

OCD-ARTESIA

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED RM
JAN 19 2010
FORM APPROVED
OMB No. 1004-0137
Expires: March 2007
OCD ARTESIA

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

2 Name of Operator **BOPCO, L. P.**

3a Address **P. O. Box 2760 Midland, TX 79702**

3b Phone No. (include area code) **432-683-2277**

4 Location of Well (Footage, Sec, T, R, M, or Survey Description)
Surface: NENW, 1015' FNL, 2080' FWL, Sec 1, T23S, R30S, Lat N32.338533, Lon W103.836222
BHL: SENW, 1980' FNL, 350' FWL, Sec 2, T23S, R30E, Lat N32.335928, Long W103.859156

5 Lease Serial No
NM02884A

6. If Indian, Allottee or Tribe Name

7 If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.
Hudson 1 Federal #8H

9 API Well No
30-015-37272

10. Field and Pool, or Exploratory Area
Quahada Ridge SE (Delaware)

11. County or Parish, State
Eddy Co., 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 requests approval of the revised horizontal drilling plan. The 8-3/4" hole will be TD'd at 8,800' MD and 7,278' TVD. The 6-1/8" hole will be TD'd at 14,639' MD and 7,278' TVD.

The 7" casing program will also be changed from 7,660' of 7", 26#, HCP-110, LTC to 8,800' of 7", 26#, HCP-110, LTC.

The 4-1/2" casing program will also be changed from 7,037' of 4-1/2", 11.6#, HCP-110, LTC and 900' of 4-1/2", 11.6#, HCP-110, Ultra Flush Joint to 7,088' of 4-1/2", 11.6#, HCP-110, LTC and 950' of 4-1/2", 11.6#, HCP-110, Ultra Flush Joint. liner hanger will be set at approx 6,600'.

The revised horizontal drilling plan is attached.

BOPCO L.P. Bond # on file: COB000050

APPROVED
JAN 12 2010
/s/ Chris Walls
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

14 I hereby certify that the foregoing is true and correct
Name (Printed/Typed) **Annette Childers**

Title **Regulatory Clerk**

Signature *Annette Childers* Date **1-6-2010**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by _____ Title _____ Date _____

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.

(Instructions on page 2)

MR

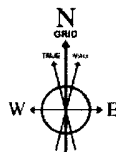
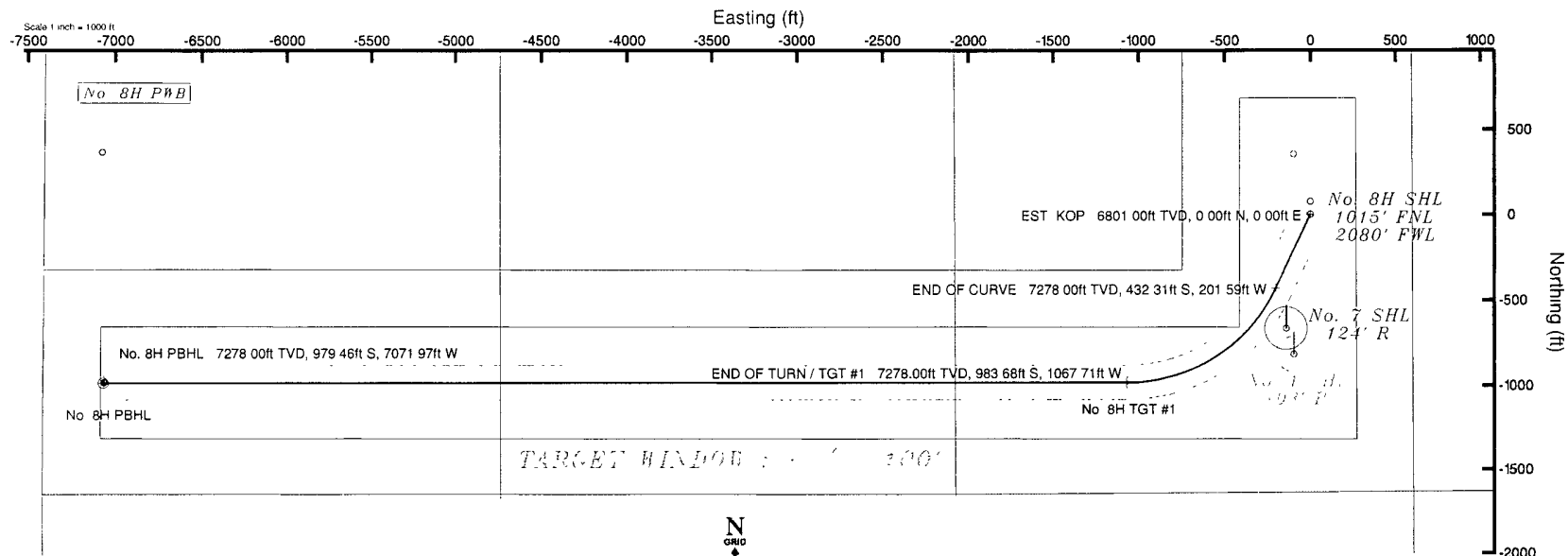


