

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** ^{OCD Artesia}
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.
NMNM06808

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
NMNM72615

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other8. Well Name and No.
JAMES RANCH 122. Name of Operator
BOPCO LPContact: KATY HOLSTER
E-Mail: keholster@basspet.com9. API Well No.
30-015-22162-00-S2

3a. Address

MIDLAND, TX 79702

3b. Phone No. (include area code)
Ph: 432-683-227710. Field and Pool, or Exploratory
WILDCAT ; Bone Spring

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

Sec 21 T22S R30E SWNE 1450FNL 1830FEL

Unit G

11. County or Parish, and State

EDDY COUNTY, NM

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	
	☐ Convert to Injection	☒ Plug Back	☐ Water Disposal	

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.)

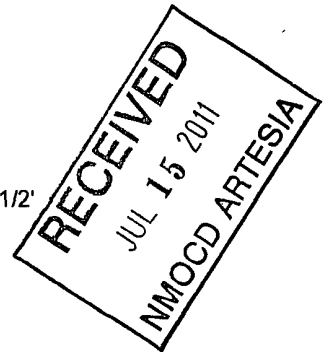
BOPCO, L.P. respectfully requests to alter the well plan, target formation, bottom hole location, and directional plans for the above captioned well. A single lateral Bone Spring is requested utilizing the same SHL, with a second lateral being drilled at a later date if necessary. A new BHL is requested at 2290' FNL & 970' FWL of Sec 23, T22S, R30E.

A 6-1/8" window will be cut in the 7" casing and a 6-1/8" lateral will be drilled to a measured depth of 16,990' at a TVD of 9386'. The kick off point will be at 8862' MD (8849' TVD) building at 12 deg/100' to a maximum of 90 degrees and with EOC at 9611' MD, 9327' TVD, 95.4 deg Az. The 4-1/2" 11.6#, P-110 LTC/FJ casing will be run from 7002' to 16,990'.

Revised plats and directional plan are attached reflecting the new BHL and Bone Spring penetration point.

Accepted for record - NMOC

DJB 7-21-11



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

Electronic Submission #110862 verified by the BLM Well Information System

For BOPCO LP, sent to the Carlsbad

Committed to AFMSS for processing by DEBORAH MCKINNEY on 06/20/2011 (11DLM0937SE)

Name (Printed/Typed) CHARLES T WARNE

Title DRILLING ENGINEER

Signature (Electronic Submission)

Date 06/17/2011

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By CHRISTOPHER WALLS

Title PETROLEUM ENGINEER

Date 07/12/2011

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 **

Additional data for EC transaction #110862 that would not fit on the form

32. Additional remarks, continued

All other aspects of the drilling plan are outlined in the attached eight point drilling plan.

Pending successful completion and favorable production, the James Ranch Unit #12 location will be utilized as a "pad" drilling site for future development of BOPCO L.P.'s assets within adjacent sections.

Surface casing already set at 534' (1980).

7" casing already set at 7262' (2009).

Production casing for 12H will be 4-1/2" run with a Baker Frac Point system. Top of 4-1/2" liner will be approximately 200' above KOP (+/- 7202')

Drilling procedure, BOP diagram, anticipated tops and surface plans attached.

This well is located within the R111 Potash area. Potash waiver on file per approved APD dated 3/15/10.

BOPCO, L.P., at P. O. Box 2760, Midland, TX, 79702 is a division office of BOPCO, L.P., 201 Main Street, Ft. Worth, TX 76102, Bond No. COB 000050 (Nationwide).

**EIGHT POINT DRILLING PROGRAM
BOPCO, L.P.**

NAME OF WELL: JAMES RANCH UNIT #12H

LEGAL DESCRIPTION - SURFACE: 1451' FNL, 1821' FEL, Section 21, T22S, R30E, Eddy County, NM. (Footage calls updated from original survey performed in 1980 – See attached Exhibit "F" for original calls)

#12H BHL: 2290' FNL, 970' FWL, Section 23, T22S, R30E, Eddy County, New Mexico.

POINT 1: ESTIMATED FORMATION TOPS

(See No. 2 Below)

POINT 2: WATER, OIL, GAS AND/OR MINERAL BEARING FORMATIONS

Anticipated Formation Tops: KB 3,191'
GL 3,169'

James Ranch Unit #12H

Formation	Estimated TVD	Estimated MD	Estimated Subsea Top	BEARING
T/Rustler	191'	191'	3,000'	Barren
B/Rustler	556'	556'	2,635'	Barren
T/Salt	556'	556'	2,635'	Barren
B/Salt	3,282'	3,282'	-91'	Barren
T/Lamar Lime	3,536'	3,536'	-345'	Barren
T/Delaware Sands	3,581'	3,581'	-390'	Oil/Gas
T/Bone Spring	7,385'	7,392'	-4,194'	Oil/Gas
KOP (Kick Off Point)	8,849'	8,862'	-5,658'	N/A
Bone Spring II "A" Sand	9,123'	9,153'	-5,932'	Oil/Gas
EOC Target	9,326'	9,621'	-6,135'	Oil/Gas
TD (end of lateral)	9,386'	16,990'	-6,195'	Oil/Gas

POINT 3: CASING PROGRAM

James Ranch Unit #12 (Existing Wellbore)

<u>TYPE</u>	<u>HOLE SIZE</u>	<u>INTERVALS</u>	<u>PURPOSE</u>	<u>CONDITION</u>
13-3/8", 48#, H-40, STC	17-1/2"	0' – 534'	Surface Casing	Existing (1980)
9-5/8", 36#, K-55, LTC	12-1/4"	0' – 3,726'	Intermediate Casing	Existing (1980)
7", 26#, P-110, LTC	8-3/4"	0' – 7,262'	Intermediate Casing	Existing (2009)

#12H

<u>TYPE</u>	<u>HOLE SIZE</u>	<u>INTERVALS</u>	<u>PURPOSE</u>	<u>CONDITION</u>
4-1/2", 11.6#, P-110, LTC/Ultra FJ	6-1/8"	7,002' – 16,990'	Production Casing	New

CASING DESIGN SAFETY FACTORS:

#12H

TYPE

4-1/2", 11.6#, P-110, LTC/UFJ

TENSION

3.72

COLLAPSE

1.68

BURST

2.42

DESIGN CRITERIA AND CASING LOADING ASSUMPTIONS:

PRODUCTION CASING

Tension	A 1.6 design factor utilizing the effects of buoyancy (9.0 ppg).
Collapse	A 1.0 design factor with full internal evacuation and a collapse force equal to the mud gradient in which the casing will be run (0.48 psi/ft). The effects of axial load on collapse will be considered.
Burst	A 1.25 design factor with anticipated maximum tubing pressure (2500 psig) on top of the maximum treating fluid gradient (0.65 psi/ft). Backup on production strings will be formation pore pressure. The effects of tension on burst will not be utilized.

