Morrow Deepening Procedure – Open Hole Plugging

NORTH INDIAN HILLS UNIT # 20
Upper Penn

Surface Hole Location: 1,650' FSL & 2,310' FWL, Section 2, Township 21 South, Range 23 East
Indian Basin Field, Eddy Co, NM

Date: January 12, 2007

Purpose: Abandon open hole drilled in January 2005 Morrow Deepening attempt.

Current Status: Upper Penn perforations re-squeezed in November 2006.

WBS#: DX.05.11334

AFE Cost: $1,180,000 (Gross)

Wellbore Prep, DRL	$133,500
Deepen to Morrow, DRL	$574,000
Completion, CMP	$472,500

WI: 90.68237% **NRI:** 77.90652%

Elevation/Depths: GL: 3,736' Original KB: 3,752' TD: 8,919' PBTD: 7,917'

Surface Casing: 9-5/8" 36# J-55 set @ 1,285'. Cemented w/ 805 sx of PSL "C" with 10 lb/sk Gil, ¼ lb/sk cello-seal mixed at 12.4 lb/gal yield. Tail with 250 sx "C" neat with 2% CaCl2 mixed at 14.8 lb/gal yield. Circulated 728 sx cement to pit.

Production Casing: 7", 23 & 26# K-55 set @ 8,042'. Cemented 2 stage with DV tool at 6,353 ft. Cemented first stage with 450 sx. Circulated 110 sx off of DV tool. Cemented second stage with 825 sx. Circulated 88 sx.

Perforations: Note: In January 2005, the following perforations were squeezed and drilled out three times using a total of 1200 sx cement with additives. The third squeeze broke down while attempting to deepen the well to the Morrow formation. These perforations were resqueezed in November 2006 with 860 sx cement with additives.
Upper Penn: 7488-7508' (20'), 7521-7536' (15'), 7546-7575' (29'), 7603-7634' (31'), 7643-7702' (59'), 7714-7730' (16'), 7738-7786' (48')
Total feet of squeezed perfs: 298' / 218'(Net)

Production Tubing: None. Dry Hole Tree on wellhead.

Open Hole: 8,042' – 8,919' (see CIBP information below)

CIBP: 7" @ 7,942' w/25' cement on top

Pressure Information: Upper Penn @ ~ 200 psi

Safety:
- H2S concentration - 6,500 ppm
- Keep TIW valve on rig floor at all times.
- Keep kill-string in well at night if tbg is pulled.
- Follow MOC SOP's throughout job.

Safety Numbers:		
	Carlsbad Hospital –	**(505)-885-2111 +0**
	Artesia Hospital –	**(505)-748-3333**
	Fire Department -	**(505)-885-3124**
	Eddy County Sheriff –	**(505)-887-7551**
	NM State Police -	**(505)-622-7200**

Procedure:

1. Notify New Mexico Oil Conservation Division (NMOCD) twenty-four (24) hours prior to commencement of the open-hole plugging operation.

2. Rig Supervisor & pulling unit operator will inspect the well & location prior to rigging up. Install and test safety anchors to 22,500 lbs.

3. Make sure all associated personnel have proper PPE for the job.

4. MIRU Drilling Unit or Pulling Unit.

5. Make sure Geronimo line is staked securely, H_2S monitors are in place, guardrails are in place and the unit is properly grounded to the wellhead.

6. Inspect casing valves and wellhead for corrosion and replace as needed or replace if equipment is rated less than 5000 psi working pressure.

7. RU Reverse Unit with settling tank(s). ND dry hole tree. Install 7 1/16", 1500 Series hydraulic BOPs w/ 2-7/8" pipe rams & blind rams (equipped w/ valved outlets below blinds) & Torus annular. Test pipe rams & blind rams to 250 & 1,000 psig. Test casing and CIBP to 500 psig.

8. PU 6 1/8" bit on 2-7/8" workstring and RIH to PBTD of approximately 7917'. If workstring is in used condition, pressure test tubing to 5,000 psi below slips on TIH. Tag cement at 7917' on top of CIBP @ 7942'. Drill out 25' of cement and CIBP, pushing CIBP out the bottom of the casing shoe at 8042' if necessary. Continue RIH to open hole TD of 8919'. Circulate hole clean with fresh water. POOH with workstring and lay down 6-1/8" bit.

9. PU 900' of 2-7/8" tailpipe with reduced coupling upset, such as Hydril type PH6 and RIH on 2-7/8" workstring to open hole TD of 8919'.

