

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.***SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		5. Lease Serial No. NMNM04557
2. Name of Operator BOPCO LP		6. If Indian, Allottee or Tribe Name
Contact: LESLIE BARNES E-Mail: lbarnes@basspet.com		7. If Unit or CA/Agreement, Name and/or No. 891000326X
3a. Address P O BOX 2760 MIDLAND, TX 79702	3b. Phone No. (include area code) Ph: 432-221-7341	8. Well Name and No. BIG EDDY UNIT D14 269H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 5 T20S R31E Lot 2 358FNL 2058FEL 32.362762 N Lat, 103.532109 W Lon		9. API Well No. 30-015-42638-00-X1
		10. Field and Pool, or Exploratory WILLIAMS SINK
		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	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 recompletable 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 recompletion 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, LP respectfully requests to change the target formation from the Bone Springs 1 back to the originally permitted Bone Springs 2. The hole size will be changed from a 8-3/4" hole to 8-1/2" hole to assist with torque and drag while drilling the lateral portion of the well. Please see casing and cement information for the revised plan below.

5-1/2", 17.00 ppg, HCP-110, BTC - Collapse ? 1.80, Burst ? 2.09, Tension ? 4.07 (MW=8.9 ppg)

Updated cement volumes and slurries are in the attached table.

RD 2/13/15
Accepted for record
NMCD

NM OIL CONSERVA
ARTESIA DISTRICT
FEB 12 2015
RECEIVED

Work is already done

14. I hereby certify that the foregoing is true and correct. Electronic Submission #288397 verified by the BLM Well Information System For BOPCO LP, sent to the Carlsbad Committed to AFMSS for processing by JENNIFER MASON on 02/06/2015 (15JAM0214SE)	
Name (Printed/Typed) JEREMY BRADEN	Title ENGINEERING ASSISTANT
Signature (Electronic Submission)	Date 01/19/2015
THIS SPACE FOR FEDERAL OR STATE OFFICE USE	
FEB 6 2015	
BUREAU OF LAND MANAGEMENT CARLSBAD FIELD OFFICE	
Approved By _____	Title _____
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 _____	
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.	

BOPCO, LP respectfully requests to change the target formation from the Bone Springs 1 back to the originally permitted Bone Springs 2. The hole size will be changed from a 8-3/4" hole to 8-1/2" hole to assist with torque and drag while drilling the lateral portion of the well. Please see casing and cement information for the revised plan below.

5-1/2", 17.00 ppf, HCP-110, BTC - Collapse – 1.80, Burst – 2.09, Tension – 4.07 (MW=8.9 ppg)

Updated cement volumes and slurries are in the below table.

INTERVAL	AMOUNT SXS	FT of FILL	TYPE	GAL/SX	PPG	FT3/SX
PRODUCTION						
Stage 1						
Lead: 5,000'-8,353'	450	3,353	VersaCem + 10% Bentonite + 0.125 pps Poly-E-Flake + 0.5 pps D-Air + 0.1% HR-601	12.8	11.9	2.24
Tail: 8,353'- 15,684'	2100	7,331	VersaCem + 0.5% LAP-1 + 0.3% CFR-3 + 0.1% FWCA + 0.125 pps Poly-E-Flake + 0.5 pps D-Air + 0.2% HR- 601	5.32	14.5	1.21
DV TOOL AT 5,000'						
Stage 2						
Lead: 2,898'-4,500'	270	1,746	VersaCem + 10% Bentonite + 0.125 pps Poly-E-Flake + 0.5 pps D-Air	12.67	11.9	2.23
Tail: 4,500'-5,000'	150	500	Halcm "C" Neat	6.34	14.8	1.33

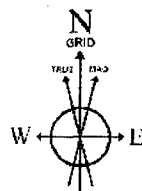
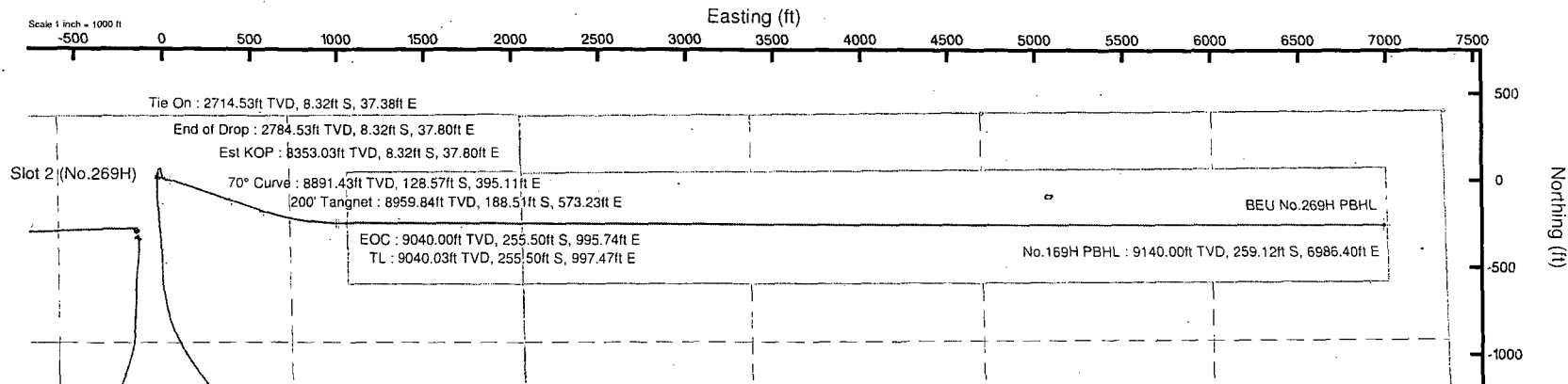


WTD - West Texas Division

Location: Eddy County, NM
Field: Big Eddy Unit
Facility: Drilling Island 4

Slot: Slot 2 (No.269H)
Well: No.269H
Wellbore: No.269H PWB

BOPCO, L.P.

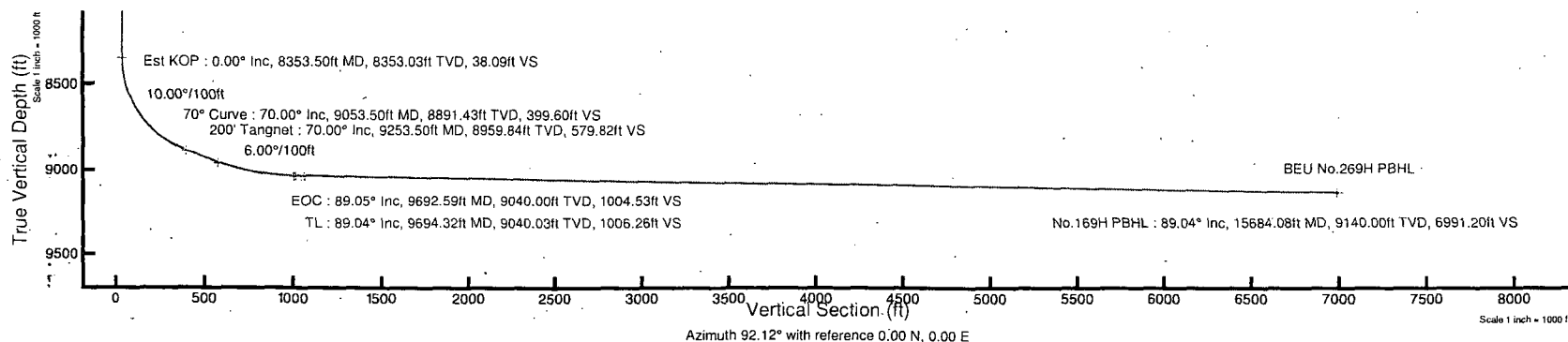


IGRF-11 (1900.0 thru 2014.0) Dip: 60.41° Field: 48489.5 nT
Magnetic North is 7.36 degrees East of True North (at 9/9/2014)
Grid North is 0.24 degrees East of True North
To correct azimuth from True to Grid subtract 0.24 degrees
To correct azimuth from Magnetic to Grid add 7.12 degrees

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	2715.00	0.700	90.180	2714.53	-8.32	37.38	0.00	37.66
End of Drop	2785.00	0.000	108.600	2784.53	-8.32	37.80	1.00	38.09
Est KOP	8353.50	0.000	108.600	8353.03	-8.32	37.80	0.00	38.09
70° Curve	9053.50	70.000	108.600	8891.43	-128.57	395.11	10.00	399.60
200' Tangnet	9253.50	70.000	108.600	8959.84	-188.51	573.23	0.00	579.82
EOC	9692.59	89.045	90.000	9040.00	-255.50	995.74	6.00	1004.53
TL	9694.32	89.044	90.035	9040.03	-255.50	997.47	2.00	1006.26
No.169H PBHL	15684.08	89.044	90.035	9140.00	-259.12	6986.40	0.00	6991.20

Plot reference wellpath is B-8	Grid System: NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet
True vertical depths are referenced to Rig on Slot 2 (No.269H) (KB)	North Reference: Grid north
Measured depths are referenced to Rig on Slot 2 (No.269H) (KB)	Scale: True distance
Rig on Slot 2 (No.269H) (KB) to Mean Sea Level: 3496 feet	Depths are in feet
Mean Sea Level to Mud line (At Slot: Slot 2 (No.269H)): 0 feet	Created by: BWGentry on 1/15/2015
Coordinates are in feet referenced to Slot	





Planned Wellpath Report

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BOPCO, L.P.

REFERENCE WELLPATH IDENTIFICATION			
Operator	WTD - West Texas Division	Slot	Slot 2 (No.269H)
Area	Eddy County, NM	Well	No.269H
Field	Big Eddy Unit	Wellbore	No.269H PWB
Facility	Drilling Island 4		

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	1/15/2015 at 3:55:34 PM
Convergence at slot	0.24° East	Database/Source file	WellArchitectDB/No.269H_PWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	343.12	155.61	636803.00	585370.80	32°36'30.611"N	103°53'20.647"W
Facility Reference Pt			636647.40	585027.70	32°36'27.223"N	103°53'22.483"W
Field Reference Pt			640125.10	530502.80	32°27'27.522"N	103°52'44.545"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Rig on Slot 2 (No.269H) (KB) to Facility Vertical Datum	3496.00ft
Horizontal Reference Pt	Slot	Rig on Slot 2 (No.269H) (KB) to Mean Sea Level	3496.00ft
Vertical Reference Pt	Rig on Slot 2 (No.269H) (KB)	Rig on Slot 2 (No.269H) (KB) to Mud Line at Slot (Slot 2 (No.269H))	3496.00ft
MD Reference Pt	Rig on Slot 2 (No.269H) (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	92.12°



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REFERENCE WELLPATH IDENTIFICATION			
Operator	WTD - West Texas Division	Slot	Slot 2 (No.269H)
Area	Eddy County, NM	Well	No.269H
Field	Big Eddy Unit	Wellbore	No.269H PWB
Facility	Drilling Island 4		

WELLPATH DATA (178 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
0.00	0.000	75.010	0.00	0.00	0.00	0.00	636803.00	585370.80	32°36'30.611"N	103°53'20.647"W	0.00	
88.00	0.170	75.010	88.00	0.12	0.03	0.13	636803.13	585370.83	32°36'30.612"N	103°53'20.646"W	0.19	
178.00	0.190	38.550	178.00	0.34	0.19	0.35	636803.35	585370.98	32°36'30.613"N	103°53'20.643"W	0.13	
268.00	0.220	42.260	268.00	0.54	0.43	0.56	636803.56	585371.23	32°36'30.616"N	103°53'20.641"W	0.04	
358.00	0.210	35.510	358.00	0.74	0.69	0.77	636803.77	585371.49	32°36'30.618"N	103°53'20.638"W	0.03	
448.00	0.250	38.470	448.00	0.95	0.98	0.99	636803.99	585371.78	32°36'30.621"N	103°53'20.636"W	0.05	
538.00	0.260	36.940	538.00	1.18	1.30	1.23	636804.23	585372.10	32°36'30.624"N	103°53'20.633"W	0.01	
583.00	0.259	24.245	583.00	1.28	1.47	1.34	636804.34	585372.27	32°36'30.626"N	103°53'20.632"W	0.13	Top Rustler Anhydrite
628.00	0.270	12.030	628.00	1.34	1.67	1.40	636804.40	585372.47	32°36'30.628"N	103°53'20.631"W	0.13	
658.00	0.180	47.670	658.00	1.38	1.77	1.45	636804.45	585372.57	32°36'30.629"N	103°53'20.630"W	0.54	
725.00	0.530	117.510	724.99	1.74	1.70	1.80	636804.80	585372.50	32°36'30.628"N	103°53'20.626"W	0.74	
756.00	0.620	137.900	755.99	1.98	1.51	2.04	636805.04	585372.31	32°36'30.626"N	103°53'20.623"W	0.72	
788.00	0.620	123.310	787.99	2.25	1.28	2.30	636805.30	585372.08	32°36'30.624"N	103°53'20.620"W	0.49	
846.01	0.620	120.872	846.00	2.80	0.95	2.83	636805.83	585371.75	32°36'30.621"N	103°53'20.614"W	0.05	Top Salt
882.00	0.620	119.360	881.99	3.14	0.75	3.17	636806.17	585371.55	32°36'30.619"N	103°53'20.610"W	0.05	
977.00	0.530	148.450	976.98	3.84	0.13	3.85	636806.85	585370.93	32°36'30.613"N	103°53'20.602"W	0.32	
1072.00	0.620	149.420	1071.98	4.36	-0.69	4.34	636807.34	585370.11	32°36'30.604"N	103°53'20.597"W	0.10	
1166.00	0.440	152.140	1165.97	4.82	-1.45	4.77	636807.77	585369.35	32°36'30.597"N	103°53'20.592"W	0.19	
1260.00	0.530	179.300	1259.97	5.02	-2.20	4.94	636807.94	585368.60	32°36'30.589"N	103°53'20.590"W	0.26	
1355.00	1.850	105.910	1354.95	6.53	-3.06	6.42	636809.42	585367.74	32°36'30.581"N	103°53'20.572"W	1.87	
1450.00	2.200	106.530	1449.89	9.79	-4.00	9.64	636812.64	585366.80	32°36'30.571"N	103°53'20.535"W	0.37	
1544.00	2.020	112.940	1543.83	13.08	-5.16	12.90	636815.90	585365.64	32°36'30.560"N	103°53'20.497"W	0.32	
1639.00	1.760	110.310	1638.77	16.03	-6.32	15.81	636818.81	585364.48	32°36'30.548"N	103°53'20.463"W	0.29	
1734.00	1.670	110.310	1733.73	18.73	-7.30	18.48	636821.47	585363.50	32°36'30.538"N	103°53'20.432"W	0.09	
1828.00	1.580	108.460	1827.69	21.28	-8.19	20.99	636823.99	585362.61	32°36'30.530"N	103°53'20.402"W	0.11	
1923.00	1.500	104.070	1922.66	23.75	-8.91	23.44	636826.44	585361.89	32°36'30.522"N	103°53'20.374"W	0.15	
2017.00	1.410	95.720	2016.63	26.11	-9.32	25.78	636828.78	585361.48	32°36'30.518"N	103°53'20.346"W	0.24	
2112.00	0.790	81.480	2111.61	27.92	-9.34	27.59	636830.59	585361.46	32°36'30.518"N	103°53'20.325"W	0.71	
2207.00	1.140	84.200	2206.60	29.50	-9.15	29.18	636832.18	585361.65	32°36'30.520"N	103°53'20.307"W	0.37	
2302.00	1.230	87.980	2301.58	31.45	-9.02	31.14	636834.14	585361.78	32°36'30.521"N	103°53'20.284"W	0.13	
2325.43	1.164	86.759	2325.00	31.94	-9.00	31.63	636834.63	585361.81	32°36'30.521"N	103°53'20.278"W	0.30	Base Salt
2396.00	0.970	82.090	2395.56	33.24	-8.87	32.94	636835.93	585361.93	32°36'30.522"N	103°53'20.263"W	0.30	
2491.00	0.880	83.320	2490.55	34.75	-8.68	34.46	636837.45	585362.12	32°36'30.524"N	103°53'20.245"W	0.10	
2586.00	0.790	83.500	2585.54	36.12	-8.52	35.83	636838.83	585362.28	32°36'30.526"N	103°53'20.229"W	0.09	
2680.00	0.620	79.720	2679.53	37.26	-8.35	36.98	636839.97	585362.45	32°36'30.527"N	103°53'20.215"W	0.19	
2715.00	0.700	90.180	2714.53	37.66	-8.32	37.38	636840.37	585362.48	32°36'30.528"N	103°53'20.211"W	0.00	Tie On
2785.00	0.000	108.600	2784.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	1.00	End of Drop
2815.00	0.000	108.600	2814.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
2894.47	0.000	108.600	2894.00	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	Top of Reef
2915.00	0.000	108.600	2914.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
3015.00	0.000	108.600	3014.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
3115.00	0.000	108.600	3114.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
3215.00	0.000	108.600	3214.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
3315.00	0.000	108.600	3314.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
3415.00	0.000	108.600	3414.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	



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REFERENCE WELLPATH IDENTIFICATION			
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Area	Eddy County, NM	Well	No.269H
Field	Big Eddy Unit	Wellbore	No.269H PWB
Facility	Drilling Island 4		

WELLPATH DATA (178 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
3515.00†	0.000	108.600	3514.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
3615.00†	0.000	108.600	3614.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
3715.00†	0.000	108.600	3714.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
3815.00†	0.000	108.600	3814.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
3915.00†	0.000	108.600	3914.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
4015.00†	0.000	108.600	4014.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
4084.47†	0.000	108.600	4084.00	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	Top Del. Mtn. Grp.
4115.00†	0.000	108.600	4114.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
4215.00†	0.000	108.600	4214.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
4315.00†	0.000	108.600	4314.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
4415.00†	0.000	108.600	4414.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
4515.00†	0.000	108.600	4514.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
4615.00†	0.000	108.600	4614.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
4715.00†	0.000	108.600	4714.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
4815.00†	0.000	108.600	4814.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
4915.00†	0.000	108.600	4914.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
5015.00†	0.000	108.600	5014.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
5115.00†	0.000	108.600	5114.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
5215.00†	0.000	108.600	5214.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
5315.00†	0.000	108.600	5314.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
5415.00†	0.000	108.600	5414.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
5515.00†	0.000	108.600	5514.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
5615.00†	0.000	108.600	5614.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
5715.00†	0.000	108.600	5714.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
5815.00†	0.000	108.600	5814.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
5915.00†	0.000	108.600	5914.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
6015.00†	0.000	108.600	6014.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
6115.00†	0.000	108.600	6114.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
6215.00†	0.000	108.600	6214.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
6315.00†	0.000	108.600	6314.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
6415.00†	0.000	108.600	6414.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
6515.00†	0.000	108.600	6514.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
6615.00†	0.000	108.600	6614.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
6715.00†	0.000	108.600	6714.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
6815.00†	0.000	108.600	6814.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
6894.47†	0.000	108.600	6894.00	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	Top Bone Spring Lime
6915.00†	0.000	108.600	6914.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
7015.00†	0.000	108.600	7014.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
7115.00†	0.000	108.600	7114.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
7215.00†	0.000	108.600	7214.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
7315.00†	0.000	108.600	7314.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
7415.00†	0.000	108.600	7414.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
7515.00†	0.000	108.600	7514.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
7615.00†	0.000	108.600	7614.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
7715.00†	0.000	108.600	7714.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	



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BOPCO, L.P.

REFERENCE WELLPATH IDENTIFICATION			
Operator	WTD - West Texas Division	Slot	Slot 2 (No.269H)
Area	Eddy County, NM	Well	No.269H
Field	Big Eddy Unit	Wellbore	No.269H PWB
Facility	Drilling Island 4		

WELLPATH DATA (178 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
7815.00†	0.000	108.600	7814.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
7915.00†	0.000	108.600	7914.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
8015.00†	0.000	108.600	8014.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
8115.00†	0.000	108.600	8114.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
8144.47†	0.000	108.600	8144.00	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	1st Bone Spring Sand
8215.00†	0.000	108.600	8214.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
8315.00†	0.000	108.600	8314.53	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	
8353.50	0.000	108.600	8353.03	38.09	-8.32	37.80	636840.80	585362.48	32°36'30.528"N	103°53'20.206"W	0.00	Est KOP
8415.00†	6.150	108.600	8414.41	41.25	-9.37	40.93	636843.93	585361.43	32°36'30.517"N	103°53'20.169"W	10.00	
8515.00†	16.150	108.600	8512.40	59.77	-15.53	59.23	636862.23	585355.27	32°36'30.455"N	103°53'19.956"W	10.00	
8615.00†	26.150	108.600	8605.54	94.32	-27.03	93.39	636896.38	585343.77	32°36'30.340"N	103°53'19.557"W	10.00	
8715.00†	36.150	108.600	8691.02	143.87	-43.51	142.35	636945.34	585327.30	32°36'30.175"N	103°53'18.985"W	10.00	
8815.00†	46.150	108.600	8766.22	206.89	-64.47	204.64	637007.62	585306.34	32°36'29.965"N	103°53'18.258"W	10.00	
8915.00†	56.150	108.600	8828.87	281.47	-89.28	278.36	637081.34	585281.53	32°36'29.717"N	103°53'17.398"W	10.00	
9015.00†	66.150	108.600	8877.06	365.36	-117.18	361.26	637164.24	585253.63	32°36'29.437"N	103°53'16.430"W	10.00	
9053.50	70.000	108.600	8891.43	399.60	-128.57	395.11	637198.08	585242.24	32°36'29.323"N	103°53'16.035"W	10.00	70° Curve
9115.00†	70.000	108.600	8912.47	455.02	-147.00	449.88	637252.85	585223.81	32°36'29.138"N	103°53'15.395"W	0.00	
9215.00†	70.000	108.600	8946.67	545.13	-176.97	538.94	637341.90	585193.84	32°36'28.838"N	103°53'14.356"W	0.00	
9236.44†	70.000	108.600	8954.00	564.45	-183.40	558.04	637361.00	585187.41	32°36'28.774"N	103°53'14.133"W	0.00	2nd Bone Spring A Sand
9253.50†	70.000	108.600	8959.84	579.82	-188.51	573.23	637376.19	585182.30	32°36'28.722"N	103°53'13.956"W	0.00	200' Tangnet
9315.00†	72.586	105.822	8979.56	636.06	-205.73	628.86	637431.82	585165.08	32°36'28.550"N	103°53'13.306"W	6.00	
9415.00†	76.867	101.465	9005.91	730.54	-228.44	722.57	637525.52	585142.37	32°36'28.321"N	103°53'12.212"W	6.00	
9484.99†	79.907	98.509	9020.00	798.44	-240.32	790.07	637593.01	585130.50	32°36'28.201"N	103°53'11.423"W	6.00	2nd Bone Spring B Sand
9515.00†	81.219	97.259	9024.92	827.89	-244.38	819.40	637622.34	585126.44	32°36'28.159"N	103°53'11.081"W	6.00	
9615.00†	85.617	93.151	9036.39	927.05	-253.37	918.29	637721.22	585117.45	32°36'28.066"N	103°53'09.925"W	6.00	
9692.59	89.045	90.000	9040.00	1004.53	-255.50	995.74	637798.67	585115.32	32°36'28.042"N	103°53'09.020"W	6.00	EOC
9694.32	89.044	90.035	9040.03	1006.26	-255.50	997.47	637800.40	585115.32	32°36'28.042"N	103°53'09.000"W	2.00	TL
9715.00†	89.044	90.035	9040.37	1026.92	-255.51	1018.15	637821.07	585115.31	32°36'28.041"N	103°53'08.758"W	0.00	
9815.00†	89.044	90.035	9042.04	1126.84	-255.57	1118.13	637921.05	585115.25	32°36'28.036"N	103°53'07.589"W	0.00	
9915.00†	89.044	90.035	9043.71	1226.76	-255.63	1218.12	638021.03	585115.18	32°36'28.031"N	103°53'06.420"W	0.00	
10015.00†	89.044	90.035	9045.38	1326.68	-255.69	1318.11	638121.01	585115.12	32°36'28.027"N	103°53'05.252"W	0.00	
10115.00†	89.044	90.035	9047.05	1426.60	-255.75	1418.09	638220.99	585115.06	32°36'28.022"N	103°53'04.083"W	0.00	
10215.00†	89.044	90.035	9048.72	1526.52	-255.81	1518.08	638320.97	585115.00	32°36'28.017"N	103°53'02.914"W	0.00	
10315.00†	89.044	90.035	9050.39	1626.44	-255.88	1618.06	638420.95	585114.94	32°36'28.012"N	103°53'01.745"W	0.00	
10415.00†	89.044	90.035	9052.06	1726.36	-255.94	1718.05	638520.93	585114.88	32°36'28.008"N	103°53'00.576"W	0.00	
10515.00†	89.044	90.035	9053.73	1826.27	-256.00	1818.04	638620.91	585114.82	32°36'28.003"N	103°52'59.408"W	0.00	
10615.00†	89.044	90.035	9055.40	1926.19	-256.06	1918.02	638720.88	585114.76	32°36'27.998"N	103°52'58.239"W	0.00	
10715.00†	89.044	90.035	9057.06	2026.11	-256.12	2018.01	638820.86	585114.70	32°36'27.993"N	103°52'57.070"W	0.00	
10815.00†	89.044	90.035	9058.73	2126.03	-256.18	2117.99	638920.84	585114.64	32°36'27.988"N	103°52'55.901"W	0.00	
10915.00†	89.044	90.035	9060.40	2225.95	-256.24	2217.98	639020.82	585114.58	32°36'27.984"N	103°52'54.732"W	0.00	
11015.00†	89.044	90.035	9062.07	2325.87	-256.30	2317.97	639120.80	585114.52	32°36'27.979"N	103°52'53.564"W	0.00	
11115.00†	89.044	90.035	9063.74	2425.79	-256.36	2417.95	639220.78	585114.46	32°36'27.974"N	103°52'52.395"W	0.00	
11215.00†	89.044	90.035	9065.41	2525.71	-256.42	2517.94	639320.76	585114.40	32°36'27.969"N	103°52'51.226"W	0.00	
11315.00†	89.044	90.035	9067.08	2625.63	-256.48	2617.92	639420.74	585114.34	32°36'27.964"N	103°52'50.057"W	0.00	
11415.00†	89.044	90.035	9068.75	2725.55	-256.54	2717.91	639520.72	585114.28	32°36'27.960"N	103°52'48.888"W	0.00	



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BOPCO, L.P.