POINT 4: PRESSURE CONTROL EQUIPMENT (SEE ATTACHED DIAGRAM)

A BOP equivalent to Diagram 1 will be nipped up on the existing intermediate casing head. After rigging up, the BOP stack, choke, kill lines, kelly cocks, inside BOP, etc. will be hydro-tested to 3,000 psi on the intermediate casing. The annular will be tested to 2500 psi. In addition to the rated working pressure test, a low pressure (250 psi) test will be required. These tests will be performed as per Onshore Oil and Gas Order No. 2, Drilling Operations, paragraph III.A.2.h.iv:

- a) When initially installed
- b) Whenever any seal subject to test pressure is broken
- c) Following related repairs
- d) At 30 day intervals

A function test to insure that the preventers are operating correctly will be performed on each trip. See the attached Diagram 1 for the minimum criteria for the choke manifold.

POINT 5: MUD PROGRAM

#12H

DEPTH

7,202' - 16,999'

MUD TYPE

FW/Gel/Starch

WEIGHT

8.5 - 9.0

FV

28-36

PV

NC

YP

NC

FL

<20

Ph

9.5-10.0

POINT 6: TECHNICAL STAGES OF OPERATION

A) TESTING

None anticipated.

B) LOGGING

For each lateral:

Run #1: GR with MWD during drilling of lateral leg with drill pipe conveyed GR-PEX-Density in lateral leg open hole at total depth.

C) CORING

No cores are anticipated.

D) CEMENT

James Ranch Unit #12 (Existing Wellbore)

<u>CASING</u>	<u>HOLE SIZE</u>	<u>INTERVALS</u>	<u>DESCRIPTION</u>
13-3/8", 48#, H-40, STC	17-1/2"	0' - 534'	1000 sx, Class 'C' + 2% CaCl (1980)
9-5/8", 36#, K-55, LTC	12-1/4"	0' - 3,726'	1725 sx BJ "lite" + 1/4 pps Floseal + 8 pps salt; 250 sx Class 'C' + 2% CaCl (1980)
7", 26#, P-110, LTC	8-3/4"	0' - 7,262'	Two stage: 175 sx "Tuned Light" + 165 sx HalCem; 675 sx EconoCem + 100 sx HalCem (2009)

No cement will be used on the 4-1/2" casing run in the laterals.

E) DIRECTIONAL DRILLING

#12H

A 6-1/8" window will be cut within the existing 7" casing and a 6-1/8" lateral will be drilled to a measured depth of 16,990' at a TVD of 9,386'. The kickoff point will be at a measured depth of approximately 8,862' (8,849' TVD) building at 12 deg/100' to a maximum of 90 degrees along an azimuth of 95.4 degrees. The 90 degree inclination will be held along the entire lateral length from 9,611' - 16,990' (9,386' TVD). A liner consisting of 4-1/2", 11.6#, P-110, LTC and Ultra FJ casing will be installed utilizing the Baker Frac Point System for zone isolation. See attached proposed directional survey report.

POINT 7: ANTICIPATED RESERVOIR CONDITIONS

Normal pressures are anticipated throughout Bone Spring section. A BHP of 4099 psi (max) or MWE of 8.4 ppg is expected. No H₂S is expected; however, in the event that H₂S is encountered, a contingency plan as outlined within original APD will be employed.

POINT 8: OTHER PERTINENT INFORMATION

A) Auxiliary Equipment

Upper and lower kelly cocks. Full opening stab in valve on the rig floor.

B) Anticipated Starting Date

7/7/11

21 days drilling operations

40 days completion operations

CTW/smm



BOPCO, L.P.

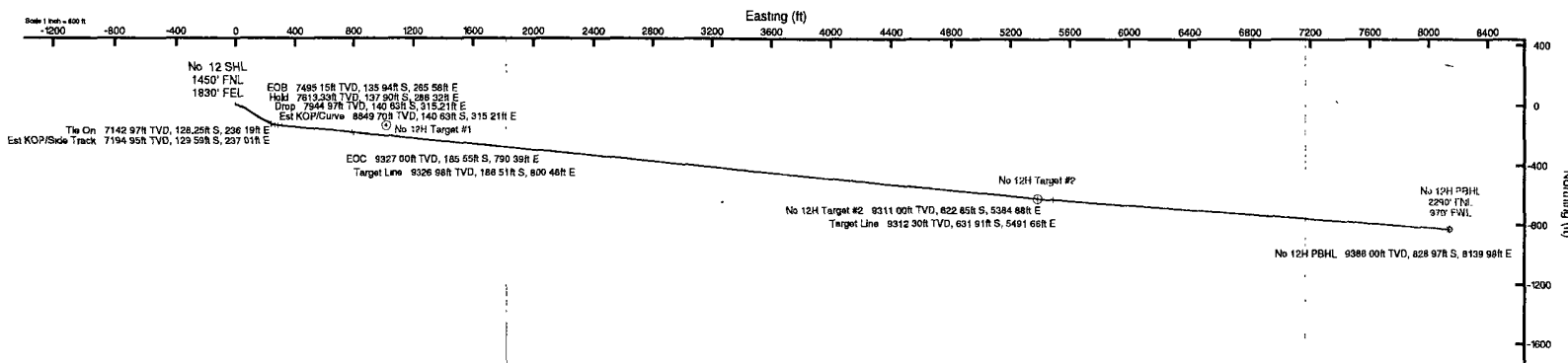
Location Eddy County, NM
Field James Ranch Unit 12 DL
Facility James Ranch Unit 12

Slot No 12 SHL
Well No. 12
Wellbore No. 12H PWB

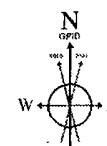
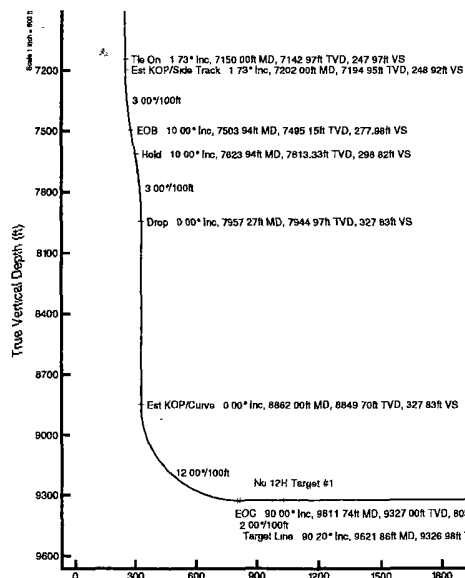


Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	7150.00	1.730	148.190	7142.97	-128.25	236.19	0.00	247.97
Est KOP/Side Track	7202.00	1.730	148.190	7194.95	-129.59	237.01	0.00	248.92
EOB	7503.94	10.000	95.400	7495.15	-135.94	265.58	3.00	277.88
Hold	7623.94	10.000	95.400	7613.33	-137.90	286.32	0.00	298.82
Drop	7957.27	0.000	95.400	7944.97	-140.53	315.21	3.00	327.83
Est KOP/Curve	8862.00	0.000	95.400	8849.70	-140.53	315.21	0.00	327.83
EOC	9611.74	90.000	95.400	9327.00	-185.55	790.39	12.00	805.12
Target Line	9621.86	90.199	95.437	9326.98	-186.51	800.46	2.00	815.23
No. 12H Target #2	14227.03	90.199	95.437	9311.00	-622.85	5384.88	0.00	5420.26
Target Line	14334.20	88.410	94.256	9312.30	-631.91	5491.65	2.00	5527.42
No. 12H PBHL	16990.86	88.410	94.256	9386.00	-628.97	8139.98	0.00	8182.06



Plot reference wellpath is Prelim_2	
True vertical depths are referenced to Rig on No. 12 SHL (RT)	Grid System: NAD83 / TM New Mexico SP, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No. 12 SHL (RT)	North Reference: Grid north
Rig on No. 12 SHL (RT) to Mean Sea Level: 3189 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot No. 12 SHL): -3169 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: gentry on 6/8/2011



BGGM (1945.0 to 2011.0) Dip: 80.33° Field: 48883.8 nT
Magnetic North is 7.97 degrees East of True North (at 12/23/2009)
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 7.72 degrees
For example if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.72 = 97.72

Vertical Section (ft)
Azimuth 95.41° with reference 0.00 N, 0.00 E



Planned Wellpath Report

Prelim_2

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 12 SHL
Area	Eddy County, NM	Well	No. 12
Field	James Ranch Unit 12 DL	Wellbore	No.12H PWB
Facility	James Ranch Unit 12		

REPORT SETUP INFORMATION

Projection System	NAD83 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect® 3.0.0
North Reference	Grid	User	Gentry
Scale	0.999931	Report Generated	6/8/2011 at 4:01:37 PM
Convergence at slot	0.24° East	Database/Source file	WA Midland/No.12H_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	0.00	680202.40	502615.41	32°22'51.443"N	103°53'00.589"W
Facility Reference Pt			680202.40	502615.41	32°22'51.443"N	103°53'00.589"W
Field Reference Pt			680202.40	502615.41	32°22'51.443"N	103°53'00.589"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 12 SHL (RT) to GL	19.00ft
Horizontal Reference Pt	Slot	Rig on No. 12 SHL (RT) to Mean Sea Level	3188.00ft
Vertical Reference Pt	Rig on No. 12 SHL (RT)	Rig on No. 12 SHL (RT) to Mud Line at Slot (No. 12 SHL)	19.00ft
MD Reference Pt	Rig on No. 12 SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	95.81°



Planned Wellpath Report

Prelim_2

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 12 SHL
Area	Eddy County, NM	Well	No. 12
Field	James Ranch Unit 12 DL	Wellbore	No.12H PWB
Facility	James Ranch Unit 12		

WELLPATH DATA (184 stations)