10. Circulate two hole volumes (~650 bbls) of fresh water to make sure fluid in hole is balanced.

11. MIRU Halliburton cement unit.

12. Pump 10 barrels of fresh water ahead of cement. Mix and pump 85 sx of 15.6 ppg cement plus retarder if needed. (Note: This is 27 barrels of slurry, which equals 600 feet with 25% excess). Pump fresh water to balance plug.

13. Bleed off pressure if necessary, then pull work string out of cement plug at a slow but steady rate.

14. Pull ten stands, then circulate 1.25 hole volumes (~400 bbls) down work string. WOC for four hours.

15. RIH slowly to top of previous plug around 8300'. Circulate 1.25 hole volumes (~400 bbls).

16. Pump ten barrels of fresh water. Mix and pump 120 sx of Premium 17 ppg cement with retarder as needed. (Note: This equals a 500 foot cement plug, leaving 200' of cement in casing with 25% excess.)

17. Pump fresh water to displace and balance cement. Release pressure if necessary, then pull workstring out of cement plug at a slow but steady rate. Pull twenty stands out of hole.

18. Wait twelve hours, then RIH with workstring and tag TOC.

19. If Pulling Unit is on location, POOH laying down 2-7/8" workstring. ND BOPs and install wellhead. RDMO Pulling Unit.

20. If Drilling Rig is on location, prepare for deepening operations.

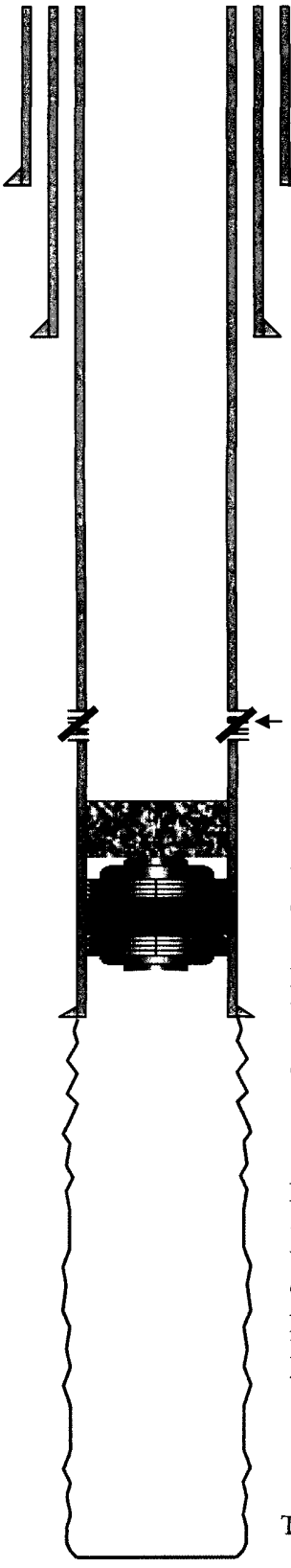
21. If there are any questions before or during the cement plugging operation, call Gene Blocker (office 713-296-3343 or cell 832-477-7431) or Ken Baker (office 713-296-3124 or cell 936-520-4692).

PREPARED BY: K. J. Baker DATE: 1/12/2007

APPROVED BY: _____ DATE: _____

xc: D. Arnst, C. Kent, R. Angel, T. Breninger, J. Harrison, T. Winters
G. Blocker, R. Gaddis, B. Ackley, R. Truby, D. Castillo, C. Kendrix

North Indian Basin Unit No. 20
As It Currently Exists w/ Open Hole Lateral
(Before Plug Back)



Dry Hole Tree
Spud: 04/29/95
G.L. Elev.: 3736'
K.B.: 3752'

16" Conductor Casing
Set at 56', Cement to Surface W/readi-mix.

Intermediate Casing: 28 Jts., 9 5/8" 36#, J-55 Csg.
Set at 1285', Cmt. W/1055 sks., Circ. 728 sks.

Perforations (SQUEEZED Nov 2006 in 2 attempts with 860 sx Class C + 3000 gals Flo-Chek.). Previously SQUEEZED Jan 2005 in 3 attempts w/1200 total sks cement + additives and 50 bbls Hydro Plug – squeeze broke down while deepening well:
7488'-7508', 7521'-36', 7546'-75',
7603'-34'. 7643'- 7702'. 7714'-30'. 7738'-86'

7" CIBP set @ 7942' w/25'
cement on top.

