

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA
MAR 17 2009

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. LEASE DESIGNATION AND SERIAL NO

NMNM-106231

1a Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other
b Type of Completion ☒ New Well ☐ Workover ☐ Deepen ☐ Plug Back ☐ Diff' Resvr

6 INDIAN ALLOTTEE OR TRIBE NAME

7 UNIT AGREEMENT

2 Name of Operator

Marbob Energy Corporations

8 FARMOR LEASE NAME

Loco Federal #7

3 Address

P.O. Box 227
Artesia, NM 88211-0227

3a Phone No (include area code)

575-748-3303

9 API WELL NO

30-015-36638

4 Location of Well (Report location clearly and in accordance with Federal requirements)*

At surface 900' FNL & 1650' FEL, Unit B (NWNE)

10 FIELD NAME

Loco Hills; Glorieta-Yeso

At top prod Interval reported below

Same

11 SEC T, R, M, OR BLOCK AND SURVEY OR AREA 21 T 17S R 30E

At total depth

Same

12 COUNTY OR PARISH 13 STATE
Eddy NM

14 Date Spudded

11/12/08

15 Date T D Reached

12/13/08

16 Date Completed

1/27/09

☐ D & A

☒ Ready to Prod

17 ELEVATIONS (DF, RKB, RT, GR, etc)*

3671'

GR

3684'

KB

18 Total Depth

MD

6290'

TVD

6288'

19 Plug back T D

MD

6271'

TVD

6269'

20 Depth Bridge Plug Set

MD

TVD

21 Type Electric & other Logs Run (Submit a copy of each)

DLL, DSN

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 Cementer Depth	No. of Sks & Type of Cement	Slurry Vol (Bbl)	Cement Top*	Amount Pulled
12 1/4"	8 5/8" J-55	24#	0	350'		450 sx		0	None
7 7/8"	5 1/2" J-55	17#	0	6285'		1500 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"	6240'	N/A						

25 Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. of Holes	Perf Status
Yeso	4430'	6164'	5993-6164'		20	Open
			5542-5756'		20	Open
			4974-5348'		20	Open
			4430-4748'		25	Open

26. Perforation Record

27 Acid/Fracture Treatment, Cement Squeeze, Etc

Depth Interval	Amount and Type of Material
5993-6164'	Acid w/2000 gal 15% HCL acid; Frac w/103325# 16/30 Ottawa sand & 66588 gal fluid
5542-5756'	Acid w/3500 gal 15% HCL acid; Frac w/182832# 16/30 Ottawa sand & 132701 gal fluid
4974-5348'	Acid w/5000 gal 15% HCL acid; Frac w/311935# 16/30 Ottawa sand & 216991 gal fluid
4430-4748'	Acid w/3500 gal 15% HCL acid; Frac w/230083# 16/30 Ottawa sand & 189326 gal fluid

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
2/1/09	2/10/09	24	→	233	637	451	N/A	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	N/A	→						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	
			→						

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

ENTERED
MAR 19 2009
sk-16 dm

ACCEPTED FOR RECORD
MAR 14 2009
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

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 Flwe 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 Flwe 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 pressures.				31 Formation (Log) Markers	
Formation	Top	Bottom	Descriptions Contents, Etc	Name	Top Measured Depth
Yates	1210'	1513'		Top of Salt	591'
Seven Rivers	1514'	2130'		Bottom of Salt	1055'
San Andres	2848'	4303'		Yates	1210'
				Seven Rivers	1514'
				Queen	2131'
				San Andres	2848'
				Glorieta	4304'
				Yeso	4387'
					TD 6290'

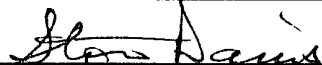
32 Additional remarks (include plugging procedure):

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 3/10/09

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

December 16, 2008

MARBOB ENERGY
P.O. Box 227
Artesia, NM 88211-0227

RE: MARBOB ENERGY
LOCO FEDERAL #7 ST-01
EDDY COUNTY, NM
RIG: PERMIAN #4
FIELD: LOCO HILLS; GLORIETA YESO
PES FILE NO.: 101008069 WT-WT

JAN 13 2009
JAN 12 2009

To whom it may concern:

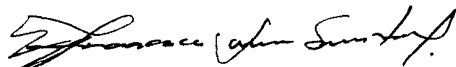
We hereby certify that the enclosed Original Field Survey Data contained in this report represents to the best of our knowledge, a true and accurate survey of the well at the time the survey was run.

