

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an
abandoned well. Use form 3160-3 (APD) for such proposals.*5. Lease Serial No.
NMLC064827A

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on reverse side.7. If Unit or CA/Agreement, Name and/or No.
891000558X

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other8. Well Name and No.
JAMES RANCH UNIT DI 1 162H2. Name of Operator
BOPCO LPContact: WHITNEY MCKEE
E-Mail: wbmckee@basspet.com9. API Well No.
30-015-42615-00-X13a. Address
P O BOX 2760
MIDLAND, TX 797023b. Phone No. (include area code)
Ph: 432-683-2277

10. Field and Pool, or Exploratory

UNDESIGNATED
WILDCAT G-07 S2230216.BS

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

Sec 21 T22S R30E SWNE 1433FNL 1432FEL
32.225136 N Lat, 103.525455 W Lon

11. County or Parish, and State

EDDY COUNTY, NM

<97905>

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Change to Original A
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	PD

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

BOPCO, L.P. respectfully requested to change the surface hole location to 1,433? FNL & 1,432? FEL, Sec. 21, T22S-R30E. This will allow us to optimize wellhead placement within the pre-cast concrete cellar system. We would also like to alter the proposed bottom hole location and shorten the lateral to 660? FNL & 2,310? FWL, Sec. 23, T22S-R30E. Devon will be drilling from the east to pick up the originally planned proration units that will be left out on this shortened lateral.

Accepted for record
NMOCD 105
11-4-2014

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #274685 verified by the BLM Well Information System

For BOPCO LP, sent to the Carlsbad

Committed to AFMSS for processing by CHRISTOPHER WALLS on 10/29/2014 (15CRW0020SE)

Name (Printed/Typed) CHRISTOPHER GIESE

Title DRILLING ENGINEER

Signature (Electronic Submission)

Date 10/29/2014

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By JAMES A AMOS

Title SUPERVISORY PET

Date 10/30/2014

Conditions of approval, if any, are attached. Approval of this notice 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.

Office Carlsbad

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.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone (575) 393-0161 Fax: (575) 393-0720

DISTRICT II
811 S. First St., Artesia, NM 88210
Phone (575) 740-1283 Fax: (575) 740-0780

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone (505) 334-6178 Fax: (505) 334-5170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3400 Fax: (505) 476-3402

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 August 1, 2011

Submit one copy to appropriate
District Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-42615	Pool Code 97905	Well Name WCG-07 S2230216; B.S. UNDESIGNATED (BONE SPRING)
Property Code 306407	Property Name JAMES RANCH UNIT D11	Well Number 162H
GRID No. 260737	Operator Name BOPCO, L.P.	Elevation 3165'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	21	22 S	30 E		1433	NORTH	1432	EAST	EDDY

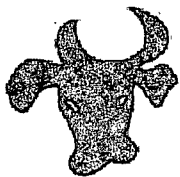
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	23	22 S	30 E		660	NORTH	2310	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
280			

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

N: 504002.6 E: 635476.1 NAD 27				N: 504007.1 E: 640837.4 NAD 27				N: 504018.2 E: 646189.9 NAD 27				N: 504025.0 E: 648871.9 NAD 27				N: 504030.3 E: 651550.9 NAD 27			
N: 501387.7 E: 640843.9 NAD 27																			
N: 501390.4 E: 646190.0 NAD 27																			
N: 501392.0 E: 651847.7 NAD 27																			
N: 498722.8 E: 635489.9 NAD 27				N: 498731.2 E: 640852.0 NAD 27				N: 498741.3 E: 646195.4 NAD 27				N: 498748.4 E: 648866.9 NAD 27				N: 498752.0 E: 651544.7 NAD 27			
SURFACE LOCATION Lat - N 32°22'51.16" Long - W 103°52'54.28" NAD 27 NADSPCE- E 639408.8 (NAD-27)																			
PROPOSED BOTTOM HOLE LOCATION Lat - N 32°22'58.60" Long - W 103°51'08.23" NADSPCE- N 503364.1 E 648499.9 (NAD-27)																			
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 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. Signature: Whitney McKee Printed Name: mcwhit29@yahoo.com Email Address: mcwhit29@yahoo.com Date: 10/26/14																			
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: 10/26/14 Signature: [Signature] Professional Surveyor: 7977 Certificate: [Signature] BASIN SURVEYS																			
0' 1500' 3000' 4500' 6000' SCALE: 1" = 3000' WO Num: D11-Well-Plats																			