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	123.750	0.00	0.00	0.00	0.00	680202.40	502615.41	32°22'51.443"N	103°53'00.589"W	0.00	
100.00	1.430	123.750	99.99	1.10	-0.69	1.04	680203.44	502614.72	32°22'51.436"N	103°53'00.577"W	1.43	
200.00	1.460	121.810	199.96	3.35	-2.06	3.16	680205.56	502613.35	32°22'51.422"N	103°53'00.552"W	0.06	
300.00	1.130	110.900	299.93	5.45	-3.08	5.16	680207.56	502612.33	32°22'51.412"N	103°53'00.529"W	0.41	
400.00	1.430	69.600	399.91	7.52	-3.00	7.25	680209.65	502612.41	32°22'51.413"N	103°53'00.504"W	0.95	
500.00	1.040	93.850	499.89	9.55	-2.62	9.33	680211.73	502612.79	32°22'51.417"N	103°53'00.480"W	0.64	
600.00	1.000	102.990	599.87	11.32	-2.88	11.08	680213.48	502612.53	32°22'51.414"N	103°53'00.460"W	0.17	
700.00	0.980	110.730	699.86	13.01	-3.38	12.73	680215.13	502612.03	32°22'51.409"N	103°53'00.441"W	0.14	
800.00	0.970	110.190	799.84	14.66	-3.97	14.33	680216.73	502611.44	32°22'51.403"N	103°53'00.422"W	0.01	
900.00	1.050	113.730	899.83	16.35	-4.64	15.96	680218.36	502610.77	32°22'51.396"N	103°53'00.403"W	0.10	
1000.00	1.170	116.220	999.81	18.18	-5.46	17.72	680220.11	502609.95	32°22'51.388"N	103°53'00.383"W	0.13	
1100.00	1.210	117.350	1099.79	20.12	-6.39	19.57	680221.97	502609.02	32°22'51.379"N	103°53'00.361"W	0.05	
1200.00	1.330	118.030	1199.76	22.17	-7.42	21.53	680223.93	502607.99	32°22'51.369"N	103°53'00.338"W	0.12	
1300.00	1.330	118.810	1299.73	24.32	-8.53	23.57	680225.97	502606.88	32°22'51.358"N	103°53'00.314"W	0.02	
1400.00	1.390	119.830	1399.71	26.49	-9.69	25.64	680228.04	502605.72	32°22'51.346"N	103°53'00.290"W	0.06	
1500.00	1.320	115.880	1499.68	28.68	-10.80	27.73	680230.13	502604.59	32°22'51.335"N	103°53'00.266"W	0.12	
1600.00	1.340	116.430	1599.65	30.86	-11.82	29.81	680232.21	502603.59	32°22'51.325"N	103°53'00.242"W	0.02	
1700.00	1.360	116.980	1699.62	33.06	-12.88	31.92	680234.32	502602.53	32°22'51.314"N	103°53'00.217"W	0.02	
1800.00	1.160	117.060	1799.60	35.11	-13.88	33.88	680236.27	502601.53	32°22'51.304"N	103°53'00.195"W	0.20	
1900.00	0.840	116.150	1899.58	36.74	-14.66	35.44	680237.83	502600.75	32°22'51.296"N	103°53'00.176"W	0.32	
2000.00	0.630	118.770	1999.58	37.93	-15.25	36.58	680238.97	502600.16	32°22'51.291"N	103°53'00.163"W	0.21	
2100.00	0.740	106.940	2099.57	39.07	-15.70	37.68	680240.07	502599.71	32°22'51.286"N	103°53'00.150"W	0.18	
2200.00	0.960	114.090	2199.56	40.50	-16.23	39.06	680241.46	502599.18	32°22'51.281"N	103°53'00.134"W	0.24	
2300.00	0.880	112.870	2299.54	42.03	-16.87	40.53	680242.93	502598.54	32°22'51.274"N	103°53'00.117"W	0.08	
2400.00	1.030	108.840	2399.53	43.64	-17.46	42.09	680244.49	502597.95	32°22'51.268"N	103°53'00.099"W	0.16	
2500.00	1.030	108.210	2499.51	45.39	-18.03	43.79	680246.19	502597.38	32°22'51.263"N	103°53'00.079"W	0.01	
2600.00	1.730	109.620	2599.48	47.74	-18.82	46.07	680248.47	502596.59	32°22'51.255"N	103°53'00.053"W	0.70	
2700.00	2.920	116.040	2699.40	51.59	-20.44	49.78	680252.18	502594.97	32°22'51.239"N	103°53'00.009"W	1.22	
2800.00	4.370	120.330	2799.20	57.45	-23.49	55.36	680257.75	502591.93	32°22'51.208"N	103°52'59.945"W	1.47	
2900.00	4.640	118.490	2899.89	64.65	-27.34	62.20	680264.60	502588.07	32°22'51.170"N	103°52'59.865"W	0.31	
3000.00	4.820	118.930	2998.55	72.25	-31.30	69.43	680271.83	502584.11	32°22'51.130"N	103°52'59.781"W	0.18	
3100.00	4.770	120.720	3098.20	79.88	-35.46	76.68	680279.08	502579.96	32°22'51.089"N	103°52'59.696"W	0.16	
3200.00	4.860	120.310	3197.84	87.51	-39.72	83.91	680286.31	502575.69	32°22'51.046"N	103°52'59.612"W	0.10	
3300.00	4.680	121.330	3297.50	95.04	-43.98	91.06	680293.45	502571.44	32°22'51.004"N	103°52'59.529"W	0.20	
3400.00	4.240	124.680	3397.19	101.96	-48.20	97.58	680299.97	502567.21	32°22'50.962"N	103°52'59.453"W	0.51	
3500.00	4.110	125.140	3496.93	108.32	-52.37	103.55	680305.94	502563.05	32°22'50.920"N	103°52'59.384"W	0.13	
3600.00	3.880	124.800	3596.69	114.41	-56.36	109.26	680311.65	502559.05	32°22'50.881"N	103°52'59.318"W	0.23	
3700.00	3.780	124.660	3696.46	120.26	-60.17	114.75	680317.14	502555.25	32°22'50.843"N	103°52'59.254"W	0.10	
3800.00	3.840	128.340	3796.24	125.97	-64.12	120.09	680322.48	502551.30	32°22'50.803"N	103°52'59.192"W	0.25	
3900.00	3.610	122.610	3896.03	131.60	-67.89	125.37	680327.76	502547.52	32°22'50.766"N	103°52'59.130"W	0.44	
4000.00	3.450	121.350	3995.84	137.12	-71.16	130.59	680332.98	502544.26	32°22'50.733"N	103°52'59.070"W	0.18	
4100.00	3.940	121.210	4095.63	142.94	-74.50	136.10	680338.49	502540.91	32°22'50.700"N	103°52'59.006"W	0.49	
4200.00	3.950	119.970	4195.40	149.19	-78.00	142.02	680344.41	502537.41	32°22'50.665"N	103°52'58.937"W	0.09	
4300.00	3.650	119.730	4295.18	155.24	-81.30	147.77	680350.15	502534.11	32°22'50.632"N	103°52'58.870"W	0.30	
4400.00	3.590	118.560	4394.98	161.04	-84.38	153.28	680355.67	502531.04	32°22'50.602"N	103°52'58.806"W	0.10	



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 12 SHL
Area	Eddy County, NM	Well	No. 12
Field	James Ranch Unit 12 DL	Wellbore	No.12H PWB
Facility	James Ranch Unit 12		

WELLPATH DATA (184 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
4500.00	3.420	118.150	4494.79	166.69	-87.28	158.66	680361.05	502528.14	32°22'50.573"N	103°52'58.743"W	0.17	
4600.00	3.520	118.760	4594.61	172.27	-90.16	163.98	680366.37	502525.25	32°22'50.544"N	103°52'58.681"W	0.11	
4700.00	3.270	119.600	4694.43	177.71	-93.05	169.15	680371.54	502522.37	32°22'50.515"N	103°52'58.621"W	0.25	
4800.00	3.180	115.860	4794.27	182.92	-95.67	174.13	680376.51	502519.75	32°22'50.489"N	103°52'58.563"W	0.23	
4900.00	3.210	116.040	4894.12	188.16	-98.11	179.14	680381.53	502517.31	32°22'50.465"N	103°52'58.505"W	0.03	
5000.00	3.070	114.690	4993.97	193.32	-100.46	184.09	680386.47	502514.96	32°22'50.441"N	103°52'58.447"W	0.16	
5100.00	2.820	114.880	5093.83	198.18	-102.61	188.75	680391.14	502512.81	32°22'50.420"N	103°52'58.393"W	0.25	
5200.00	2.690	115.050	5193.72	202.72	-104.64	193.11	680395.50	502510.78	32°22'50.400"N	103°52'58.342"W	0.13	
5300.00	2.530	117.340	5293.61	206.99	-106.64	197.20	680399.58	502508.77	32°22'50.379"N	103°52'58.295"W	0.19	
5400.00	2.450	114.860	5393.52	211.06	-108.56	201.10	680403.48	502506.86	32°22'50.360"N	103°52'58.249"W	0.13	
5500.00	2.010	114.460	5493.44	214.74	-110.18	204.63	680407.02	502505.24	32°22'50.344"N	103°52'58.208"W	0.44	
5600.00	1.900	111.860	5593.39	218.00	-111.52	207.77	680410.15	502503.89	32°22'50.331"N	103°52'58.172"W	0.14	
5700.00	1.820	109.480	5693.33	221.13	-112.67	210.80	680413.19	502502.75	32°22'50.319"N	103°52'58.136"W	0.11	
5800.00	1.870	112.170	5793.28	224.24	-113.82	213.81	680416.19	502501.60	32°22'50.308"N	103°52'58.101"W	0.10	
5900.00	1.840	115.670	5893.23	227.32	-115.13	216.77	680419.15	502500.29	32°22'50.295"N	103°52'58.067"W	0.12	
6000.00	1.660	110.340	5993.18	230.23	-116.33	219.57	680421.96	502499.09	32°22'50.283"N	103°52'58.034"W	0.24	
6100.00	1.480	116.020	6093.15	232.84	-117.40	222.09	680424.48	502498.02	32°22'50.272"N	103°52'58.005"W	0.24	
6200.00	1.270	115.660	6193.12	235.10	-118.44	224.25	680426.63	502496.98	32°22'50.262"N	103°52'57.980"W	0.21	
6300.00	1.280	114.860	6293.09	237.20	-119.39	226.26	680428.65	502496.03	32°22'50.252"N	103°52'57.956"W	0.02	
6400.00	1.270	114.660	6393.07	239.30	-120.32	228.28	680430.67	502495.09	32°22'50.243"N	103°52'57.933"W	0.01	
6500.00	1.080	119.900	6493.05	241.21	-121.26	230.11	680432.49	502494.16	32°22'50.234"N	103°52'57.912"W	0.22	
6600.00	0.670	145.510	6593.03	242.45	-122.21	231.26	680433.64	502493.21	32°22'50.224"N	103°52'57.898"W	0.56	
6700.00	0.630	155.210	6693.03	243.11	-123.19	231.82	680434.20	502492.23	32°22'50.214"N	103°52'57.892"W	0.12	
6800.00	0.760	144.860	6793.02	243.82	-124.23	232.43	680434.81	502491.19	32°22'50.204"N	103°52'57.885"W	0.18	
6900.00	0.540	132.380	6893.01	244.63	-125.09	233.16	680435.54	502490.33	32°22'50.195"N	103°52'57.876"W	0.26	
7000.00	1.010	131.380	6993.00	245.73	-125.99	234.17	680436.55	502489.43	32°22'50.187"N	103°52'57.864"W	0.47	
7100.00	1.080	137.310	7092.99	247.15	-127.27	235.47	680437.85	502488.15	32°22'50.174"N	103°52'57.849"W	0.13	
7150.00	1.730	148.190	7142.97	247.97	-128.25	236.19	680438.57	502487.16	32°22'50.164"N	103°52'57.841"W	0.00	Tie On
7202.00	1.730	148.190	7194.95	248.92	-129.59	237.01	680439.40	502485.83	32°22'50.151"N	103°52'57.831"W	0.00	Est KOP/Side Track
7250.00†	2.729	120.566	7242.91	250.40	-130.79	238.38	680440.76	502484.63	32°22'50.139"N	103°52'57.816"W	3.00	
7350.00†	5.481	102.796	7342.65	257.31	-133.05	245.09	680447.47	502482.37	32°22'50.116"N	103°52'57.738"W	3.00	
7392.59†	6.718	99.763	7385.00	261.81	-133.93	249.53	680451.91	502481.49	32°22'50.107"N	103°52'57.686"W	3.00	Bone Spring
7450.00†	8.404	97.091	7441.91	269.36	-135.01	257.00	680459.38	502480.41	32°22'50.096"N	103°52'57.599"W	3.00	
7503.94	10.000	95.400	7495.15	277.98	-135.94	265.58	680467.96	502479.48	32°22'50.087"N	103°52'57.499"W	3.00	EOB
7550.00†	10.000	95.400	7540.51	285.98	-136.69	273.54	680475.92	502478.73	32°22'50.079"N	103°52'57.406"W	0.00	
7623.94	10.000	95.400	7613.33	298.82	-137.90	286.32	680488.70	502477.52	32°22'50.066"N	103°52'57.257"W	0.00	Hold
7650.00†	9.218	95.400	7639.02	303.17	-138.31	290.65	680493.03	502477.11	32°22'50.062"N	103°52'57.206"W	3.00	
7750.00†	6.218	95.400	7738.11	316.60	-139.58	304.02	680506.40	502475.84	32°22'50.049"N	103°52'57.051"W	3.00	
7850.00†	3.218	95.400	7837.76	324.82	-140.35	312.21	680514.59	502475.07	32°22'50.041"N	103°52'56.955"W	3.00	
7950.00†	0.218	95.400	7937.70	327.82	-140.63	315.19	680517.57	502474.79	32°22'50.038"N	103°52'56.920"W	3.00	
7957.27	0.000	95.400	7944.97	327.83	-140.63	315.21	680517.58	502474.79	32°22'50.038"N	103°52'56.920"W	3.00	Drop
8050.00†	0.000	95.400	8037.70	327.83	-140.63	315.21	680517.58	502474.79	32°22'50.038"N	103°52'56.920"W	0.00	
8150.00†	0.000	95.400	8137.70	327.83	-140.63	315.21	680517.58	502474.79	32°22'50.038"N	103°52'56.920"W	0.00	
8250.00†	0.000	95.400	8237.70	327.83	-140.63	315.21	680517.58	502474.79	32°22'50.038"N	103°52'56.920"W	0.00	
8350.00†	0.000	95.400	8337.70	327.83	-140.63	315.21	680517.58	502474.79	32°22'50.038"N	103°52'56.920"W	0.00	



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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 12 SHL
Area	Eddy County, NM	Well	No. 12
Field	James Ranch Unit 12 DL	Wellbore	No.12H PWB
Facility	James Ranch Unit 12		

WELLPATH DATA (184 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
8381.30†	0.000	95.400	8369.00	327.83	-140.63	315.21	680517.58	502474.79	32°22'50.038"N	103°52'56.920"W	0.00	Bone Spring I Sand
8450.00†	0.000	95.400	8437.70	327.83	-140.63	315.21	680517.58	502474.79	32°22'50.038"N	103°52'56.920"W	0.00	
8550.00†	0.000	95.400	8537.70	327.83	-140.63	315.21	680517.58	502474.79	32°22'50.038"N	103°52'56.920"W	0.00	
8650.00†	0.000	95.400	8637.70	327.83	-140.63	315.21	680517.58	502474.79	32°22'50.038"N	103°52'56.920"W	0.00	
8750.00†	0.000	95.400	8737.70	327.83	-140.63	315.21	680517.58	502474.79	32°22'50.038"N	103°52'56.920"W	0.00	
8850.00†	0.000	95.400	8837.70	327.83	-140.63	315.21	680517.58	502474.79	32°22'50.038"N	103°52'56.920"W	0.00	
8862.00	0.000	95.400	8849.70	327.83	-140.63	315.21	680517.58	502474.79	32°22'50.038"N	103°52'56.920"W	0.00	Est KOP/Curve
8950.00†	10.564	95.400	8937.20	335.92	-141.39	323.26	680525.64	502474.03	32°22'50.030"N	103°52'56.826"W	12.00	
9050.00†	22.568	95.400	9032.88	364.38	-144.07	351.59	680553.97	502471.35	32°22'50.003"N	103°52'56.496"W	12.00	
9150.00†	34.572	95.400	9120.54	412.11	-148.57	399.12	680601.49	502466.86	32°22'49.956"N	103°52'55.942"W	12.00	
9153.00†	34.931	95.400	9123.00	413.82	-148.73	400.82	680603.19	502466.69	32°22'49.955"N	103°52'55.922"W	12.00	Bone Spring II "A" Sand
9250.00†	46.576	95.400	9196.36	477.04	-154.68	463.75	680666.12	502460.75	32°22'49.893"N	103°52'55.189"W	12.00	
9350.00†	58.580	95.400	9257.01	556.31	-162.14	542.67	680745.04	502453.29	32°22'49.816"N	103°52'54.269"W	12.00	
9450.00†	70.584	95.400	9299.86	646.46	-170.62	632.43	680834.78	502444.80	32°22'49.728"N	103°52'53.223"W	12.00	
9550.00†	82.588	95.400	9323.01	743.55	-179.76	729.09	680931.44	502435.67	32°22'49.634"N	103°52'52.096"W	12.00	
9611.74	90.000	95.400	9327.00	805.12	-185.55	790.39	680992.73	502429.87	32°22'49.574"N	103°52'51.382"W	12.00	EOC
9621.86	90.199	95.437	9326.98	815.23	-186.51	800.46	681002.80	502428.92	32°22'49.564"N	103°52'51.264"W	2.00	Target Line
9650.00†	90.199	95.437	9326.88	843.38	-189.17	828.47	681030.82	502426.25	32°22'49.537"N	103°52'50.938"W	0.00	
9750.00†	90.199	95.437	9326.54	943.38	-198.65	928.02	681130.36	502416.78	32°22'49.439"N	103°52'49.777"W	0.00	
9850.00†	90.199	95.437	9326.19	1043.37	-208.12	1027.57	681229.90	502407.30	32°22'49.341"N	103°52'48.617"W	0.00	
9950.00†	90.199	95.437	9325.84	1143.37	-217.60	1127.12	681329.44	502397.83	32°22'49.243"N	103°52'47.457"W	0.00	
10050.00†	90.199	95.437	9325.50	1243.37	-227.07	1226.67	681428.99	502388.35	32°22'49.145"N	103°52'46.296"W	0.00	
10150.00†	90.199	95.437	9325.15	1343.36	-236.55	1326.22	681528.53	502378.88	32°22'49.047"N	103°52'45.136"W	0.00	
10250.00†	90.199	95.437	9324.80	1443.36	-246.02	1425.77	681628.07	502369.40	32°22'48.949"N	103°52'43.976"W	0.00	
10350.00†	90.199	95.437	9324.46	1543.36	-255.50	1525.32	681727.61	502359.93	32°22'48.851"N	103°52'42.815"W	0.00	
10450.00†	90.199	95.437	9324.11	1643.36	-264.97	1624.87	681827.16	502350.45	32°22'48.753"N	103°52'41.655"W	0.00	
10550.00†	90.199	95.437	9323.76	1743.35	-274.45	1724.42	681926.70	502340.98	32°22'48.655"N	103°52'40.495"W	0.00	
10650.00†	90.199	95.437	9323.41	1843.35	-283.92	1823.97	682026.24	502331.51	32°22'48.557"N	103°52'39.334"W	0.00	
10750.00†	90.199	95.437	9323.07	1943.35	-293.40	1923.52	682125.78	502322.03	32°22'48.459"N	103°52'38.174"W	0.00	
10850.00†	90.199	95.437	9322.72	2043.34	-302.88	2023.07	682225.33	502312.56	32°22'48.361"N	103°52'37.014"W	0.00	
10950.00†	90.199	95.437	9322.37	2143.34	-312.35	2122.62	682324.87	502303.08	32°22'48.263"N	103°52'35.853"W	0.00	
11050.00†	90.199	95.437	9322.03	2243.34	-321.83	2222.17	682424.41	502293.61	32°22'48.165"N	103°52'34.693"W	0.00	
11150.00†	90.199	95.437	9321.68	2343.34	-331.30	2321.72	682523.95	502284.13	32°22'48.067"N	103°52'33.533"W	0.00	
11250.00†	90.199	95.437	9321.33	2443.33	-340.78	2421.27	682623.50	502274.66	32°22'47.969"N	103°52'32.372"W	0.00	
11350.00†	90.199	95.437	9320.98	2543.33	-350.25	2520.82	682723.04	502265.18	32°22'47.871"N	103°52'31.212"W	0.00	
11450.00†	90.199	95.437	9320.64	2643.33	-359.73	2620.37	682822.58	502255.71	32°22'47.773"N	103°52'30.052"W	0.00	
11550.00†	90.199	95.437	9320.29	2743.33	-369.20	2719.92	682922.12	502246.23	32°22'47.675"N	103°52'28.891"W	0.00	
11650.00†	90.199	95.437	9319.94	2843.32	-378.68	2819.46	683021.67	502236.76	32°22'47.577"N	103°52'27.731"W	0.00	
11750.00†	90.199	95.437	9319.60	2943.32	-388.15	2919.01	683121.21	502227.29	32°22'47.480"N	103°52'26.571"W	0.00	
11850.00†	90.199	95.437	9319.25	3043.32	-397.63	3018.56	683220.75	502217.81	32°22'47.382"N	103°52'25.410"W	0.00	
11950.00†	90.199	95.437	9318.90	3143.31	-407.10	3118.11	683320.29	502208.34	32°22'47.284"N	103°52'24.250"W	0.00	
12050.00†	90.199	95.437	9318.56	3243.31	-416.58	3217.66	683419.83	502198.86	32°22'47.186"N	103°52'23.090"W	0.00	
12150.00†	90.199	95.437	9318.21	3343.31	-426.05	3317.21	683519.38	502189.39	32°22'47.088"N	103°52'21.929"W	0.00	
12250.00†	90.199	95.437	9317.86	3443.31	-435.53	3416.76	683618.92	502179.91	32°22'46.990"N	103°52'20.769"W	0.00	
12350.00†	90.199	95.437	9317.51	3543.30	-445.00	3516.31	683718.46	502170.44	32°22'46.892"N	103°52'19.609"W	0.00	



Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No. 12 SHL
Area	Eddy County, NM	Well	No. 12
Field	James Ranch Unit 12 DL	Wellbore	No.12H PWB
Facility	James Ranch Unit 12		

WELLPATH DATA (184 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
12450.00†	90.199	95.437	9317.17	3643.30	-454.48	3615.86	683818.00	502160.96	32°22'46.794"N	103°52'18.449"W	0.00	
12550.00†	90.199	95.437	9316.82	3743.30	-463.95	3715.41	683917.55	502151.49	32°22'46.696"N	103°52'17.288"W	0.00	
12650.00†	90.199	95.437	9316.47	3843.29	-473.43	3814.96	684017.09	502142.02	32°22'46.598"N	103°52'16.128"W	0.00	
12750.00†	90.199	95.437	9316.13	3943.29	-482.90	3914.51	684116.63	502132.54	32°22'46.500"N	103°52'14.968"W	0.00	
12850.00†	90.199	95.437	9315.78	4043.29	-492.38	4014.06	684216.17	502123.07	32°22'46.402"N	103°52'13.807"W	0.00	
12950.00†	90.199	95.437	9315.43	4143.29	-501.85	4113.61	684315.72	502113.59	32°22'46.304"N	103°52'12.647"W	0.00	
13050.00†	90.199	95.437	9315.08	4243.28	-511.33	4213.16	684415.26	502104.12	32°22'46.205"N	103°52'11.487"W	0.00	
13150.00†	90.199	95.437	9314.74	4343.28	-520.80	4312.71	684514.80	502094.64	32°22'46.107"N	103°52'10.326"W	0.00	
13250.00†	90.199	95.437	9314.39	4443.28	-530.28	4412.26	684614.34	502085.17	32°22'46.009"N	103°52'09.166"W	0.00	
13350.00†	90.199	95.437	9314.04	4543.28	-539.75	4511.81	684713.89	502075.69	32°22'45.911"N	103°52'08.006"W	0.00	
13450.00†	90.199	95.437	9313.70	4643.27	-549.23	4611.36	684813.43	502066.22	32°22'45.813"N	103°52'06.845"W	0.00	
13550.00†	90.199	95.437	9313.35	4743.27	-558.70	4710.91	684912.97	502056.74	32°22'45.715"N	103°52'05.685"W	0.00	
13650.00†	90.199	95.437	9313.00	4843.27	-568.18	4810.45	685012.51	502047.27	32°22'45.617"N	103°52'04.525"W	0.00	
13750.00†	90.199	95.437	9312.66	4943.26	-577.66	4910.00	685112.06	502037.80	32°22'45.519"N	103°52'03.364"W	0.00	
13850.00†	90.199	95.437	9312.31	5043.26	-587.13	5009.55	685211.60	502028.32	32°22'45.421"N	103°52'02.204"W	0.00	
13950.00†	90.199	95.437	9311.96	5143.26	-596.61	5109.10	685311.14	502018.85	32°22'45.323"N	103°52'01.044"W	0.00	
14050.00†	90.199	95.437	9311.61	5243.26	-606.08	5208.65	685410.68	502009.37	32°22'45.225"N	103°51'59.884"W	0.00	
14150.00†	90.199	95.437	9311.27	5343.25	-615.56	5308.20	685510.23	501999.90	32°22'45.127"N	103°51'58.723"W	0.00	
14227.03	90.199	95.437	9311.00†	5420.28	-622.85	5384.88	685586.90	501992.60	32°22'45.052"N	103°51'57.830"W	0.00	No.12H Target #2
14250.00†	89.815	95.184	9311.00	5443.25	-624.98	5407.76	685609.77	501990.47	32°22'45.030"N	103°51'57.563"W	2.00	
14334.20	88.410	94.256	9312.30	5527.42	-631.91	5491.66	685693.67	501983.55	32°22'44.957"N	103°51'56.585"W	2.00	Target Line
14350.00†	88.410	94.256	9312.74	5543.21	-633.08	5507.41	685709.42	501982.38	32°22'44.945"N	103°51'56.401"W	0.00	
14450.00†	88.410	94.256	9315.51	5643.13	-640.50	5607.09	685809.10	501974.96	32°22'44.867"N	103°51'55.239"W	0.00	
14550.00†	88.410	94.256	9318.29	5743.06	-647.91	5706.78	685908.78	501967.54	32°22'44.790"N	103°51'54.077"W	0.00	
14650.00†	88.410	94.256	9321.06	5842.98	-655.33	5806.47	686008.45	501960.12	32°22'44.712"N	103°51'52.915"W	0.00	
14750.00†	88.410	94.256	9323.84	5942.91	-662.75	5906.15	686108.13	501952.71	32°22'44.634"N	103°51'51.753"W	0.00	
14850.00†	88.410	94.256	9326.61	6042.83	-670.17	6005.84	686207.81	501945.29	32°22'44.556"N	103°51'50.591"W	0.00	
14950.00†	88.410	94.256	9329.38	6142.76	-677.59	6105.52	686307.49	501937.87	32°22'44.479"N	103°51'49.429"W	0.00	
15050.00†	88.410	94.256	9332.16	6242.68	-685.00	6205.21	686407.17	501930.46	32°22'44.401"N	103°51'48.267"W	0.00	
15150.00†	88.410	94.256	9334.93	6342.61	-692.42	6304.90	686506.85	501923.04	32°22'44.323"N	103°51'47.105"W	0.00	
15250.00†	88.410	94.256	9337.71	6442.53	-699.84	6404.58	686606.53	501915.62	32°22'44.246"N	103°51'45.943"W	0.00	
15350.00†	88.410	94.256	9340.48	6542.45	-707.26	6504.27	686706.21	501908.20	32°22'44.168"N	103°51'44.781"W	0.00	
15450.00†	88.410	94.256	9343.25	6642.38	-714.67	6603.95	686805.89	501900.79	32°22'44.090"N	103°51'43.619"W	0.00	
15550.00†	88.410	94.256	9346.03	6742.30	-722.09	6703.64	686905.56	501893.37	32°22'44.012"N	103°51'42.457"W	0.00	
15650.00†	88.410	94.256	9348.80	6842.23	-729.51	6803.33	687005.24	501885.95	32°22'43.935"N	103°51'41.295"W	0.00	
15750.00†	88.410	94.256	9351.58	6942.15	-736.93	6903.01	687104.92	501878.54	32°22'43.857"N	103°51'40.133"W	0.00	
15850.00†	88.410	94.256	9354.35	7042.08	-744.34	7002.70	687204.60	501871.12	32°22'43.779"N	103°51'38.971"W	0.00	
15950.00†	88.410	94.256	9357.13	7142.00	-751.76	7102.38	687304.28	501863.70	32°22'43.701"N	103°51'37.809"W	0.00	
16050.00†	88.410	94.256	9359.90	7241.93	-759.18	7202.07	687403.96	501856.28	32°22'43.624"N	103°51'36.647"W	0.00	
16150.00†	88.410	94.256	9362.67	7341.85	-766.60	7301.75	687503.64	501848.87	32°22'43.546"N	103°51'35.485"W	0.00	
16250.00†	88.410	94.256	9365.45	7441.77	-774.01	7401.44	687603.32	501841.45	32°22'43.468"N	103°51'34.323"W	0.00	
16350.00†	88.410	94.256	9368.22	7541.70	-781.43	7501.13	687703.00	501834.03	32°22'43.390"N	103°51'33.162"W	0.00	
16450.00†	88.410	94.256	9371.00	7641.62	-788.85	7600.81	687802.67	501826.62	32°22'43.313"N	103°51'32.000"W	0.00	
16550.00†	88.410	94.256	9373.77	7741.55	-796.27	7700.50	687902.35	501819.20	32°22'43.235"N	103°51'30.838"W	0.00	
16650.00†	88.410	94.256	9376.54	7841.47	-803.68	7800.18	688002.03	501811.78	32°22'43.157"N	103°51'29.676"W	0.00	