DIRECTIONAL SURVEY DATA

- 1 – Original survey report
- 2 – Survey report copies

We appreciate the opportunity to work with you and we look forward to your business support. If you have any questions, I can be reached at (432) 687-1647

Sincerely,



FRANCISCO SINISTERRA
M/LWD Service Coordinator
PathFinder Energy Services

ML:sh



DIRECTIONAL SURVEY REPORT

MARBOB ENERGY

LOCO FEDERAL #7 ST-01

EDDY COUNTY, NEW MEXICO

PREPARED BY: FRANCISCO SINISTERRA

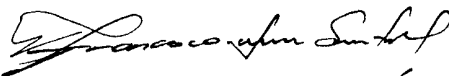
Pathfinder Energy Services, Inc.
6213 W. County Road 112 • Midland, TX • 79706
(432)681-6000

DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) JEFF GARAY
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 11/22/08 TO 12/12/08
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
LOCO FEDERAL #7 ST-01
EDDY COUNTY, NM
RIG: PERMIAN #4
9. SURVEY CERTIFIED FROM: 3,773 TO 6,245 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 18.45 FEET ON A BEARING OF 185.98 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 6,290 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: 11/22/2008
Date Completed: 12/12/2008

MARBOB ENERGY
LOCO FEDERAL #7 ST1
EDDY COUNTY, NEW MEXICO
Rig:PERMIAN 4
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers:J. GARAY

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.49.28.8685 N LON:103.58.23.6042 W
GRID Reference:NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 610621.8000 Y: 663920.2000
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.92° EAST TO GRID
Vertical Section Plane: 180.27
Survey Vert. Reference: 21.00' Kelly Bushing To Ground
Altitude:3671.00' Ground To MSL

Measured Depth	6290.00	(feet)
Inclination	2.46	(deg)
Azimuth	8.27	(deg)
True Vertical Depth	6288.49	(feet)
Vertical Section	18.36	(feet)
Survey X cord	610619.88	(feet)
Survey Y cord	663901.85	(feet)
Survey Lat	32.82463526 N	(deg)
Survey Lon	103.97322985 W	(deg)
Rectangular Corr. N/S	18.35 S	(feet)
Rectangular Corr. E/W	1.92 W	(feet)
Closure Distance	18.45	(feet)
Direction of Closure	185.98	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

MARBOB ENERGY
 LOCO FEDERAL #7 ST1
 EDDY COUNTY, NEW MEXICO
 Rig:PERMIAN 4
 PathFinder Office Supervisor: FRANCISCO SINISTERRA
 PathFinder Field Engineers: J. GARAY

Page 01/02
 Tie-in Date: 11/22/2008
 Date Completed: 12/12/2008

Survey Horiz. Reference:WELLHEAD
 Ref Coordinates: LAT:32.49.28.8685 N LON:103.58.23.6042 W
 Reference:NAD27 new mexico east Transverse Mercator
 Ref GRID Coord: X: 610621.8000 Y: 663920.2000
 North Aligned To:GRID NORTH
 Total Magnetic Correction: 7.92° EAST TO GRID
 Vertical Section Plane: 180.27
 Survey Vert. Reference: 21.00' Kelly Bushing To Ground
 Altitude:3671.00' 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 @ 3673' ASSUMING VERTICAL										
3673.00	0.00	0.00	3673.00	0.00	-0.00	0.00	0.00	0.00@	0.00	0.00
THE FOLLOWING ARE PATHFINDER MWD SURVEYS										
3773.00	2.73	359.31	3772.96	100.00	-2.38	2.38 N	0.03 W	2.38@	359.31	2.73
3809.00	2.64	358.52	3808.92	36.00	-4.07	4.07 N	0.06 W	4.07@	359.15	0.27
3872.00	0.70	130.62	3871.90	63.00	-5.27	5.27 N	0.19 E	5.27@	2.11	5.00
3936.00	2.11	166.65	3935.88	64.00	-3.87	3.87 N	0.76 E	3.94@	11.16	2.50
3999.00	2.20	175.18	3998.84	63.00	-1.54	1.53 N	1.13 E	1.91@	36.44	0.53
4063.00	2.37	181.07	4062.79	64.00	1.01	1.01 S	1.21 E	1.58@	129.92	0.45
4126.00	3.25	179.48	4125.71	63.00	4.10	4.10 S	1.20 E	4.27@	163.66	1.40
4189.00	3.96	179.48	4188.59	63.00	8.06	8.06 S	1.24 E	8.16@	171.26	1.13
4253.00	4.13	183.52	4252.43	64.00	12.57	12.57 S	1.12 E	12.62@	174.92	0.52
4316.00	3.96	185.55	4315.27	63.00	17.00	17.00 S	0.77 E	17.02@	177.41	0.35
4380.00	3.61	187.74	4379.13	64.00	21.20	21.20 S	0.28 E	21.20@	179.24	0.59
4443.00	3.78	190.56	4442.00	63.00	25.21	25.21 S	0.37 W	25.21@	180.83	0.39
4506.00	2.46	197.41	4504.90	63.00	28.54	28.54 S	1.15 W	28.56@	182.31	2.17
4568.00	1.41	195.04	4566.87	62.00	30.55	30.54 S	1.75 W	30.59@	183.27	1.70
4630.00	0.97	194.69	4628.86	62.00	31.80	31.79 S	2.08 W	31.86@	183.74	0.71
4693.00	1.14	197.76	4691.84	63.00	32.91	32.90 S	2.40 W	32.99@	184.18	0.28
4788.00	1.06	199.61	4786.83	95.00	34.64	34.63 S	2.99 W	34.76@	184.93	0.09
4883.00	1.06	206.82	4881.81	95.00	36.26	36.24 S	3.68 W	36.43@	185.80	0.14
4977.00	0.88	201.37	4975.80	94.00	37.71	37.69 S	4.33 W	37.94@	186.56	0.21
5073.00	0.62	197.15	5071.79	96.00	38.89	38.87 S	4.76 W	39.16@	186.97	0.28
5168.00	0.26	208.84	5166.79	95.00	39.57	39.55 S	5.01 W	39.87@	187.22	0.39

PathFinder Energy Services, Inc.

Survey Report

MARBOB ENERGY
 LOCO FEDERAL #7 ST1
 EDDY COUNTY, NEW MEXICO
 RIG:PERMIAN 4

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)
5263.00	0.26	281.08	5261.79	95.00	39.72	39.70 S	5.33 W	40.05@	187.64	0.32
5358.00	0.44	325.82	5356.78	95.00	39.38	39.36 S	5.74 W	39.77@	188.30	0.33
5453.00	1.23	339.80	5451.77	95.00	38.13	38.10 S	6.30 W	38.61@	189.39	0.85
5516.00	2.02	348.94	5514.75	63.00	36.40	36.37 S	6.75 W	36.99@	190.51	1.32
5580.00	1.14	2.03	5578.72	64.00	34.66	34.63 S	6.94 W	35.32@	191.33	1.48
5643.00	1.32	10.21	5641.71	63.00	33.32	33.29 S	6.79 W	33.97@	191.53	0.40
5738.00	1.06	24.27	5736.69	95.00	31.44	31.41 S	6.23 W	32.02@	191.23	0.41
5833.00	1.14	8.45	5831.67	95.00	29.70	29.67 S	5.73 W	30.22@	190.94	0.33
5896.00	1.58	0.80	5894.65	63.00	28.21	28.19 S	5.63 W	28.74@	191.30	0.75
5959.00	1.06	34.90	5957.64	63.00	26.86	26.84 S	5.28 W	27.36@	191.14	1.46
6022.00	1.06	52.48	6020.63	63.00	26.03	26.01 S	4.49 W	26.39@	189.79	0.51
6116.00	1.23	27.43	6114.61	94.00	24.60	24.58 S	3.33 W	24.81@	187.72	0.56
6179.00	2.02	9.77	6177.58	63.00	22.90	22.89 S	2.83 W	23.06@	187.06	1.47
6211.00	2.46	17.85	6209.56	32.00	21.69	21.68 S	2.53 W	21.83@	186.65	1.69
6245.00	2.46	8.27	6243.53	34.00	20.27	20.26 S	2.20 W	20.38@	186.20	1.21
STRAIGHT LINE PROJECTION TO BIT @ 6290'										
6290.00	2.46	8.27	6288.49	45.00	18.36	18.35 S	1.92 W	18.45@	185.98	0.00

December 17, 2008

MARBOB ENERGY
P.O. Box 227
Artesia, NM 88211-0227

RE: MARBOB ENERGY
LOCO FEDERAL #7
EDDY COUNTY, NM
RIG: PERMIAN #4
FIELD: LOCO HILLS, GLORIETA YESO
PES FILE NO.: 101008069 WT-WT

JAN 13 2009
JAN 12 2009

To whom it may concern:

We hereby certify that the enclosed Original Field Survey Data contained in this report represents to the best of our knowledge, a true and accurate survey of the well at the time the survey was run.

DIRECTIONAL SURVEY DATA
1 – Original survey report
2 – Survey report copies

We appreciate the opportunity to work with you and we look forward to your business support. If you have any questions, I can be reached at (432) 687-1647

Sincerely,


FRANCISCO SINISTERRA
M/LWD Service Coordinator
PathFinder Energy Services

ML:sh



DIRECTIONAL SURVEY REPORT

MARBOB ENERGY

LOCO FEDERAL #7

EDDY COUNTY, NEW MEXICO

PREPARED BY: FRANCISCO SINISTERRA

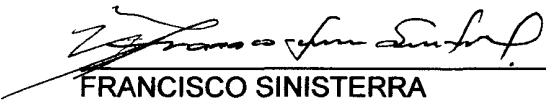
Pathfinder Energy Services, Inc.
6213 W. County Road 112 • Midland, TX • 79706
(432)681-6000

DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) JEFF GARAY
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 11/22/08 TO 11/29/08
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
LOCO FEDERAL #7
EDDY COUNTY, NM
RIG: PERMIAN #4
9. SURVEY CERTIFIED FROM: 4,050 TO 4,460 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 14.13 FEET ON A BEARING OF 347.42 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 4,505 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: 11/22/2008
Date Completed: 11/29/2008

MARBOB ENERGY
LOCO FEDERAL #7
EDDY COUNTY, NEW MEXICO
Rig:PERMIAN 4
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers:J. GARAY

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.49.28.8685 N LON:103.58.23.6042 W
GRID Reference:NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 610621.8000 Y: 663920.2000
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.92° EAST TO GRID
Vertical Section Plane: 180.27
Survey Vert. Reference: 21.00' Kelly Bushing To Ground

Measured Depth	4505.00	(feet)
Inclination	1.14	(deg)
Azimuth	309.80	(deg)
True Vertical Depth	4504.73	(feet)
Vertical Section	-3.08	(feet)
Survey X cord	610618.72	(feet)
Survey Y cord	663933.99	(feet)
Survey Lat	32.82472362 N	(deg)
Survey Lon	103.97323326 W	(deg)
Rectangular Corr. N/S	13.79 N	(feet)
Rectangular Corr. E/W	3.08 W	(feet)
Closure Distance	14.13	(feet)
Direction of Closure	347.42	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.**Survey Report**

MARBOB ENERGY

LOCO FEDERAL #7

EDDY COUNTY, NEW MEXICO

Rig:PERMIAN 4

PathFinder Office Supervisor: FRANCISCO SINISTERRA

PathFinder Field Engineers: J. GARAY

Survey Horiz. Reference:WELLHEAD

Ref Coordinates: LAT:32.49.28.8685 N LON:103.58.23.6042 W

Reference:NAD27 new mexico east Transverse Mercator

Ref GRID Coord: X: 610621.8000 Y: 663920.2000

North Aligned To:GRID NORTH

Total Magnetic Correction: 7.92° EAST TO GRID

Vertical Section Plane: 180.27

Survey Vert. Reference: 21.00' Kelly Bushing To Ground

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 @ 3950' ASSUMING VERTICAL										
3950.00	0.00	0.00	3950.00	0.00	0.00	0.00	0.00	0.00@ 0.00	0.00	
THE FOLLOWING ARE PATHFINDER MWD SURVEYS										
4050.00	3.69	6.08	4049.93	100.00	0.34	3.20 N	0.34 E	3.22@ 6.08	3.69	
4112.00	2.73	4.03	4111.83	62.00	0.66	6.66 N	0.66 E	6.69@ 5.63	1.56	
4174.00	1.41	338.17	4173.79	62.00	0.48	8.84 N	0.48 E	8.85@ 3.08	2.56	
4238.00	0.97	317.55	4237.78	64.00	-0.18	9.97 N	0.18 W	9.97@ 358.95	0.95	
4301.00	1.06	337.56	4300.77	63.00	-0.76	10.90 N	0.76 W	10.93@ 355.99	0.58	
4364.00	0.97	330.17	4363.76	63.00	-1.25	11.90 N	1.25 W	11.97@ 353.99	0.25	
4460.00	1.14	309.80	4459.74	96.00	-2.39	13.22 N	2.39 W	13.43@ 349.75	0.43	
STRAIGHT LINE PROJECTION TO BIT @ 4505' MD										
4505.00	1.14	309.80	4504.73	45.00	-3.08	13.79 N	3.08 W	14.13@ 347.42	0.00	



ENERGY SERVICES

TIE-IN SURVEY INFORMATION SHEET

CLIENT INFORMATION

CLIENT:	MARBOB ENERGY		
LEASE / WELL No.:	LOCO FEDERAL	#7-ST1	
WELL LOCATION:	EDDY COUNTY, NM		
COUNTY / STATE / COUNTRY:	EDDY COUNTY	NEW MEXICO	USA
RIG:	PERMIAN #4		
API WELL No:	30-015-36638		
JOB No:	101008069 WT-WT		
P.O. / AFE No.			
DIRECTIONAL COMPANY:	PATHFINDER ENERGY SERVICES		

WELL SITE INFORMATION

TOTAL MAGNETIC CORRECTION (TMC):			
On Wall Plat:	7.2	LWD Calculated:	7.2
		Agreed Upon:	7.2
X =	610621.800000	Feet	Y = 663920.200000
			Feet
SITE LATITUDE:	32.824686 N	SITE LONGITUDE:	103.973223 W
GRID SYSTEM:	TRUE ☐ UTM ☒ LAMBERT ☐	ZONE:	
PROPOSED DRIFT DIRECTION:	180.32		
KELLY BUSHING ELEVATION:	21		
ALTITUDE:	3671	Feet	WATER DEPTH:
			Feet

TIE-IN SURVEY

MEASURED DEPTH:	3673		
DRIFT ANGLE:	0		
DRIFT DIRECTION:	0		
TRUE VERTICAL DEPTH:	3673		
VERTICAL SECTION:	0		
RECTANGULAR COORDINATE (N / S):	32.824686 N		
RECTANGULAR COORDINATE (E / W):	103.973223 W		
CLOSURE DISTANCE / DIRECTION:	0	0	
SURVEY CALCULATION METHOD:	AA ☐	MC ☒	RC ☐ BT ☐
SOURCE OF TIE-IN DATA (COMPANY):			
COPY OF TIE-IN SURVEY REPORT	☐ YES ☒ NO		

WELL PLAN

KICKOFF DEPTH:	3800	TOTAL DEPTH:	6100
KICKOFF ANGLE:	3.75	MAX ANGLE:	3.75

PES Engineers:

J. GARAY

**Signature of both field engineers required if applicable

Directional Driller:

E. LOPEZ

Directional Driller:

G. RENIERO

DATE:

12/1/08

DATE:

12/12/08

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

EOG Resources, Inc.
Loco Federal #7
Eddy County
Rig:Permain #4

Fri Nov 21 22:35:06 2008

Coordinates

Latitude: 32.824686 N (32 deg. 49 min. 28.8685 sec.)
Longitude: 103.973223 W (-103 deg. 58 min. 23.6042 sec.)
Elevation: 3671.00 feet.
Calculation Date: Nov/21/2008

Magnetic Calculations

Model: IGRF2005
Dip Angle: 60.7508 degrees
Total Magnetic Field: 0.49215 gauss
Magnetic Declination: 8.112217 degrees
Horizontal Intensity: 0.240468 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 8.112217 Degr.

Transverse Mercator Grid Calculations NAD27

Grid System: Transverse Mercator: new mexico east
Ellipsoid: Clarke 1866
X: 610621.8000 feet
Y: 663920.2000 feet
True to Grid: (convergence) -0.195207 degrees
Magnetic to Grid: 7.917011 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.917011 Degr.

DISTRICT I

1625 N. FRENCH DR., HOBBS, NM 85240

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 DepartmentOIL 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 EDDYse - 4 Copies

Fee EDDYse - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number		Pool Code 96718	Pool Name LOCO HILLS; GLORIETA YESO
Property Code	Property Name LOCO FEDERAL		Well Number 7
OGRID No. 14049	Operator Name MARBOB ENERGY CORPORATION		Elevation 3671'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	21	17-S	30-E		900	NORTH	1650	EAST	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
Dedicated Acres 40	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

	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 T. Agnew</u> 5/15/08 Signature Date <u>Nancy T. Agnew</u> 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.
	Date Surveyed: <u>7/21/08</u> Signature: <u>Ronald J. Eidson</u> Seal of Professional Surveyor Certificate No. <u>12641</u> GARY C. EIDSON RONALD J. EIDSON 3239

OCD-ARTESIA

SEP 17 2008

ARS-08-947
EA-08-1299UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

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. NMNM 106231
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 14049		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. 23063 Loco Federal #7
3b Phone No. (include area code) 505-748-3303		9 API Well No. 30-015-36638
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface 900' FNL & 1650' FEL - B At proposed prod. zone		10 Field and Pool, or Exploratory Loco Hills; Glorieta-Yeso 96718
11 Sec, T R M or Blk and Survey or Area Section 21, T17S -R30E		12 County or Parish Eddy County
13 State NM		14 Distance in miles and direction from nearest town or post office* About 1/2 a mile from Loco Hills, NM
15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig unit line, if any) 330'	16 No of acres in lease 80	17 Spacing Unit dedicated to this well 40
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft	19 Proposed Depth 6030'	20 BLM/BIA Bond No. on file NMB000412
21 Elevations (Show whether DF, KDB, RT, GL, etc) 3671' GL	22 Approximate date work will start* 09/06/2008	23 Estimated duration 15 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 08/06/2008
Title Land Department		
Approved by (Signature) <i>/s/ Don Peterson</i>	Name (Printed/Typed) Don Peterson	Date SEP 12 2008
Title FIELD MANAGER		
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.

APPROVAL FOR TWO YEARS

Title 18 USC Section 1001 and Title 43 USC 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

*(Instructions on page 2)

ROSWELL CONTROLLED WATER BASIN
SEE ATTACHED FOR
CONDITIONS OF APPROVALAPPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

FINDER

ENERGY SERVICES

TOOL RUN SUMMARY

CLIENT:	MARBOB ENERGY		DATE EQUIP SHIPPED:	21-Nov-2008		TOOL TYPE:	HDS1R	
WELL:	LOCO FEDERAL #7-ST1		DATE CREW OUT:	21-Nov-2008		JOB NUMBER:	101008069 WT-WT	
LOCATION:	EDDY COUNTY, NM		DATE JOB COMPLETED:	12-Dec-2008		M/LWD ENGINEERS:	J. GARAY	
RIG:	PERMIAN #4		DATE EQUIP RETURNED:	12-Dec-2008		DIRECTIONAL CO.:	HFINDER ENERGY SERV	