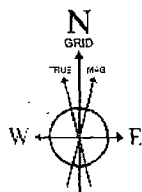
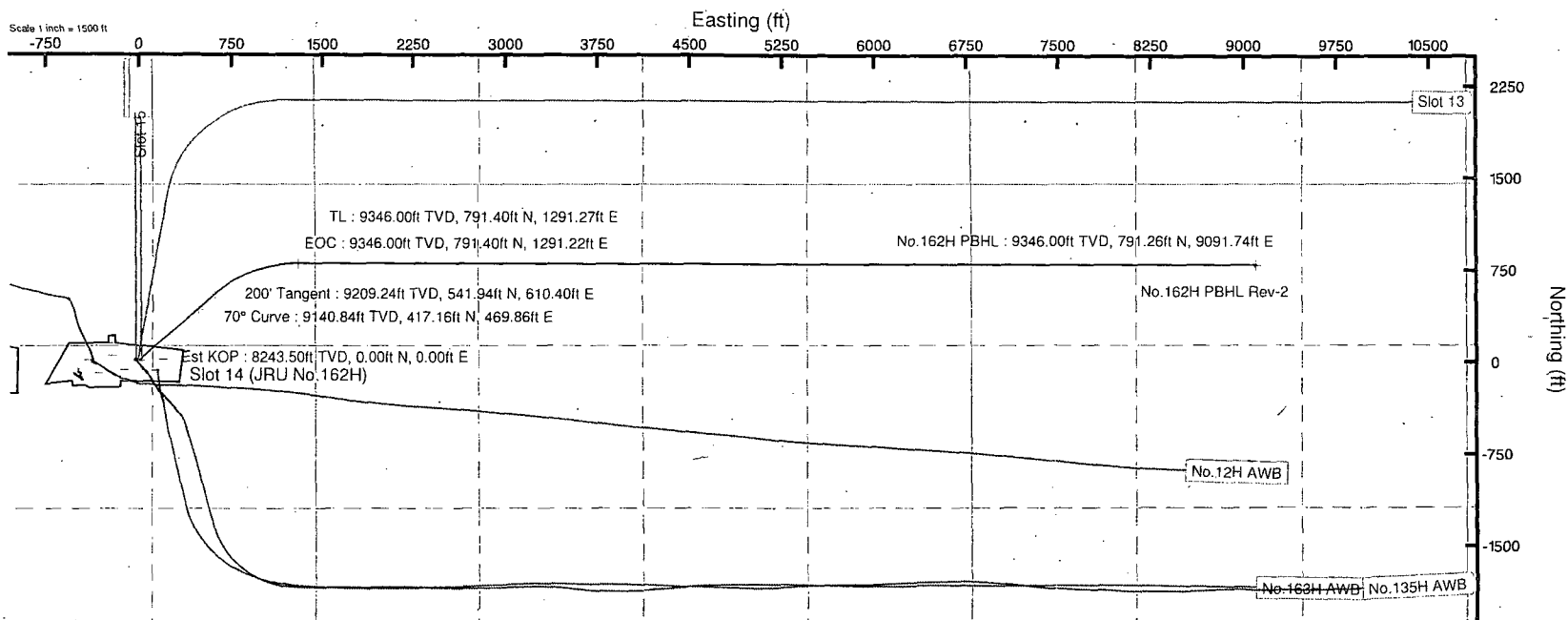


WTD - West Texas Division

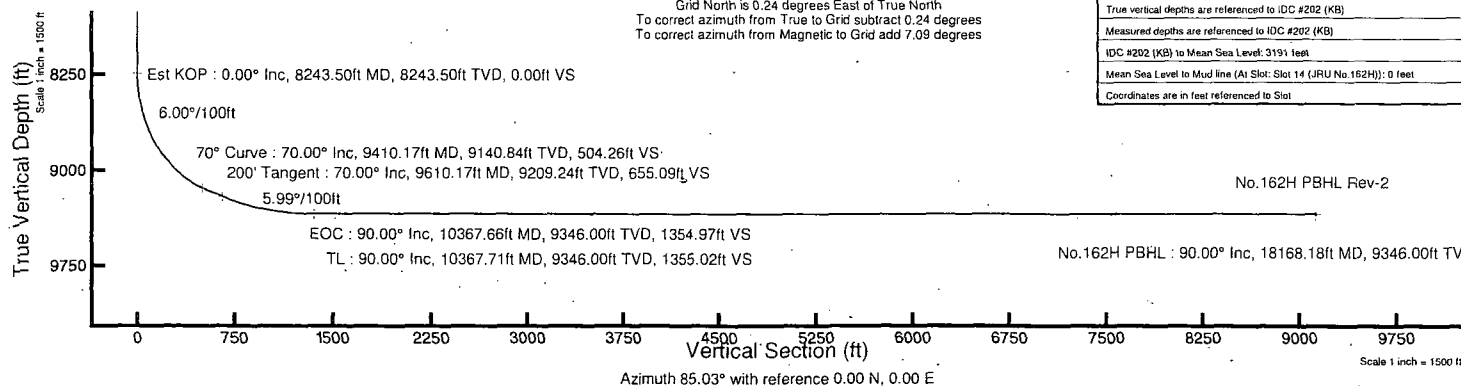
Location: Eddy County, NM
Field: James Ranch Unit
Facility: Drilling Island 1

Slot: Slot 14 (JRU No.162H)
Well: No.162H
Wellbore: No.162H PWB

BOPCO, L.P.