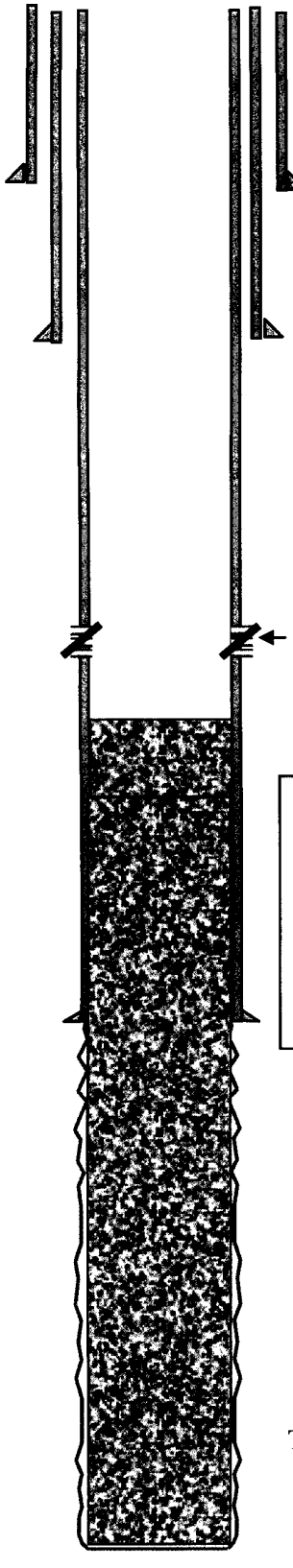
Production Casing
7" 26# & 23#, K-55 Csg.
Set at 8042', Cmt. W/1300 sks.
Circ. 258 sks.

Directional Hole from 8042' to 8919' where complete returns were lost and could not be re-established with 2 – 50 bbl gel pills and 2 – 50 bbl Magna Fiber LCM pills (Note: Determined that UP Perf Squeeze broke down)

TD: 8919'

Well No. NIBU 20
Updated: 11/26/06
U.L. "K", 1650' FSL, 2310' FWL
Sec. 2, T-21-S, R-23-E
Eddy Co., N.M.
Lease No.: E-7906
API No.: 30-015-28384

North Indian Basin Unit No. 20
Wellbore After Proposed OH Squeeze
(Before Second Lateral)



Dry Hole Tree
Spud: 04/29/95
G.L. Elev.: 3736'
K.B.: 3752'

Well No. NIBU 20
Updated: 1/18/07
U.L. "K", 1650' FSL, 2310' FWL
Sec. 2, T-21-S, R-23-E
Eddy Co., N.M.
Lease No.: E-7906
API No.: 30-015-28384

16" Conductor Casing
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7488'-7508', 7521'-36', 7546'-75',
7603'-34', 7643'- 7702', 7714'-30', 7738'-86'

Proposed Cement Plugging of 6-1/8" Open Hole (Jan 2007):

Plug with 205 sx of cement in two stages as follows:
1) 85 sx of 15.6 ppg cement
2) 120 sx of 17 ppg Premium cement

With 25% overage, the plug is designed to extend from TD of 8919' to 7842' (200' above shoe)

Production Casing
7" 26# & 23#, K-55 Csg.
Set at 8042', Cmt. W/1300 sks.
Circ. 258 sks.

TD: 8919'

Directional Hole from 8042' to 8919' where complete returns were lost and could not be re-established with 2 – 50 bbl gel pills and 2 – 50 bbl Magna Fiber LCM pills (Note: Determined that UP Perf Squeeze broke down)

Planned Wellpath Report

Plan #1

MARATHON

BAKER HUGHES INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Marathon Oil Company**	Slot	**#20_SHL**
Area	**Eddy County, NM**	Well	**North Indian Basin Unit #20**
Field	**Indian Basin Field**	Wellbore	**#20 PWB ST01**
Facility	**Indian Basin**	Sidetrack from	**#20 AWB at 8042.00 MD**

REPORT SETUP INFORMATION			
Projection System	**NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet**	Software System	**WellArchitect™ 1.2**
North Reference	**Grid**	User	**GomeOscR**
Scale	**0.999915**	Report Generated	**01/17/07 at 16:10:46**
Wellbore last revised	**01/17/07**	Database/Source file	**WA_Midland/#20_PWI**

WELLPATH LOCATION	Local coordinates		Grid coordinates		Geographic coordinates	
	North [feet]	**East [feet]**	**Easting [US feet]**	**Northing [US feet]**	**Latitude [°]**	**Longitude [°]**
Slot Location	-7426.65	-7969.70	**425898.50**	**547431.50**	32 30 17.172N	104 34 25.321W
Facility Reference Pt			**433867.50**	**554857.50**	32 31 30.826N	104 32 52.438W
Field Reference Pt			**0.00**	**0.00**	30 59 24.512N	105 55 44.137W

WELLPATH DATUM			
Calculation method	**Minimum curvature**	Rig on #20_SHL (RT) to Facility Vertical Datum	**0.00 feet**
Horizontal Reference Pt	**Slot**	Rig on #20_SHL (RT) to Mean Sea Level	**0.00 feet**
Vertical Reference Pt	**Rig on #20_SHL (RT)**	Facility Vertical Datum to Mud Line (Facility)	**0.00 feet**
MD Reference Pt	**Rig on #20_SHL (RT)**	Section Origin	**N 0.00, E 0.00 ft**
Field Vertical Reference	**Mean Sea Level**	Section Azimuth	**227.07°**

Planned Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	**Marathon Oil Company**	Slot	**#20_SHL**
Area	**Eddy County, NM**	Well	**North Indian Basin Unit #20**
Field	**Indian Basin Field**	Wellbore	**#20 PWB ST01**
Facility	**Indian Basin**	Sidetrack from	**#20 AWB at 8042.00 MD**

WELLPATH DATA (108 stations)

MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]	Design Comments	Path Comment
0.00	0.000	0.000	0.00	0.00	0.00	0.00	0.00		
100.00	0.260	106.180	100.00	-0.12	-0.06	0.22	0.26		
200.00	0.620	107.710	200.00	-0.50	-0.29	0.95	0.36		
300.00	0.620	122.620	299.99	-0.90	-0.75	1.92	0.16		
400.00	0.600	127.100	399.99	-1.12	-1.35	2.80	0.05		
500.00	0.620	122.480	499.98	-1.35	-1.96	3.67	0.05		
600.00	0.470	124.530	599.97	-1.58	-2.48	4.46	0.15		
700.00	0.680	211.430	699.97	-1.09	-3.22	4.49	0.81		
800.00	1.650	205.740	799.95	0.82	-5.03	3.56	0.98		
900.00	1.330	212.890	899.92	3.29	-7.30	2.30	0.37		
1000.00	1.470	210.800	999.89	5.64	-9.37	1.02	0.15		
1100.00	0.920	211.580	1099.86	7.65	-11.16	-0.06	0.55		
1200.00	1.040	207.030	1199.85	9.27	-12.65	-0.89	0.14		
1300.00	1.040	215.590	1299.83	11.01	-14.20	-1.84	0.16		
1400.00	1.100	229.410	1399.82	12.86	-15.56	-3.09	0.26		
1500.00	1.130	227.710	1499.80	14.81	-16.85	-4.55	0.04		
1600.00	1.030	234.680	1599.78	16.69	-18.03	-6.01	0.16		
1700.00	1.140	231.820	1699.76	18.57	-19.17	-7.53	0.12		
1800.00	1.110	227.100	1799.74	20.53	-20.44	-9.02	0.10		
1900.00	1.090	243.140	1899.72	22.41	-21.53	-10.58	0.31		
2000.00	1.110	240.920	1999.70	24.26	-22.43	-12.27	0.05		
2100.00	1.220	228.730	2099.68	26.27	-23.60	-13.92	0.27		
2200.00	1.130	240.270	2199.66	28.29	-24.79	-15.58	0.25		
2300.00	1.120	232.720	2299.64	30.23	-25.88	-17.21	0.15		
2400.00	0.850	278.670	2399.63	31.66	-26.36	-18.72	0.81		
2500.00	0.870	235.480	2499.62	32.87	-26.67	-20.08	0.63		
2600.00	1.470	206.100	2599.60	34.82	-28.26	-21.27	0.83		
2700.00	0.950	225.020	2699.58	36.85	-29.99	-22.42	0.65		
2800.00	0.900	245.250	2799.57	38.42	-30.91	-23.72	0.33		
2900.00	1.110	229.150	2899.55	40.13	-31.87	-25.17	0.35		
3000.00	1.050	220.590	2999.53	42.01	-33.20	-26.50	0.17		
3100.00	1.020	227.480	3099.52	43.81	-34.50	-27.75	0.13		
3200.00	1.150	228.370	3199.50	45.71	-35.77	-29.15	0.13		
3300.00	1.380	227.680	3299.47	47.91	-37.24	-30.79	0.23		
3400.00	1.430	231.100	3399.44	50.36	-38.84	-32.66	0.10		
3500.00	1.400	234.300	3499.41	52.82	-40.33	-34.62	0.08		
3600.00	1.210	236.630	3599.39	55.07	-41.63	-36.49	0.20		
3700.00	1.310	224.790	3699.36	57.26	-43.02	-38.18	0.28		
3800.00	1.070	231.860	3799.34	59.33	-44.41	-39.72	0.28		
3900.00	1.110	224.580	3899.32	61.23	-45.67	-41.13	0.14		