Slot	No 8H SHL
Weil	No 8H
Wellbore	No 8H PWB

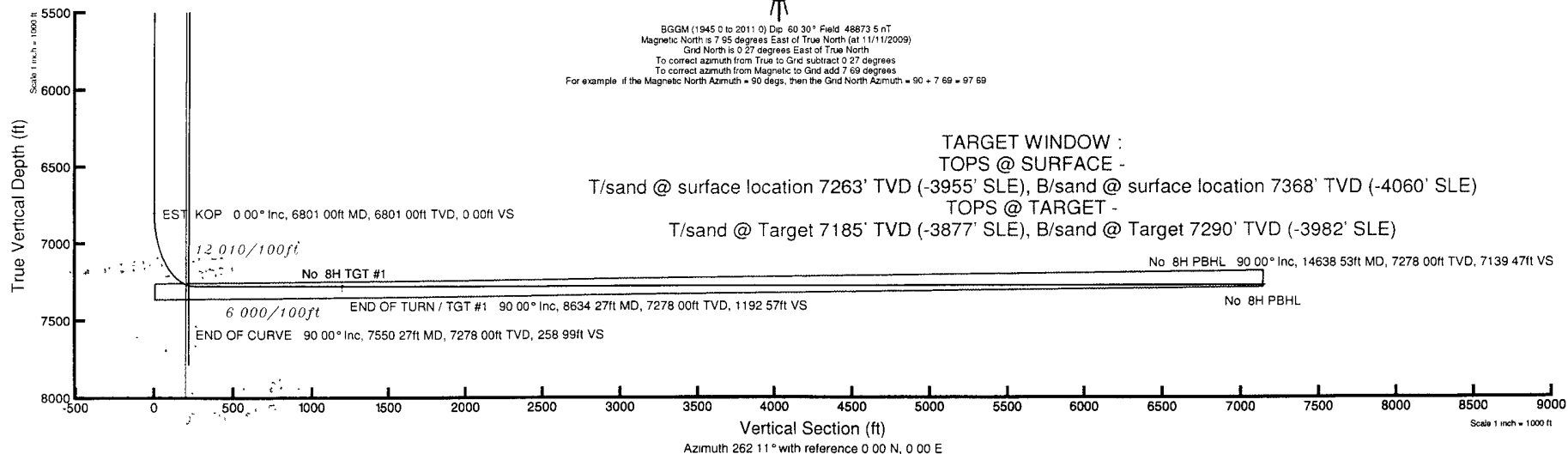
Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	0 00	0 000	205 000	0 00	0 00	0 00	0 00	0.00
EST KOP	6801 00	0 000	205 000	6801 00	0 00	0 00	0 00	0 00
END OF CURVE	7550 27	90.000	205.000	7278 00	-432 31	-201 59	12.01	258.99
END OF TURN / TGT #1	8634 27	90.000	270 038	7278 00	-983 68	-1067 71	6 00	1192 57
No 8H PBHL	14638 53	90 000	270 042	7278 00	-979 46	-7071 97	0 00	7139 47

True vertical depths are referenced to Rig on No. 8H SHL (RT)	Grid System: NAD83 / TM New Mexico State Plane, Eastern Zone (2003) US feet
Measured depths are referenced to Rig on No. 8H SHL (RT)	North Reference: Grid north
Rig on No. 8H SHL (RT) to Mean Sea Level: 2000 feet	Scale: True distance
Mean Sea Level to Mud line (Facility: Hudson / Field No. 8H) : 2289 feet	Depths are in feet
Coordinates are in feet referenced to Surface Location	Created by Victor Hernandez on 12/16/2009



BGGM (1945 0 to 2011 0) Dip: 60 30° Field: 48873 5 nT
Magnetic North is 7.95 degrees East of True North (at 11/11/2009)
Grid North is 0.27 degrees East of True North
To correct azimuth from True to Grid subtract 0.27 degrees
To correct azimuth from Magnetic to Grid add 7.69 degrees
For example if the Magnetic North Azimuth = 90 degrees, then the Grid North Azimuth = 90 + 7.69 = 97.69





Planned Wellpath Report

Plan #5

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 8H SHL
Area	Eddy County, NM	Well	No. 8H
Field	Quahada Ridge, SE (Delaware)	Wellbore	No. 8H PWB
Facility	Hudson 1 Fed No. 8H		

REPORT SETUP INFORMATION

Projection System	NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect® 2.0
North Reference	Grid	User	Victor Hernandez
Scale	0.999936	Report Generated	12/16/2009 at 6:31:09 PM
Convergence at slot	0.27° East	Database/Source file	WA_Midland/No._8H_PWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	694868.40	487246.30	32°20'18.716"N	103°50'10.395"W
Facility Reference Pt			694868.40	487246.30	32°20'18.716"N	103°50'10.395"W
Field Reference Pt			696371.30	485350.50	32°19'59.887"N	103°49'52.981"W

WELLPATH DATUM

Calculation method	Minimum curvature / Radius of curvature	Rig on No. 8H SHL (RT) to GL	19.00ft
Horizontal Reference Pt	Surface Location	Rig on No. 8H SHL (RT) to Mean Sea Level	3308.00ft
Vertical Reference Pt	Rig on No. 8H SHL (RT)	GL to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 8H SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	262.11°



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Facility	Hudson 1 Fed No. 8H		

WELLPATH DATA (83 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	DLS [°/100ft]	Comments
0.00	0.000	205.000	0.00	0.00	0.00	0.00	694868.40	487246.30	0.00	Tie On
6801.00	0.000	205.000	6801.00	0.00	0.00	0.00	694868.40	487246.30	0.00	EST. KOP
6901.00†	12.012	205.000	6900.27	5.67	-9.47	-4.41	694863.99	487236.84	12.01	
7001.00†	24.023	205.000	6995.19	22.43	-37.45	-17.46	694850.94	487208.86	12.01	
7101.00†	36.035	205.000	7081.61	49.56	-82.72	-38.57	694829.63	487163.59	12.01	
7201.00†	48.047	205.000	7155.74	85.85	-143.30	-66.82	694801.58	487103.01	12.01	
7301.00†	60.058	205.000	7214.34	129.72	-216.54	-100.97	694767.43	487029.78	12.01	
7401.00†	72.070	205.000	7254.83	179.26	-299.22	-139.53	694728.88	486947.10	12.01	
7501.00†	84.082	205.000	7275.46	232.29	-387.73	-180.80	694687.61	486858.59	12.01	
7550.27	90.000	205.000	7278.00	258.99	-432.31	-201.59	694666.82	486814.02	12.01	END OF CURVE
7601.00†	90.000	208.044	7278.00	287.65	-477.69	-224.24	694644.18	486768.64	6.00	
7701.00†	90.000	214.044	7278.00	350.46	-563.33	-275.78	694592.63	486683.00	6.00	
7801.00†	90.000	220.043	7278.00	421.05	-643.11	-336.00	694532.42	486603.23	6.00	
7901.00†	90.000	226.043	7278.00	498.65	-716.16	-404.22	694464.20	486530.18	6.00	
8001.00†	90.000	232.043	7278.00	582.41	-781.68	-479.71	694388.72	486464.67	6.00	
8101.00†	90.000	238.043	7278.00	671.42	-838.95	-561.63	694306.81	486407.40	6.00	
8201.00†	90.000	244.043	7278.00	764.69	-887.35	-649.09	694219.35	486359.01	6.00	
8301.00†	90.000	250.043	7278.00	861.20	-926.33	-741.13	694127.32	486320.03	6.00	
8401.00†	90.000	256.043	7278.00	959.91	-955.49	-836.73	694031.72	486290.88	6.00	
8501.00†	90.000	262.043	7278.00	1059.72	-974.49	-934.87	693933.59	486271.88	6.00	
8601.00†	90.000	268.042	7278.00	1159.54	-983.12	-1034.45	693834.02	486263.24	6.00	
8634.27	90.000	270.038	7278.00	1192.57	-983.68	-1057.71	693800.75	486262.68	6.00	END OF TURN / TGT #1
8701.00†	90.000	270.039	7278.00	1258.66	-983.64	-1134.44	693734.03	486262.73	0.00	
8801.00†	90.000	270.039	7278.00	1357.70	-983.57	-1234.44	693634.04	486262.80	0.00	
8901.00†	90.000	270.039	7278.00	1456.75	-983.50	-1334.44	693534.05	486262.86	0.00	
9001.00†	90.000	270.039	7278.00	1555.80	-983.43	-1434.44	693434.05	486262.93	0.00	
9101.00†	90.000	270.039	7278.00	1654.84	-983.37	-1534.44	693334.06	486263.00	0.00	
9201.00†	90.000	270.039	7278.00	1753.89	-983.30	-1634.44	693234.07	486263.07	0.00	
9301.00†	90.000	270.039	7278.00	1852.93	-983.23	-1734.44	693134.07	486263.13	0.00	
9401.00†	90.000	270.039	7278.00	1951.98	-983.16	-1834.44	693034.08	486263.20	0.00	