IGRF-11 (1900.0 thru 2014.0) Dip: 60.20° Field: 48342.4 nT
Magnetic North is 7.33 degrees East of True North (at 10/29/2014)
Grid North is 0.24 degrees East of True North
To correct azimuth from True to Grid subtract 0.24 degrees
To correct azimuth from Magnetic to Grid add 7.09 degrees



Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	26.00	0.000	48.400	26.00	0.00	0.00	0.00	0.00
Est KOP	8243.50	0.000	48.400	8243.50	0.00	0.00	0.00	0.00
70° Curve	9410.17	70.000	48.400	9140.84	417.16	469.86	6.00	504.26
200' Tangent	9610.17	70.000	48.400	9209.24	541.94	610.40	0.00	655.09
EOC	10367.66	90.000	90.000	9346.00	791.40	1291.22	5.99	1354.97
TL	10367.71	90.000	90.001	9346.00	791.40	1291.27	2.00	1355.02
No.162H PBHL	18168.18	90.000	90.001	9346.00	791.26	9091.74	0.00	9126.11

Plot reference wellpath is B-4	
True vertical depths are referenced to IDC #202 (KB)	Grid System: NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet
Measured depths are referenced to IDC #202 (KB)	North Reference: Grid north
IDC #202 (KB) to Mean Sea Level: 3191 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: Slot 14 (JRU No.162H)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: BWGentry on 10/29/2014



Planned Wellpath Report

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BOPCO, L.P.

REFERENCE WELLPATH IDENTIFICATION

Operator	WTD - West Texas Division	Slot	Slot 14 (JRU No.162H)
Area	Eddy County, NM	Well	No.162H
Field	James Ranch Unit	Wellbore	No.162H PWB
Facility	Drilling Island 1		

REPORT SETUP INFORMATION

Projection System	NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect® 4.0.1
North Reference	Grid	User	BWGentry
Scale	0.999931	Report Generated	10/29/2014 at 9:39:47 AM
Convergence at slot	0.24° East	Database/Source file	WellArchitectDB/No.162H_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	17.80	388.75	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W
Facility Reference Pt			639020.08	502555.10	32°22'51.004"N	103°52'58.816"W
Field Reference Pt			639020.08	502555.11	32°22'51.004"N	103°52'58.816"W

WELLPATH DATUM

Calculation method	Minimum curvature	IDC #202 (KB) to Facility Vertical Datum	3191.00ft
Horizontal Reference Pt	Slot	IDC #202 (KB) to Mean Sea Level	3191.00ft
Vertical Reference Pt	IDC #202 (KB)	IDC #202 (KB) to Mud Line at Slot (Slot 14 (JRU No.162H))	3191.00ft
MD Reference Pt	IDC #202 (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	85.03°



Planned Wellpath Report

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BOPCO, L.P.

REFERENCE WELLPATH IDENTIFICATION			
Operator	WTD - West Texas Division	Slot	Slot 14 (JRU No.162H)
Area	Eddy County, NM	Well	No.162H
Field	James Ranch Unit	Wellbore	No.162H PWB
Facility	Drilling Island 1		

WELLPATH DATA (197 stations) 1 = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	48.400	0.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
26.00	0.000	48.400	26.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	Tie On
126.00†	0.000	48.400	126.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
191.00†	0.000	48.400	191.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	Rustler
226.00†	0.000	48.400	226.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
326.00†	0.000	48.400	326.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
426.00†	0.000	48.400	426.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
526.00†	0.000	48.400	526.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
556.00†	0.000	48.400	556.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	Salado
626.00†	0.000	48.400	626.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
726.00†	0.000	48.400	726.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
826.00†	0.000	48.400	826.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
926.00†	0.000	48.400	926.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
1026.00†	0.000	48.400	1026.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
1126.00†	0.000	48.400	1126.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
1226.00†	0.000	48.400	1226.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
1326.00†	0.000	48.400	1326.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
1426.00†	0.000	48.400	1426.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
1526.00†	0.000	48.400	1526.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
1626.00†	0.000	48.400	1626.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
1726.00†	0.000	48.400	1726.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
1826.00†	0.000	48.400	1826.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
1926.00†	0.000	48.400	1926.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
2026.00†	0.000	48.400	2026.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
2126.00†	0.000	48.400	2126.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
2226.00†	0.000	48.400	2226.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
2326.00†	0.000	48.400	2326.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
2426.00†	0.000	48.400	2426.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
2526.00†	0.000	48.400	2526.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
2626.00†	0.000	48.400	2626.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
2726.00†	0.000	48.400	2726.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
2826.00†	0.000	48.400	2826.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
2926.00†	0.000	48.400	2926.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
3026.00†	0.000	48.400	3026.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
3126.00†	0.000	48.400	3126.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
3226.00†	0.000	48.400	3226.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
3326.00†	0.000	48.400	3326.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
3426.00†	0.000	48.400	3426.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
3526.00†	0.000	48.400	3526.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
3536.00†	0.000	48.400	3536.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	Samar
3581.00†	0.000	48.400	3581.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	Delaware Sands
3626.00†	0.000	48.400	3626.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
3726.00†	0.000	48.400	3726.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
3826.00†	0.000	48.400	3826.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
3926.00†	0.000	48.400	3926.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	