REFERENCE WELLPATH IDENTIFICATION

Operator	WTD - West Texas Division	Slot	Slot 2 (No.269H)
Area	Eddy County, NM	Well	No.269H
Field	Big Eddy Unit	Wellbore	No.269H PWB
Facility	Drilling Island 4		

WELLPATH DATA (178 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
11515.00†	89.044	90.035	9070.42	2825.47	-256.60	2817.90	639620.69	585114.22	32°36'27.955"N	103°52'47.720"W	0.00	
11615.00†	89.044	90.035	9072.09	2925.39	-256.66	2917.88	639720.67	585114.16	32°36'27.950"N	103°52'46.551"W	0.00	
11715.00†	89.044	90.035	9073.75	3025.31	-256.72	3017.87	639820.65	585114.10	32°36'27.945"N	103°52'45.382"W	0.00	
11815.00†	89.044	90.035	9075.42	3125.23	-256.78	3117.85	639920.63	585114.04	32°36'27.940"N	103°52'44.213"W	0.00	
11915.00†	89.044	90.035	9077.09	3225.15	-256.84	3217.84	640020.61	585113.98	32°36'27.935"N	103°52'43.044"W	0.00	
12015.00†	89.044	90.035	9078.76	3325.07	-256.90	3317.83	640120.59	585113.92	32°36'27.931"N	103°52'41.876"W	0.00	
12115.00†	89.044	90.035	9080.43	3424.99	-256.96	3417.81	640220.57	585113.86	32°36'27.926"N	103°52'40.707"W	0.00	
12215.00†	89.044	90.035	9082.10	3524.91	-257.02	3517.80	640320.55	585113.79	32°36'27.921"N	103°52'39.538"W	0.00	
12315.00†	89.044	90.035	9083.77	3624.83	-257.08	3617.78	640420.53	585113.73	32°36'27.916"N	103°52'38.369"W	0.00	
12415.00†	89.044	90.035	9085.44	3724.75	-257.14	3717.77	640520.50	585113.67	32°36'27.911"N	103°52'37.200"W	0.00	
12515.00†	89.044	90.035	9087.11	3824.67	-257.20	3817.76	640620.48	585113.61	32°36'27.906"N	103°52'36.032"W	0.00	
12615.00†	89.044	90.035	9088.78	3924.59	-257.27	3917.74	640720.46	585113.55	32°36'27.902"N	103°52'34.863"W	0.00	
12715.00†	89.044	90.035	9090.44	4024.51	-257.33	4017.73	640820.44	585113.49	32°36'27.897"N	103°52'33.694"W	0.00	
12815.00†	89.044	90.035	9092.11	4124.43	-257.39	4117.71	640920.42	585113.43	32°36'27.892"N	103°52'32.525"W	0.00	
12915.00†	89.044	90.035	9093.78	4224.34	-257.45	4217.70	641020.40	585113.37	32°36'27.887"N	103°52'31.356"W	0.00	
13015.00†	89.044	90.035	9095.45	4324.26	-257.51	4317.69	641120.38	585113.31	32°36'27.882"N	103°52'30.188"W	0.00	
13115.00†	89.044	90.035	9097.12	4424.18	-257.57	4417.67	641220.36	585113.25	32°36'27.877"N	103°52'29.019"W	0.00	
13215.00†	89.044	90.035	9098.79	4524.10	-257.63	4517.66	641320.34	585113.19	32°36'27.872"N	103°52'27.850"W	0.00	
13315.00†	89.044	90.035	9100.46	4624.02	-257.69	4617.65	641420.32	585113.13	32°36'27.868"N	103°52'26.681"W	0.00	
13415.00†	89.044	90.035	9102.13	4723.94	-257.75	4717.63	641520.29	585113.07	32°36'27.863"N	103°52'25.512"W	0.00	
13515.00†	89.044	90.035	9103.80	4823.86	-257.81	4817.62	641620.27	585113.01	32°36'27.858"N	103°52'24.344"W	0.00	
13615.00†	89.044	90.035	9105.47	4923.78	-257.87	4917.60	641720.25	585112.95	32°36'27.853"N	103°52'23.175"W	0.00	
13715.00†	89.044	90.035	9107.14	5023.70	-257.93	5017.59	641820.23	585112.89	32°36'27.848"N	103°52'22.006"W	0.00	
13815.00†	89.044	90.035	9108.80	5123.62	-257.99	5117.58	641920.21	585112.83	32°36'27.843"N	103°52'20.837"W	0.00	
13915.00†	89.044	90.035	9110.47	5223.54	-258.05	5217.56	642020.19	585112.77	32°36'27.838"N	103°52'19.668"W	0.00	
14015.00†	89.044	90.035	9112.14	5323.46	-258.11	5317.55	642120.17	585112.71	32°36'27.833"N	103°52'18.500"W	0.00	
14115.00†	89.044	90.035	9113.81	5423.38	-258.17	5417.53	642220.15	585112.65	32°36'27.828"N	103°52'17.331"W	0.00	
14215.00†	89.044	90.035	9115.48	5523.30	-258.23	5517.52	642320.13	585112.59	32°36'27.824"N	103°52'16.162"W	0.00	
14315.00†	89.044	90.035	9117.15	5623.22	-258.29	5617.51	642420.10	585112.53	32°36'27.819"N	103°52'14.993"W	0.00	
14415.00†	89.044	90.035	9118.82	5723.14	-258.35	5717.49	642520.08	585112.47	32°36'27.814"N	103°52'13.824"W	0.00	
14515.00†	89.044	90.035	9120.49	5823.06	-258.41	5817.48	642620.06	585112.41	32°36'27.809"N	103°52'12.656"W	0.00	
14615.00†	89.044	90.035	9122.16	5922.98	-258.47	5917.46	642720.04	585112.34	32°36'27.804"N	103°52'11.487"W	0.00	
14715.00†	89.044	90.035	9123.83	6022.90	-258.53	6017.45	642820.02	585112.28	32°36'27.799"N	103°52'10.318"W	0.00	
14815.00†	89.044	90.035	9125.49	6122.82	-258.59	6117.44	642920.00	585112.22	32°36'27.794"N	103°52'09.149"W	0.00	
14915.00†	89.044	90.035	9127.16	6222.74	-258.66	6217.42	643019.98	585112.16	32°36'27.789"N	103°52'07.980"W	0.00	
15015.00†	89.044	90.035	9128.83	6322.66	-258.72	6317.41	643119.96	585112.10	32°36'27.784"N	103°52'06.812"W	0.00	
15115.00†	89.044	90.035	9130.50	6422.58	-258.78	6417.39	643219.94	585112.04	32°36'27.779"N	103°52'05.643"W	0.00	
15215.00†	89.044	90.035	9132.17	6522.50	-258.84	6517.38	643319.91	585111.98	32°36'27.774"N	103°52'04.474"W	0.00	
15315.00†	89.044	90.035	9133.84	6622.42	-258.90	6617.37	643419.89	585111.92	32°36'27.770"N	103°52'03.305"W	0.00	
15415.00†	89.044	90.035	9135.51	6722.33	-258.96	6717.35	643519.87	585111.86	32°36'27.765"N	103°52'02.136"W	0.00	
15515.00†	89.044	90.035	9137.18	6822.25	-259.02	6817.34	643619.85	585111.80	32°36'27.760"N	103°52'00.968"W	0.00	
15615.00†	89.044	90.035	9138.85	6922.17	-259.08	6917.32	643719.83	585111.74	32°36'27.755"N	103°51'59.799"W	0.00	
15684.08	89.044	90.035	9140.00	6991.20	-259.12	6986.40	643788.90	585111.70	32°36'27.751"N	103°51'58.991"W	0.00	No.169H PBHL

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
1) BEU No.269H PBHL	15684.08	9140.00	-259.12	6986.40	643788.90	585111.70	32°36'27.751"N	103°51'58.991"W	point

SURVEY PROGRAM - Ref Wellbore: No.269H PWB - Ref Wellpath: B-8				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
26.00	658.00	Generic gyro - northseeking (Standard)		No.269H AWB
658.00	2715.00	Generic gyro - northseeking (Standard)		No.269H AWB
2715.00	15684.08	NaviTrak (Standard)		No.269H PWB