☒ DRILL ☐ REENTER		5. Lease Serial No. NMMN 113927
1b. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Marbob Energy Corporation		7. If Unit or CA Agreement, Name and No
3a. Address P.O. Box 227, Artesia, NM 88211-0228		8. Lease Name and Well No. Noose Federal #4H 36300
3b. Phone No. (include area code) 505-748-3303		9. API Well No. 30-015-36537
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface 330' FNL & 485' FWL At proposed prod. zone 2310' FNL & 330' FWL		10. Field and Pool, or Exploratory North Seven Rivers; Glorieta-Yeso
14. Distance in miles and direction from nearest town or post office* About 6 miles from Lakewood, NM		11. Sec., T R M or Blk and Survey or Area Section 35, T19S - R25E
15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drg unit line, if any) 330'	16. No of acres in lease 320	17. Spacing Unit dedicated to this well 80
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft	19. Proposed Depth 4900' MD 2650' TVD	20. BLM/BIA Bond No. on file NMB000412
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3507' GL	22. Approximate date work will start* 04/19/2008	23. Estimated duration 10 Days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No 1, must be attached to this form

- | | |
|--|---|
| 1 Well plat certified by a registered surveyor | 4 Bond to cover the operations unless covered by an existing bond on file (see Item 20 above) |
| 2 A Drilling Plan | 5 Operator certification |
| 3 A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office) | 6 Such other site specific information and/or plans as may be required by the BLM |

25. Signature <i>Nancy T. Agnew</i>	Name (Printed/Typed) Nancy T. Agnew	Date 03/19/2008
Title Land Department		

Approved by (Signature) <i>/s/ DAVID D. EVANS</i>	Name (Printed/Typed) <i>/s/ DAVID D. EVANS</i>	DATE 04 04 2008
Title <i>FIELD MANAGER</i>	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 USC, Section 1001 and Title 43 USC, States any false, fictitious or fraudulent state

*(Instructions on page 2)

NOTE: NEW PIT RULE

19-15-17 NMAC PART 17

A form C-144 must be approved before starting drilling operations.

APPROVAL FOR TWO YEARS

fully to make to any department or agency of the United

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

ROSWELL CONTROLLED WATER BASIN

**APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED**