



UNITED STATES
DEPARTMENT OF THE INTERIOR **OCD-ARTESIA**
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No 1004-0135
Expires March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1 Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2 Name of Operator

Mack Energy Corporation

3 Address and Telephone No

P.O. Box 960 Artesia, NM 88211-0960 (505)748-1288

4 Location of Well (Footage, Sec, T R., M or Survey Description)

SHL 2248 FNL & 763 FEL, Sec. 6 T16S R29E
BHL 2238 FNL & 2300 FEL, Sec. 6 T16S R29E

OCT 02 2007

OCD-ARTESIA

5 Lease Designation and Serial No

NM-98171

6 If Indian, Allottee or Tribe Name

7 If Unit or CA, Agreement Designation

8. Well Name and No

Bears Federal #2

9 API Well No

30-015-35769

10 Field and Pool, or Exploratory Area

Ishee Lake; San Andres

11 County or Parish, State

Eddy, NM

12 CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

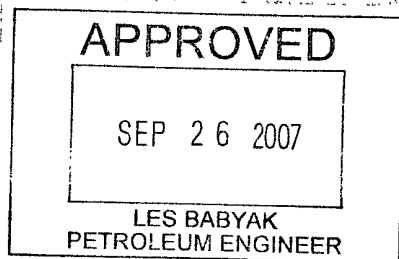
TYPE OF ACTION

☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☐ Other Drill Horizontal
☒ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water

(Note Report results of multiple completion on Well Completion or Recompletion Report and Log form)

13 Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work)*

Mack Energy Corporation is changing the proposed formation and drilling this well horizontal. All surface, BOP, and casing specifications will remain the same. 5 1/2 production string will be run to a TD of 3875'. No pits will be constructed at this location, this well will be drilled using a closed loop system.



14 I hereby certify that the foregoing is true and correct

Signed Jimmy W. Shenall

Title Production Clerk

Date 9/20/07

(This space for Federal or State office use)

Approved by _____
Conditions of approval, if any

Title _____

Date _____

Title 18 U S C Section 1001, makes 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

•See Instruction on Reverse Side

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 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 30-015-35769	Pool Code 97628	Pool Name Ishee Lake; San Andres
Property Code 36305	Property Name BEARS FEDERAL	Well Number 2
OGRID No. 013837	Operator Name MACK ENERY COPORATION	Elevation 3601'

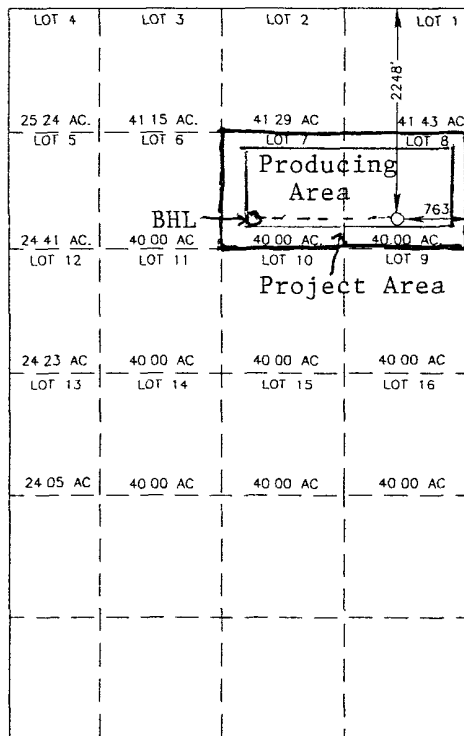
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
8	6	16-S	29-E		2248	NORTH	763	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
7	6	16S	29E		2235	North	2300	East	Eddy
Dedicated Acres 80	Joint or Infill	Consolidation Code	Order No.						

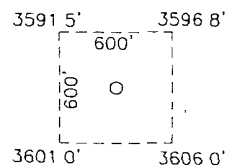
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



GEODETIC COORDINATES
NAD 27 NME

Y=712702.6 N
X=569230.3 E

LAT = 32.959088° N
LONG = 104.107625° 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.

Jerry W. Sherrell 9/20/07
Signature Date

Jerry W. Sherrell
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: JUNE 27, 2007 LA
Signature & Seal of Professional Surveyor

Ronald J. Eidson 7/05/07
7/05/07

Certificate No GARY EIDSON 12641
RONALD EIDSON 3239



Mack Energy Corp.

Eddy County, NM (NAD 27 NME)

Bears Federal #2H

Bears Federal #2H

Wellbore #1

Plan: Plan #1

Standard Planning Report

19 September, 2007





Scientific Drilling
Planning Report



Database:	EDM 2003.16 Single User Db	Local Co-ordinate Reference:	Well Bears Federal #2H
Company:	Mack Energy Corp	TVD Reference:	WELL @ 3617 00ft (KB Elev)
Project:	Eddy County, NM (NAD 27 NME)	MD Reference:	WELL @ 3617 00ft (KB Elev)
Site:	Bears Federal #2H	North Reference:	Grid
Well:	Bears Federal #2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Project:	Eddy County, NM (NAD 27 NME)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site:	Bears Federal #2H		
Site Position:		Northing:	712,702 60 ft
From:	Map	Easting:	569,230 30 ft
Position Uncertainty:	0 00 ft	Slot Radius:	ft
		Latitude:	32° 57' 32.716 N
		Longitude:	104° 6' 27.451 W
		Grid Convergence:	0 12 °

Well:	Bears Federal #2H		
Well Position	+N/-S	0 00 ft	Northing:
	+E/-W	0 00 ft	Easting:
Position Uncertainty	0 00 ft	Wellhead Elevation:	3,617 00 ft
		Ground Level:	0 00 ft
		Latitude:	32° 57' 32.716 N
		Longitude:	104° 6' 27.451 W

Wellbore:	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
	IGRF200510	9/19/2007	8 33
			Dip Angle
			60 87
			Field Strength
			49,420

Design:	Plan #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0 00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0 00	0 00	0 00
			Direction
			270 37

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)	(°)	
0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
2,065 00	0 00	0 00	2,065 00	0 00	0 00	0 00	0 00	0 00	0 00	
2,828 81	91 66	270 37	2,542 26	3 20	-491 27	12.00	12 00	-11 73	270 37	
3,875 01	91 66	270 37	2,512 00	10 00	-1,537.00	0 00	0 00	0 00	0 00	PBHL- Bears Fed #2H



Scientific Drilling
Planning Report



Database:	EDM 2003 16 Single User Db	Local Co-ordinate Reference:	Well Bears Federal #2H
Company:	Mack Energy Corp.	TVD Reference:	WELL @ 3617 00ft (KB Elev)
Project:	Eddy County, NM (NAD 27 NME)	MD Reference:	WELL @ 3617.00ft (KB Elev)
Site:	Bears Federal #2H	North Reference:	Grid
Well:	Bears Federal #2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
South HL - Bears Fed #2H - West HL - Bears Fed #2H									
2,065 00	0 00	0 00	2,065 00	0 00	0 00	0 00	0 00	0 00	0 00
KOP 2065' Start 12.0°/100'									
2,100 00	4 20	270 37	2,099 97	0 01	-1 28	1 28	12 00	12 00	0 00
2,200 00	16 20	270 37	2,198 21	0 12	-18 96	18 96	12 00	12 00	0 00
2,300 00	28 20	270 37	2,290 63	0 37	-56 67	56 67	12 00	12 00	0 00
2,400 00	40 20	270 37	2,373 18	0 73	-112 78	112 78	12 00	12 00	0 00
2,500 00	52 20	270 37	2,442 27	1 20	-184 82	184 82	12 00	12 00	0 00
2,600 00	64 20	270 37	2,494 87	1 75	-269 65	269 66	12 00	12 00	0 00
2,700 00	76 20	270 37	2,528 68	2 37	-363 57	363 57	12 00	12 00	0 00
2,800 00	88 20	270 37	2,542 23	3 01	-462 46	462 47	12 00	12 00	0 00
2,828 81	91 66	270 37	2,542 27	3 20	-491 26	491 27	12 00	12 00	0 00
EOC hold 91.66°									
2,900 00	91 66	270 37	2,540 21	3 66	-562 42	562 43	0 00	0 00	0 00
3,000 00	91 66	270 37	2,537 31	4 31	-662 38	662 39	0 00	0 00	0 00
3,100 00	91 66	270 37	2,534 42	4 96	-762 33	762 35	0 00	0 00	0 00
3,200 00	91 66	270 37	2,531 53	5 61	-862 29	862 31	0 00	0 00	0 00
3,300 00	91 66	270 37	2,528 63	6 26	-962 25	962 27	0 00	0 00	0 00
3,400 00	91 66	270 37	2,525 74	6 91	-1,062 20	1,062 22	0 00	0 00	0 00
3,500 00	91 66	270 37	2,522 85	7 56	-1,162 16	1,162 18	0 00	0 00	0 00
3,600 00	91 66	270 37	2,519 96	8 21	-1,262 11	1,262 14	0 00	0 00	0 00
3,700 00	91 66	270 37	2,517 06	8 86	-1,362 07	1,362 10	0 00	0 00	0 00
3,800 00	91 66	270 37	2,514 17	9 51	-1,462 03	1,462 06	0 00	0 00	0 00
3,875 01	91 66	270 37	2,512 00	10 00	-1,537 00	1,537 03	0 00	0 00	0 00
PBHL- Bears Fed #2H									

Target Name	hit/miss target	Dip Angle (°)	Dip Dir (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
West HL - Bears Fed #2	- plan misses by 1547 00ft at 0 00ft MD (0 00 TVD, 0 00 N, 0 00 E)	0 00	0 00	0 00	0 00	-1,547 00	712,702 60	567,683 30	32° 57' 32 749 N	104° 6' 45 608 W
	- Rectangle (sides W2,000 00 H0 00 D0 00)									
PBHL- Bears Fed #2H	- plan hits target	0 00	0 00	2,512 00	10 00	-1,537 00	712,712 60	567,693 30	32° 57' 32 848 N	104° 6' 45 490 W
	- Circle (radius 10 00)									
South HL - Bears Fed #2	- plan misses by 1547 00ft at 0 00ft MD (0 00 TVD, 0 00 N, 0 00 E)	0 00	0 00	0 00	0 00	-1,547 00	712,702 60	567,683 30	32° 57' 32 749 N	104° 6' 45 608 W
	- Rectangle (sides W0 00 H2,000 00 D0 00)									

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
2,065 00	2,065 00	0 00	0 00	KOP 2065' Start 12 0°/100'
2,828 81	2,542 27	3 20	-491 26	EOC hold 91 66°



Scientific Drilling for Mack Energy Corp.
Site: Eddy County, NM (NAD 27 NME)
Well: Bears Federal #2H
Wellbore: Wellbore #1
Design: Plan #1

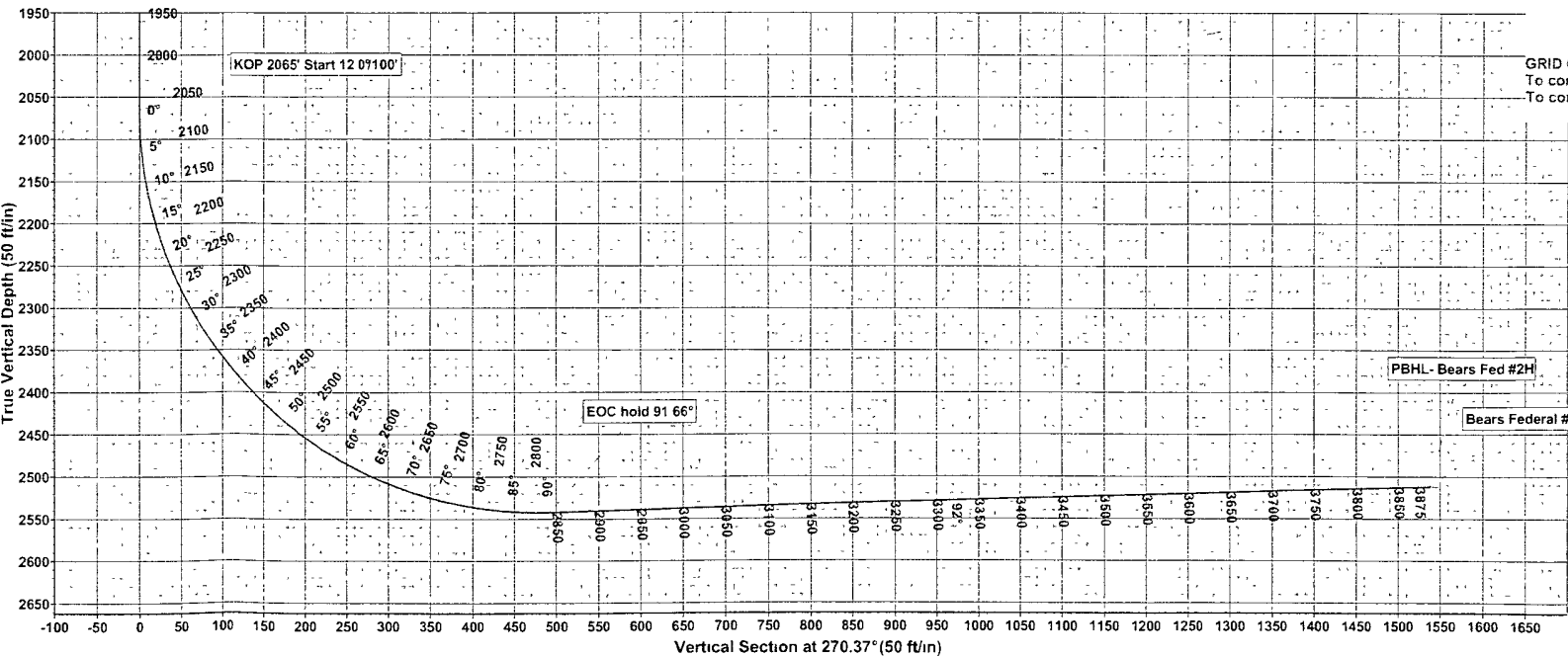
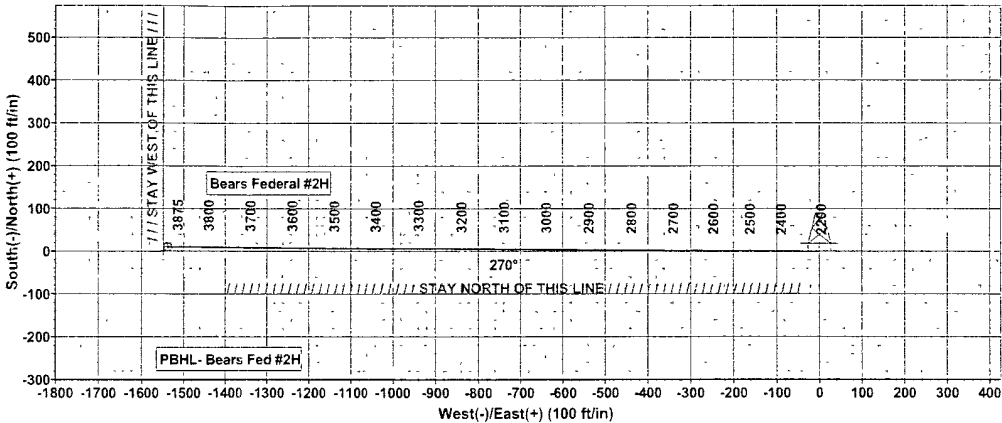


SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	2065.00	0.00	0.00	2065.00	0.00	0.00	0.00	0.00	0.00	
3	2828.81	91.66	270.37	2542.26	3.20	-491.27	12.00	270.37	491.28	
4	3875.01	91.66	270.37	2512.00	10.00	-1537.00	0.00	0.00	1537.03	PBHL- Bears Fed #2H

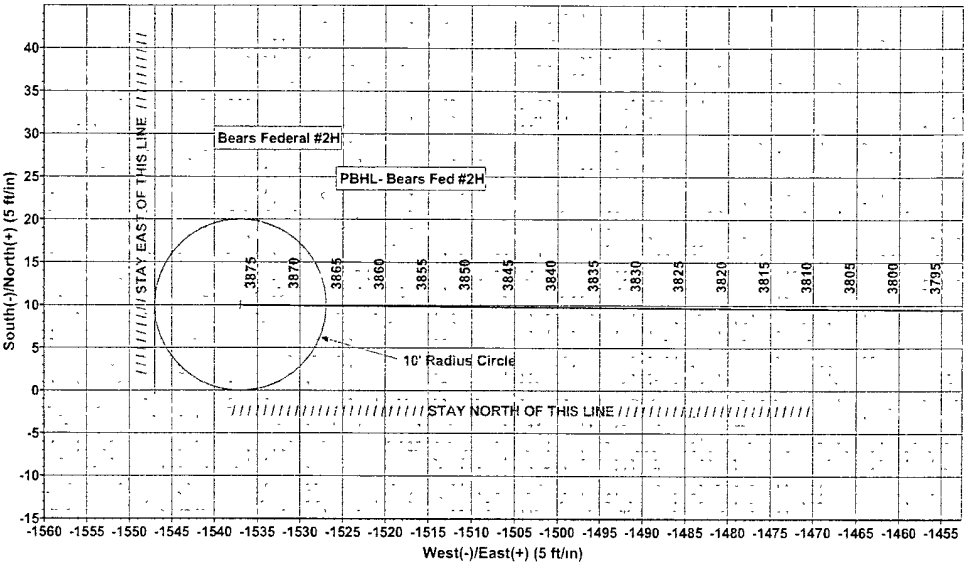
WELL DETAILS: Bears Federal #2H

+N/-S	+E/-W	Northing	Ground Level	Easting	0.00	Latitude	Longitude	Slot
0.00	0.00	712702.60		569230.30		32°57' 32.716 N	104°6' 27.451 W	

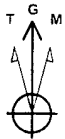


WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
South HL - Bears Fed #2H	0.00	0.00	-1547.00	712702.60	567683.30	32°57' 32.749 N	104°6' 45.608 W	Rectangle (Sides L0.00 W2000.00)
West HL - Bears Fed #2H	0.00	0.00	-1547.00	712702.60	567683.30	32°57' 32.749 N	104°6' 45.608 W	Rectangle (Sides L2000.00 W0.00)
PBHL- Bears Fed #2H	2512.00	10.00	-1537.00	712712.60	567693.30	32°57' 32.848 N	104°6' 45.490 W	Circle (Radius 10.00)



AZIMUTH CORRECTIONS
ALL AZIMUTHS MUST BE CORRECTED TO GRID
GRID CORRECTIONS MUST BE APPLIED BEFORE PLOTTING
To convert a Magnetic Direction to a Grid Direction, Add 8.20°
To convert a True Direction to a Grid Direction, Subtract 0.12°



Azimuths to Grid North
True North: 0.12°
Magnetic North: 8.20°

Magnetic Field
Strength 49420 1snT
Dip Angle 60.87°
Date 9/19/2007
Model IGRF200510

PROJECT DETAILS Eddy County, NM (NAD 27 NME)

Geodetic System US State Plane 1927 (Exact solution)
Datum NAD 1927 (NADCON CONUS)
Ellipsoid Clarke 1866
Zone New Mexico East 3001
System Datum Mean Sea Level

Plan Plan #1 (Bears Federal #2H/Wellbore #1)

Created By Julio Pina Date 19-Sep-07
Checked _____ Date _____
Reviewed _____ Date _____
Approved _____ Date _____