Planned Wellpath Report

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BOPCO, L.P.

REFERENCE WELLPATH IDENTIFICATION			
Operator	WTD - West Texas Division	Slot	Slot 14 (JRU No.162H)
Area	Eddy County, NM	Well	No.162H
Field	James Ranch Unit	Wellbore	No.162H PWB
Facility	Drilling Island 1		

WELLPATH DATA (197 stations) = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4026.00†	0.000	48.400	4026.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
4126.00†	0.000	48.400	4126.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
4226.00†	0.000	48.400	4226.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
4326.00†	0.000	48.400	4326.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
4426.00†	0.000	48.400	4426.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
4526.00†	0.000	48.400	4526.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
4626.00†	0.000	48.400	4626.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
4726.00†	0.000	48.400	4726.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
4826.00†	0.000	48.400	4826.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
4926.00†	0.000	48.400	4926.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
5026.00†	0.000	48.400	5026.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
5126.00†	0.000	48.400	5126.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
5226.00†	0.000	48.400	5226.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
5326.00†	0.000	48.400	5326.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
5426.00†	0.000	48.400	5426.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
5526.00†	0.000	48.400	5526.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
5626.00†	0.000	48.400	5626.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
5726.00†	0.000	48.400	5726.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
5826.00†	0.000	48.400	5826.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
5926.00†	0.000	48.400	5926.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
6026.00†	0.000	48.400	6026.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
6126.00†	0.000	48.400	6126.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
6226.00†	0.000	48.400	6226.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
6326.00†	0.000	48.400	6326.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
6426.00†	0.000	48.400	6426.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
6526.00†	0.000	48.400	6526.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
6626.00†	0.000	48.400	6626.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
6726.00†	0.000	48.400	6726.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
6826.00†	0.000	48.400	6826.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
6926.00†	0.000	48.400	6926.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
7026.00†	0.000	48.400	7026.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
7104.00†	0.000	48.400	7104.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	Lower Brushy Canyon
7126.00†	0.000	48.400	7126.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
7226.00†	0.000	48.400	7226.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
7326.00†	0.000	48.400	7326.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
7384.00†	0.000	48.400	7384.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	Bone Spring
7426.00†	0.000	48.400	7426.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
7526.00†	0.000	48.400	7526.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
7626.00†	0.000	48.400	7626.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
7726.00†	0.000	48.400	7726.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
7826.00†	0.000	48.400	7826.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
7926.00†	0.000	48.400	7926.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
8026.00†	0.000	48.400	8026.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
8126.00†	0.000	48.400	8126.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	
8226.00†	0.000	48.400	8226.00	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	



Planned Wellpath Report

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BOPCO, L.P.

REFERENCE WELLPATH IDENTIFICATION			
Operator	WTD - West Texas Division	Slot	Slot 14 (JRU No.162H)
Area	Eddy County, NM	Well	No.162H
Field	James Ranch Unit	Wellbore	No.162H PWB
Facility	Drilling Island 1		

WELLPATH DATA (197 stations) † = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8243.50	0.000	48.400	8243.50	0.00	0.00	0.00	639408.80	502572.90	32°22'51.164"N	103°52'54.283"W	0.00	Est KOP
8326.00†	4.950	48.400	8325.90	2.86	2.36	2.66	639411.46	502575.26	32°22'51.187"N	103°52'54.251"W	6.00	
8388.56†	8.703	48.400	8388.00	8.82	7.30	8.22	639417.02	502580.20	32°22'51.236"N	103°52'54.186"W	6.00	Bone Spring 1 Sand
8426.00†	10.950	48.400	8424.89	13.95	11.54	13.00	639421.80	502584.44	32°22'51.278"N	103°52'54.130"W	6.00	
8526.00†	16.950	48.400	8521.90	33.29	27.54	31.02	639439.82	502600.44	32°22'51.435"N	103°52'53.919"W	6.00	
8626.00†	22.950	48.400	8615.85	60.66	50.18	56.52	639465.32	502623.08	32°22'51.658"N	103°52'53.621"W	6.00	
8726.00†	28.950	48.400	8705.73	95.76	79.22	89.23	639498.03	502652.12	32°22'51.944"N	103°52'53.238"W	6.00	
8826.00†	34.950	48.400	8790.54	138.21	114.34	128.79	639537.58	502687.23	32°22'52.290"N	103°52'52.775"W	6.00	
8926.00†	40.950	48.400	8869.36	187.55	155.15	174.75	639583.54	502728.04	32°22'52.692"N	103°52'52.237"W	6.00	
9026.00†	46.950	48.400	8941.32	243.22	201.21	226.63	639635.41	502774.10	32°22'53.146"N	103°52'51.630"W	6.00	
9126.00†	52.950	48.400	9005.64	304.63	252.01	283.84	639692.62	502824.89	32°22'53.646"N	103°52'50.960"W	6.00	
9226.00†	58.950	48.400	9061.60	371.09	306.99	345.77	639754.55	502879.87	32°22'54.187"N	103°52'50.236"W	6.00	
9326.00†	64.950	48.400	9108.61	441.88	365.56	411.74	639820.51	502938.43	32°22'54.764"N	103°52'49.463"W	6.00	
9361.40†	67.074	48.400	9123.00	467.84	387.03	435.93	639844.70	502959.91	32°22'54.976"N	103°52'49.180"W	6.00	Bone Spring 2 A Sand
9410.17	70.000	48.400	9140.84	504.26	417.16	469.86	639878.63	502990.03	32°22'55.272"N	103°52'48.783"W	6.00	70° Curve
9426.00†	70.000	48.400	9146.26	516.20	427.04	480.99	639889.75	502999.91	32°22'55.370"N	103°52'48.653"W	0.00	
9526.00†	70.000	48.400	9180.46	591.61	489.43	551.26	639960.02	503062.29	32°22'55.984"N	103°52'47.830"W	0.00	
9610.17	70.000	48.400	9209.24	655.09	541.94	610.40	640019.16	503114.80	32°22'56.501"N	103°52'47.138"W	0.00	200' Tangent
9626.00†	70.343	49.339	9214.62	667.11	551.74	621.62	640030.37	503124.60	32°22'56.598"N	103°52'47.007"W	5.99	
9726.00†	72.619	55.181	9246.40	746.82	609.71	696.58	640105.33	503182.57	32°22'57.168"N	103°52'46.130"W	5.99	
9826.00†	75.060	60.874	9274.25	832.37	660.52	778.03	640186.77	503233.37	32°22'57.667"N	103°52'45.178"W	5.99	
9926.00†	77.638	66.436	9297.87	922.82	703.60	865.08	640273.82	503276.45	32°22'58.090"N	103°52'44.161"W	5.99	
10026.00†	80.328	71.887	9316.99	1017.20	738.48	956.78	640365.51	503311.33	32°22'58.431"N	103°52'43.090"W	5.99	
10126.00†	83.101	77.250	9331.41	1114.47	764.78	1052.12	640460.85	503337.63	32°22'58.688"N	103°52'41.976"W	5.99	
10226.00†	85.934	82.550	9340.97	1213.57	782.22	1150.08	640558.80	503355.06	32°22'58.856"N	103°52'40.833"W	5.99	
10326.00†	88.801	87.813	9345.56	1313.42	790.60	1249.58	640658.29	503363.45	32°22'58.935"N	103°52'39.673"W	5.99	
10367.66	90.000	90.000	9346.00	1354.97	791.40	1291.22	640699.93	503364.24	32°22'58.941"N	103°52'39.187"W	5.99	EOC
10367.71	90.000	90.001	9346.00	1355.02	791.40	1291.27	640699.98	503364.24	32°22'58.941"N	103°52'39.186"W	2.00	TL
10426.00†	90.000	90.001	9346.00	1413.10	791.40	1349.56	640758.27	503364.24	32°22'58.938"N	103°52'38.507"W	0.00	
10526.00†	90.000	90.001	9346.00	1512.72	791.39	1449.56	640858.26	503364.24	32°22'58.934"N	103°52'37.341"W	0.00	
10626.00†	90.000	90.001	9346.00	1612.34	791.39	1549.56	640958.25	503364.24	32°22'58.930"N	103°52'36.175"W	0.00	
10726.00†	90.000	90.001	9346.00	1711.97	791.39	1649.56	641058.25	503364.23	32°22'58.926"N	103°52'35.009"W	0.00	
10826.00†	90.000	90.001	9346.00	1811.59	791.39	1749.56	641158.24	503364.23	32°22'58.921"N	103°52'33.843"W	0.00	
10926.00†	90.000	90.001	9346.00	1911.21	791.39	1849.56	641258.23	503364.23	32°22'58.917"N	103°52'32.676"W	0.00	
11026.00†	90.000	90.001	9346.00	2010.84	791.39	1949.56	641358.22	503364.23	32°22'58.913"N	103°52'31.510"W	0.00	
11126.00†	90.000	90.001	9346.00	2110.46	791.38	2049.56	641458.22	503364.23	32°22'58.909"N	103°52'30.344"W	0.00	
11226.00†	90.000	90.001	9346.00	2210.08	791.38	2149.56	641558.21	503364.23	32°22'58.904"N	103°52'29.178"W	0.00	
11326.00†	90.000	90.001	9346.00	2309.71	791.38	2249.56	641658.20	503364.22	32°22'58.900"N	103°52'28.012"W	0.00	
11426.00†	90.000	90.001	9346.00	2409.33	791.38	2349.56	641758.20	503364.22	32°22'58.896"N	103°52'26.846"W	0.00	
11526.00†	90.000	90.001	9346.00	2508.95	791.38	2449.56	641858.19	503364.22	32°22'58.892"N	103°52'25.680"W	0.00	
11626.00†	90.000	90.001	9346.00	2608.58	791.37	2549.56	641958.18	503364.22	32°22'58.887"N	103°52'24.514"W	0.00	
11726.00†	90.000	90.001	9346.00	2708.20	791.37	2649.56	642058.18	503364.22	32°22'58.883"N	103°52'23.348"W	0.00	
11826.00†	90.000	90.001	9346.00	2807.82	791.37	2749.56	642158.17	503364.22	32°22'58.879"N	103°52'22.182"W	0.00	
11926.00†	90.000	90.001	9346.00	2907.45	791.37	2849.56	642258.16	503364.21	32°22'58.875"N	103°52'21.016"W	0.00	
12026.00†	90.000	90.001	9346.00	3007.07	791.37	2949.56	642358.15	503364.21	32°22'58.870"N	103°52'19.850"W	0.00	



Planned Wellpath Report

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BOPCO, L.P.

REFERENCE WELLPATH IDENTIFICATION			
Operator	WTD - West Texas Division	Slot	Slot 14 (JRU No.162H)
Area	Eddy County, NM	Well	No.162H
Field	James Ranch Unit	Wellbore	No.162H PWB
Facility	Drilling Island 1		

WELLPATH DATA (197 stations) [-] = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12126.00†	90.000	90.001	9346.00	3106.69	791.37	3049.56	642458.15	503364.21	32°22'58.866"N	103°52'18.684"W	0.00	
12226.00†	90.000	90.001	9346.00	3206.31	791.36	3149.56	642558.14	503364.21	32°22'58.862"N	103°52'17.518"W	0.00	
12326.00†	90.000	90.001	9346.00	3305.94	791.36	3249.56	642658.13	503364.21	32°22'58.857"N	103°52'16.352"W	0.00	
12426.00†	90.000	90.001	9346.00	3405.56	791.36	3349.56	642758.13	503364.20	32°22'58.853"N	103°52'15.186"W	0.00	
12526.00†	90.000	90.001	9346.00	3505.18	791.36	3449.56	642858.12	503364.20	32°22'58.849"N	103°52'14.019"W	0.00	
12626.00†	90.000	90.001	9346.00	3604.81	791.36	3549.56	642958.11	503364.20	32°22'58.845"N	103°52'12.853"W	0.00	
12726.00†	90.000	90.001	9346.00	3704.43	791.35	3649.56	643058.10	503364.20	32°22'58.840"N	103°52'11.687"W	0.00	
12826.00†	90.000	90.001	9346.00	3804.05	791.35	3749.56	643158.10	503364.20	32°22'58.836"N	103°52'10.521"W	0.00	
12926.00†	90.000	90.001	9346.00	3903.68	791.35	3849.56	643258.09	503364.20	32°22'58.832"N	103°52'09.355"W	0.00	
13026.00†	90.000	90.001	9346.00	4003.30	791.35	3949.56	643358.08	503364.19	32°22'58.827"N	103°52'08.189"W	0.00	
13126.00†	90.000	90.001	9346.00	4102.92	791.35	4049.56	643458.08	503364.19	32°22'58.823"N	103°52'07.023"W	0.00	
13226.00†	90.000	90.001	9346.00	4202.55	791.35	4149.56	643558.07	503364.19	32°22'58.819"N	103°52'05.857"W	0.00	
13326.00†	90.000	90.001	9346.00	4302.17	791.34	4249.56	643658.06	503364.19	32°22'58.814"N	103°52'04.691"W	0.00	
13426.00†	90.000	90.001	9346.00	4401.79	791.34	4349.56	643758.05	503364.19	32°22'58.810"N	103°52'03.525"W	0.00	
13526.00†	90.000	90.001	9346.00	4501.42	791.34	4449.56	643858.05	503364.18	32°22'58.806"N	103°52'02.359"W	0.00	
13626.00†	90.000	90.001	9346.00	4601.04	791.34	4549.56	643958.04	503364.18	32°22'58.801"N	103°52'01.193"W	0.00	
13726.00†	90.000	90.001	9346.00	4700.66	791.34	4649.56	644058.03	503364.18	32°22'58.797"N	103°52'00.027"W	0.00	
13826.00†	90.000	90.001	9346.00	4800.29	791.33	4749.56	644158.03	503364.18	32°22'58.793"N	103°51'58.861"W	0.00	
13926.00†	90.000	90.001	9346.00	4899.91	791.33	4849.56	644258.02	503364.18	32°22'58.788"N	103°51'57.695"W	0.00	
14026.00†	90.000	90.001	9346.00	4999.53	791.33	4949.56	644358.01	503364.18	32°22'58.784"N	103°51'56.529"W	0.00	
14126.00†	90.000	90.001	9346.00	5099.16	791.33	5049.56	644458.01	503364.17	32°22'58.780"N	103°51'55.362"W	0.00	
14226.00†	90.000	90.001	9346.00	5198.78	791.33	5149.56	644558.00	503364.17	32°22'58.775"N	103°51'54.196"W	0.00	
14326.00†	90.000	90.001	9346.00	5298.40	791.33	5249.56	644657.99	503364.17	32°22'58.771"N	103°51'53.030"W	0.00	
14426.00†	90.000	90.001	9346.00	5398.03	791.32	5349.56	644757.98	503364.17	32°22'58.767"N	103°51'51.864"W	0.00	
14526.00†	90.000	90.001	9346.00	5497.65	791.32	5449.56	644857.98	503364.17	32°22'58.762"N	103°51'50.698"W	0.00	
14626.00†	90.000	90.001	9346.00	5597.27	791.32	5549.56	644957.97	503364.16	32°22'58.758"N	103°51'49.532"W	0.00	
14726.00†	90.000	90.001	9346.00	5696.90	791.32	5649.56	645057.96	503364.16	32°22'58.754"N	103°51'48.366"W	0.00	
14826.00†	90.000	90.001	9346.00	5796.52	791.32	5749.56	645157.96	503364.16	32°22'58.749"N	103°51'47.200"W	0.00	
14926.00†	90.000	90.001	9346.00	5896.14	791.31	5849.56	645257.95	503364.16	32°22'58.745"N	103°51'46.034"W	0.00	
15026.00†	90.000	90.001	9346.00	5995.77	791.31	5949.56	645357.94	503364.16	32°22'58.740"N	103°51'44.868"W	0.00	
15126.00†	90.000	90.001	9346.00	6095.39	791.31	6049.56	645457.93	503364.16	32°22'58.736"N	103°51'43.702"W	0.00	
15226.00†	90.000	90.001	9346.00	6195.01	791.31	6149.56	645557.93	503364.15	32°22'58.732"N	103°51'42.536"W	0.00	
15326.00†	90.000	90.001	9346.00	6294.64	791.31	6249.56	645657.92	503364.15	32°22'58.727"N	103°51'41.370"W	0.00	
15426.00†	90.000	90.001	9346.00	6394.26	791.31	6349.56	645757.91	503364.15	32°22'58.723"N	103°51'40.204"W	0.00	
15526.00†	90.000	90.001	9346.00	6493.88	791.30	6449.56	645857.91	503364.15	32°22'58.719"N	103°51'39.038"W	0.00	
15626.00†	90.000	90.001	9346.00	6593.51	791.30	6549.56	645957.90	503364.15	32°22'58.714"N	103°51'37.872"W	0.00	
15726.00†	90.000	90.001	9346.00	6693.13	791.30	6649.56	646057.89	503364.14	32°22'58.710"N	103°51'36.705"W	0.00	
15826.00†	90.000	90.001	9346.00	6792.75	791.30	6749.56	646157.89	503364.14	32°22'58.705"N	103°51'35.539"W	0.00	
15926.00†	90.000	90.001	9346.00	6892.38	791.30	6849.56	646257.88	503364.14	32°22'58.701"N	103°51'34.373"W	0.00	
16026.00†	90.000	90.001	9346.00	6992.00	791.29	6949.56	646357.87	503364.14	32°22'58.697"N	103°51'33.207"W	0.00	
16126.00†	90.000	90.001	9346.00	7091.62	791.29	7049.56	646457.86	503364.14	32°22'58.692"N	103°51'32.041"W	0.00	
16226.00†	90.000	90.001	9346.00	7191.25	791.29	7149.56	646557.86	503364.14	32°22'58.688"N	103°51'30.875"W	0.00	
16326.00†	90.000	90.001	9346.00	7290.87	791.29	7249.56	646657.85	503364.13	32°22'58.683"N	103°51'29.709"W	0.00	
16426.00†	90.000	90.001	9346.00	7390.49	791.29	7349.56	646757.84	503364.13	32°22'58.679"N	103°51'28.543"W	0.00	
16526.00†	90.000	90.001	9346.00	7490.12	791.29	7449.56	646857.84	503364.13	32°22'58.675"N	103°51'27.377"W	0.00	