RUN NUMBER	1	2	3	4	5				
DATE BELOW ROTARY TABLE	22-Nov-2008	30-Nov-2008	30-Nov-2008	03-Dec-2008	08-Dec-2008				
TIME BELOW ROTARY TABLE	08:30	13:00	21:15	13:15	10:45				
DATE ABOVE ROTARY TABLE	28-Nov-2008	30-Nov-2008	02-Dec-2008	08-Dec-2008	12-Dec-2008				
TIME ABOVE ROTARY TABLE	23:59	20:30	13:45	09:30	17:00				
HOURS BRT	159.48	7.50	40.50	116.25	102.25				
HOURS CIRCULATING	60.80	0.90	24.70	104.00	90.90				
DEPTH IN HOLE	4080	3800	3810	3820	5032				
DEPTH OUT HOLE	4510	3810	3820	5032	6290				
MAX TVD	4460	N/A	3773	4976	6288				
COLLAR SIZE	6.50	6.50	6.50	6.50	6.50				
COLLAR SERIAL No.	B65L033L	1375502	1375502	1375502	1375502				
MULESHOE SUB No. / ORIFICE No.									
DTA No.	HDS1M								
DTA No.	CWR								
DTA No.	DNSC								
DTA No.	DPM								
DTA No.	ABS								
DTA No.	AWR								
TOOL TYPE(S) IN HOLE:	HDS1R	HDS1R	HDS1R	HDS1R	HDS1R				
Serial No.	Pulser	TT- 0371B	TT- 0189B	TT- 0189B	TT-0117B	TT-0117B			
Serial No.	TCM / TrkrElec	TCM-0798	TCM-0308	TCM-0308	TCM-0516	TCM-0516			
Serial No.	BMS / TrkrBat	BMS-5468	BMS-5398	BMS-5398	BMS-0033	BMS-5398			
Serial No.	HDAS	HDAS-5725	HDAS-5755	HDAS-5755	HDAS-5402	HDAS-5402			
Serial No.	UGS								
Serial No.	HTC								
Serial No.	Datalink								
BATTERY LIFE (Start) AHrs Used	6.7 / .3	15.0 / 0.0	15.4 / 1.0	17.0 / 0.1	16.6 / 3.6				
BATTERY LIFE (Finish) AHrs Used	UNKNOWN	15.4 / 1.0	16.6 / 3.6	23.8 / 13.6	20.5 / 15.9				
TFO CALCULATED (by tool)	227.15	289.34	289.34	8.21	7.14				
OTF MEASURED (# and Initial)	0	0	0	0	0				
MUD WEIGHT (PPG)	10.0	N/A	9.7	10.1	10.4				
MUD TYPE:	WATER	WATER	WATER	WATER	WATER				
MUD SOLIDS (%)	0.2	N/A	0.4	0.8	1				
FLOW RATE (GPM)	300	300	300	300	300				
PULSE SIZE (PSI)	28.2	0	70.6	24.1	33.7				
MAX TEMP (DEG F)	32	N/A	26	36	38				
MAX VIBRATION	500	N/A	350	500	500				
MAX INCLINATION	4	N/A	3	4	1				
PROTOTYPE EQUIPMENT	NO	NO	NO	NO	NO				
M/LWD PROBLEMS	NO	HDS1R	NO	NO	NO				
TRIP or WIRELINE:	NO	T	NO	NO	NO				
LOST RIG TIME (Hrs)	0.0	7.5	0.0	0.0	0.0				

RUN	1	GOOD MWD RUN. MWD LOST IN HOLE	POOH FOR:	STUCK IN HOLE
RUN	2	HAD TO TRIP FOR MWD TO INSERT ORIFICE PROPERLY	POOH FOR:	ORIFICE
RUN	3	GOOD MWD RUN. TRIP OUT DUE TO STUCK IN HOLE. WILL PICK UP HEAVY WEIGHT AND GO BACK IN.	POOH FOR:	STUCK IN HOLE
RUN	4	GOOD MWD RUN. TRIP FOR BIT. CHANGED BMS AS WELL	POOH FOR:	BIT
RUN	5	GOOD MWD RUN.	POOH FOR:	REACHED TD
RUN			POOH FOR:	
RUN			POOH FOR:	
RUN			POOH FOR:	
RUN			POOH FOR:	

WELL SUMMARY	TOTAL RUNS	TOTAL HRS BRT	TOTAL HRS CIRC	TOTAL FOOTAGE	TOTAL MWD FAILURES	TOTAL TRIPS FOR MWD	TOTAL LOST TIME	PAGE 1
	5	425.98	281.30	2920	1	1	7.50	