Planned Wellpath Report

Plan #5

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INTEQ

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Facility	Hudson 1 Fed No. 8H		

WELLPATH DATA (83 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	DLS [°/100ft]	Comments
9501.00†	90.000	270.039	7278.00	2051.02	-983.09	-1934.44	692934.09	486263.27	0.00	
9601.00†	90.000	270.039	7278.00	2150.07	-983.03	-2034.44	692834.09	486263.34	0.00	
9701.00†	90.000	270.039	7278.00	2249.11	-982.96	-2134.44	692734.10	486263.41	0.00	
9801.00†	90.000	270.039	7278.00	2348.16	-982.89	-2234.44	692634.11	486263.48	0.00	
9901.00†	90.000	270.039	7278.00	2447.20	-982.82	-2334.44	692534.11	486263.54	0.00	
10001.00†	90.000	270.039	7278.00	2546.25	-982.75	-2434.44	692434.12	486263.61	0.00	
10101.00†	90.000	270.039	7278.00	2645.29	-982.68	-2534.44	692334.13	486263.68	0.00	
10201.00†	90.000	270.039	7278.00	2744.34	-982.62	-2634.44	692234.13	486263.75	0.00	
10301.00†	90.000	270.039	7278.00	2843.38	-982.55	-2734.44	692134.14	486263.82	0.00	
10401.00†	90.000	270.040	7278.00	2942.43	-982.48	-2834.44	692034.15	486263.89	0.00	
10501.00†	90.000	270.040	7278.00	3041.47	-982.41	-2934.44	691934.15	486263.96	0.00	
10601.00†	90.000	270.040	7278.00	3140.52	-982.34	-3034.44	691834.16	486264.03	0.00	
10701.00†	90.000	270.040	7278.00	3239.56	-982.27	-3134.44	691734.17	486264.09	0.00	
10801.00†	90.000	270.040	7278.00	3338.61	-982.20	-3234.44	691634.17	486264.16	0.00	
10901.00†	90.000	270.040	7278.00	3437.65	-982.13	-3334.44	691534.18	486264.23	0.00	
11001.00†	90.000	270.040	7278.00	3536.70	-982.06	-3434.44	691434.19	486264.30	0.00	
11101.00†	90.000	270.040	7278.00	3635.74	-981.99	-3534.44	691334.19	486264.37	0.00	
11201.00†	90.000	270.040	7278.00	3734.79	-981.92	-3634.44	691234.20	486264.44	0.00	
11301.00†	90.000	270.040	7278.00	3833.83	-981.85	-3734.44	691134.21	486264.51	0.00	
11401.00†	90.000	270.040	7278.00	3932.88	-981.78	-3834.44	691034.21	486264.58	0.00	
11501.00†	90.000	270.040	7278.00	4031.92	-981.71	-3934.44	690934.22	486264.65	0.00	
11601.00†	90.000	270.040	7278.00	4130.97	-981.64	-4034.44	690834.23	486264.72	0.00	
11701.00†	90.000	270.040	7278.00	4230.01	-981.57	-4134.44	690734.23	486264.79	0.00	
11801.00†	90.000	270.040	7278.00	4329.05	-981.50	-4234.44	690634.24	486264.86	0.00	
11901.00†	90.000	270.040	7278.00	4428.10	-981.43	-4334.44	690534.25	486264.93	0.00	
12001.00†	90.000	270.040	7278.00	4527.14	-981.36	-4434.44	690434.25	486265.00	0.00	
12101.00†	90.000	270.041	7278.00	4626.19	-981.29	-4534.44	690334.26	486265.07	0.00	
12201.00†	90.000	270.041	7278.00	4725.23	-981.22	-4634.44	690234.27	486265.14	0.00	
12301.00†	90.000	270.041	7278.00	4824.28	-981.15	-4734.44	690134.27	486265.22	0.00	
12401.00†	90.000	270.041	7278.00	4923.32	-981.08	-4834.44	690034.28	486265.29	0.00	



Planned Wellpath Report

Plan #5

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No. 8H SHL
Area	Eddy County, NM	Well	No. 8H
Field	Quahada Ridge, SE (Delaware)	Wellbore	No. 8H PWB
Facility	Hudson 1 Fed No. 8H		

WELLPATH DATA (83 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	DLS [°/100ft]	Comments
12501.00†	90.000	270.041	7278.00	5022.37	-981.01	-4934.44	689934.29	486265.36	0.00	
12601.00†	90.000	270.041	7278.00	5121.41	-980.94	-5034.44	689834.29	486265.43	0.00	
12701.00†	90.000	270.041	7278.00	5220.46	-980.86	-5134.44	689734.30	486265.50	0.00	
12801.00†	90.000	270.041	7278.00	5319.50	-980.79	-5234.44	689634.30	486265.57	0.00	
12901.00†	90.000	270.041	7278.00	5418.55	-980.72	-5334.44	689534.31	486265.64	0.00	
13001.00†	90.000	270.041	7278.00	5517.59	-980.65	-5434.44	689434.32	486265.71	0.00	
13101.00†	90.000	270.041	7278.00	5616.64	-980.58	-5534.44	689334.32	486265.79	0.00	
13201.00†	90.000	270.041	7278.00	5715.68	-980.51	-5634.44	689234.33	486265.86	0.00	
13301.00†	90.000	270.041	7278.00	5814.73	-980.43	-5734.44	689134.34	486265.93	0.00	
13401.00†	90.000	270.041	7278.00	5913.77	-980.36	-5834.44	689034.34	486266.00	0.00	
13501.00†	90.000	270.041	7278.00	6012.81	-980.29	-5934.44	688934.35	486266.07	0.00	
13601.00†	90.000	270.041	7278.00	6111.86	-980.22	-6034.44	688834.36	486266.15	0.00	
13701.00†	90.000	270.041	7278.00	6210.90	-980.15	-6134.44	688734.36	486266.22	0.00	
13801.00†	90.000	270.041	7278.00	6309.95	-980.07	-6234.44	688634.37	486266.29	0.00	
13901.00†	90.000	270.042	7278.00	6408.99	-980.00	-6334.44	688534.38	486266.36	0.00	
14001.00†	90.000	270.042	7278.00	6508.04	-979.93	-6434.44	688434.38	486266.44	0.00	
14101.00†	90.000	270.042	7278.00	6607.08	-979.86	-6534.44	688334.39	486266.51	0.00	
14201.00†	90.000	270.042	7278.00	6706.13	-979.78	-6634.44	688234.40	486266.58	0.00	
14301.00†	90.000	270.042	7278.00	6805.17	-979.71	-6734.44	688134.40	486266.65	0.00	
14401.00†	90.000	270.042	7278.00	6904.21	-979.64	-6834.44	688034.41	486266.73	0.00	
14501.00†	90.000	270.042	7278.00	7003.26	-979.56	-6934.44	687934.42	486266.80	0.00	
14601.00†	90.000	270.042	7278.00	7102.30	-979.49	-7034.44	687834.42	486266.87	0.00	
14638.53	90.000	270.042	7278.00	7139.47	-979.46	-7071.97	687796.90	486266.90	0.00	No. 8H PBHL



Planned Wellpath Report

Plan #5

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INTEQ

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Field	Quahada Ridge, SE (Delaware)	Wellbore	No. 8H PWB
Facility	Hudson 1 Fed No. 8H		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
2) No. 8H PBHL	14638.53	7278.00	979.46	7071.97	687796.90	486266.90	32°20'09.341"N	103°51'32.871"W	point
1) No. 8H TGT #1	8634.27	7278.00	983.68	1067.71	693800.76	486262.68	32°20'09.031"N	103°50'22.892"W	point

SURVEY PROGRAM Ref Wellbore: No. 8H PWB Ref Wellpath: Plan #5

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
19.00	14638.53	NaviTrak (Standard)		No. 8H PWB