Planned Wellpath Report

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BOPCO, L.P.

REFERENCE WELLPATH IDENTIFICATION				
Operator	WTD - West Texas Division	Slot	Slot 14 (JRU No.162H)	
Area	Eddy County, NM	Well	No.162H	
Field	James Ranch Unit	Wellbore	No.162H PWB	
Facility	Drilling Island 1			

WELLPATH DATA (197 stations) † = interpolated/extrapolated station												
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
16626.00†	90.000	90.001	9346.00	7589.74	791.28	7549.56	646957.83	503364.13	32°22'58.670"N	103°51'26.211"W	0.00	
16726.00†	90.000	90.001	9346.00	7689.36	791.28	7649.56	647057.82	503364.13	32°22'58.666"N	103°51'25.045"W	0.00	
16826.00†	90.000	90.001	9346.00	7788.99	791.28	7749.56	647157.81	503364.12	32°22'58.661"N	103°51'23.879"W	0.00	
16926.00†	90.000	90.001	9346.00	7888.61	791.28	7849.56	647257.81	503364.12	32°22'58.657"N	103°51'22.713"W	0.00	
17026.00†	90.000	90.001	9346.00	7988.23	791.28	7949.56	647357.80	503364.12	32°22'58.652"N	103°51'21.547"W	0.00	
17126.00†	90.000	90.001	9346.00	8087.86	791.27	8049.56	647457.79	503364.12	32°22'58.648"N	103°51'20.381"W	0.00	
17226.00†	90.000	90.001	9346.00	8187.48	791.27	8149.56	647557.79	503364.12	32°22'58.644"N	103°51'19.215"W	0.00	
17326.00†	90.000	90.001	9346.00	8287.10	791.27	8249.56	647657.78	503364.12	32°22'58.639"N	103°51'18.048"W	0.00	
17426.00†	90.000	90.001	9346.00	8386.72	791.27	8349.56	647757.77	503364.11	32°22'58.635"N	103°51'16.882"W	0.00	
17526.00†	90.000	90.001	9346.00	8486.35	791.27	8449.56	647857.77	503364.11	32°22'58.630"N	103°51'15.716"W	0.00	
17626.00†	90.000	90.001	9346.00	8585.97	791.27	8549.56	647957.76	503364.11	32°22'58.626"N	103°51'14.550"W	0.00	
17726.00†	90.000	90.001	9346.00	8685.59	791.26	8649.56	648057.75	503364.11	32°22'58.621"N	103°51'13.384"W	0.00	
17826.00†	90.000	90.001	9346.00	8785.22	791.26	8749.56	648157.74	503364.11	32°22'58.617"N	103°51'12.218"W	0.00	
17926.00†	90.000	90.001	9346.00	8884.84	791.26	8849.56	648257.74	503364.10	32°22'58.612"N	103°51'11.052"W	0.00	
18026.00†	90.000	90.001	9346.00	8984.46	791.26	8949.56	648357.73	503364.10	32°22'58.608"N	103°51'09.886"W	0.00	
18126.00†	90.000	90.001	9346.00	9084.09	791.26	9049.56	648457.72	503364.10	32°22'58.603"N	103°51'08.720"W	0.00	
18168.18	90.000	90.001	9346.00	9126.11	791.26	9091.74	648499.90	503364.10	32°22'58.602"N	103°51'08.228"W	0.00	No.162H PBHL

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
1) No.162H PBHL Rev-2	18168.18	9346.00	791.26	9091.74	648499.90	503364.10	32°22'58.602"N	103°51'08.228"W	point
No.162H PBHL		9441.00	798.60	11814.24	651222.20	503371.44	32°22'58.552"N	103°50'36.482"W	point

SURVEY PROGRAM - Ref Wellbore: No.162H PWB Ref Wellpath: B-4				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
26.00	500.00	Generic gyro - northseeking (Standard)		No.162H PWB
500.00	18168.18	NaviTrak (Standard)		No.162H PWB