Planned Wellpath Report

Prelim_2

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REFERENCE WELLPATH IDENTIFICATION			
Operator	BOPCO, L.P.	Slot	No. 12 SHL
Area	Eddy County, NM	Well	No. 12
Field	James Ranch Unit 12 DL	Wellbore	No.12H PWB
Facility	James Ranch Unit 12		

WELLPATH DATA (184 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
16750.00†	88.410	94.256	9379.32	7941.40	-811.10	7899.87	688101.71	501804.37	32°22'43.079"N	103°51'28.514"W	0.00	
16850.00†	88.410	94.256	9382.09	8041.32	-818.52	7999.56	688201.39	501796.95	32°22'43.001"N	103°51'27.352"W	0.00	
16950.00†	88.410	94.256	9384.87	8141.25	-825.94	8099.24	688301.07	501789.53	32°22'42.924"N	103°51'26.190"W	0.00	
16990.86	88.410	94.256	9386.00	8182.08	-828.97	8139.98	688341.80	501786.50	32°22'42.892"N	103°51'25.715"W	0.00	No.12H PBHL

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
1) no.12H Target #2	14227.03	9311.00	-622.85	5384.88	685586.90	501992.60	32°22'45.052"N	103°51'57.830"W	point
No.12H Target #1		9326.00	-137.62	1021.27	681223.60	502477.80	32°22'50.039"N	103°52'48.687"W	point
2) No.12H PBHL	16990.86	9386.00	-828.97	8139.98	688341.80	501786.50	32°22'42.892"N	103°51'25.715"W	point

SURVEY PROGRAM - Ref Wellbore: No.12H PWB Ref Wellpath: Prelim_2				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
19.00	7150.00	Gyrodata standard - Drop gyro or Multi-shot		No. 12 AWB
7150.00	16990.86	NaviTrak (Standard)		No.12H PWB

DISTRICT I --- CHECKLIST FOR INTENTS TO DRILL

APD is for N ☐ P ☒ E ☐ A ☐ D ☐WELL TYPE: O ☐ G ☒ I ☐ S ☐ OTHER ☐Operator Bupco LP OGRID # 260737Well Name & # James Ranch Lt #12 H Surface Type (F) (S) (P)Location: UL G, Sect 21, Township 22 s, RNG 30 e, Sub-surface Type (F) (S) (P)1: BHL @: UL E, Sect 23, Township 22 s, RNG 30 e, H ☐ DD ☐2: BHL @: UL ☐ , Sect ☐ , Township ☐ s, RNG ☐ e, H ☐ DD ☐A. Date C101 rec'd 7/15/11 C101 reviewed ☐ / ☐ / ☐

B. 1. Check mark, Information is OK on Forms:

OGRID ☒ , BONDING ☒ , PROP CODE ☒ , WELL # ☒ , SIGNATURE ☒2. Inactive Well list as of: 8/25/11 # wells 421, # Inactive wells 5

a. District Grant APD but see number of inactive wells:

No letter required ☒ ; Sent Letter to Operator ☐ , to Santa Fe ☐3. Additional Bonding as of: 8/25/11

a. District Denial because operator needs addition bonding:

No Letter required ☒ ; Sent Letter to Operator ☐ , To Santa Fe ☐

b. District Denial because of Inactive well list and Financial Assurance:

No Letter required ☒ ; Sent Letter to Operator ☐ , To Santa Fe ☐C102 YES ☒ , NO ☐ , Signature ☒1. Pool Wilcat Bone Spring, Code 96403a. Dedicated acreage 240, What Units ☐b. SUR. Location Standard ☐ : Non-Standard Location ☐c. Well shares acres: Yes ☐ , No ☐ , # of wells ☐ plus this well # ☐2. 2nd. Operator in same acreage, Yes ☐ , No ☐ WELL(S) SHARING:WELL(S) BY 2nd OPER: Agreement Letter ☐ , Disagreement letter ☐3. Intent to Directional Drill Yes ☒ , No ☐Dedicated acreage 240, What Units ☐Bottomhole Location Standard ☒ , Non-Standard Bottomhole ☐4. Downhole Commingle: Yes ☐ , No ☐a. Pool #2 ☐ , Code ☐ , Acres ☐Pool #3 ☐ , Code ☐ , Acres ☐Pool #4 ☐ , Code ☐ , Acres ☐5. POTASH Area Yes ☒ , No ☐C. Blowout Preventer Yes ☐ , No ☐D. H2S Yes ☐ , No ☐E. C144 Pit Registration Yes ☐ , No ☐

F. Does APD require Santa Fe Approval:

1. Non-Standard Location: Yes ☐ , No ☒ , NSL # ☐2. Non-Standard Proration: Yes ☐ , No ☒ , NSP # ☐3. Simultaneous Dedication: Yes ☐ , No ☒ , SD # ☐Number of wells ☐ Plus # ☐4. Injection order Yes ☐ , No ☒ ; PMX # ☐ or WFX # ☐5. SWD order Yes ☐ , NO ☒ ; SWD # ☐6. DHC from SF ☐ ; DHC-HOB ☐ ; Holding ☐7. OCD Approval Date 8/25/11API #30-0 15-- 221628. Reviewers dm