Planned Wellpath Report

Plan #1

MARATHON

BAKER HUGHES INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Marathon Oil Company**	Slot	**#20_SHL**
Area	**Eddy County, NM**	Well	**North Indian Basin Unit #20**
Field	**Indian Basin Field**	Wellbore	**#20 PWB ST01**
Facility	**Indian Basin**	Sidetrack from	**#20 AWB at 8042.00 MD**

WELLPATH DATA (108 stations)

MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]	Design Comments	Path Comment
4000.00	0.970	237.930	3999.31	63.03	-46.81	-42.53	0.28		
4100.00	0.970	235.670	4099.29	64.69	-47.74	-43.95	0.04		
4200.00	1.110	242.300	4199.28	66.46	-48.67	-45.50	0.18		
4300.00	0.970	256.780	4299.26	68.13	-49.31	-47.18	0.30		
4400.00	1.040	273.440	4399.24	69.50	-49.45	-48.91	0.30		
4500.00	0.990	278.880	4499.23	70.66	-49.26	-50.67	0.11		
4600.00	1.280	310.430	4599.21	71.32	-48.41	-52.38	0.68		
4700.00	1.460	308.610	4699.18	71.64	-46.89	-54.22	0.19		
4800.00	1.600	311.230	4799.15	71.97	-45.17	-56.27	0.16		
4900.00	1.860	322.010	4899.10	71.97	-42.97	-58.32	0.42		
5000.00	2.440	329.530	4999.03	71.37	-39.86	-60.40	0.64		
5100.00	2.510	325.540	5098.94	70.59	-36.22	-62.71	0.19		
5200.00	2.680	323.000	5198.83	70.02	-32.55	-65.36	0.21		
5300.00	2.610	327.020	5298.73	69.39	-28.77	-68.01	0.20		
5400.00	2.560	329.730	5398.63	68.50	-24.93	-70.37	0.13		
5500.00	2.290	327.000	5498.54	67.67	-21.33	-72.59	0.29		
5600.00	2.160	326.110	5598.46	67.03	-18.09	-74.72	0.13		
5700.00	2.170	327.520	5698.39	66.39	-14.92	-76.79	0.05		
5800.00	1.980	340.540	5798.32	65.36	-11.70	-78.38	0.51		
5900.00	1.780	353.320	5898.27	63.75	-8.53	-79.14	0.46		
6000.00	1.780	351.810	5998.22	61.95	-5.45	-79.54	0.05		
6100.00	1.470	354.360	6098.18	60.29	-2.63	-79.89	0.32		
6200.00	1.130	335.690	6198.16	59.19	-0.46	-80.42	0.54		
6300.00	1.160	297.260	6298.14	59.22	0.90	-81.73	0.75		
6400.00	1.550	270.820	6398.11	60.54	1.39	-83.98	0.73		
6500.00	1.650	273.150	6498.07	62.52	1.49	-86.77	0.12		
6600.00	0.940	252.240	6598.05	64.26	1.31	-88.99	0.84		
6700.00	0.860	266.340	6698.03	65.58	1.02	-90.52	0.23		
6800.00	0.860	275.330	6798.02	66.66	1.04	-92.01	0.13		
6900.00	0.360	326.210	6898.02	67.11	1.37	-92.94	0.69		
7000.00	0.130	182.130	6998.02	67.14	1.52	-93.12	0.47		
7100.00	1.350	135.250	7098.01	67.18	0.57	-92.29	1.26		
7200.00	3.560	128.130	7197.91	66.66	-2.19	-89.02	2.23		
7300.00	3.440	141.630	7297.72	66.42	-6.46	-84.71	0.83		
7400.00	1.830	148.930	7397.62	66.99	-10.18	-82.03	1.64		
7500.00	1.380	155.020	7497.58	67.69	-12.64	-80.69	0.48		
7600.00	1.280	150.240	7597.55	68.31	-14.70	-79.63	0.15		
7700.00	1.470	152.800	7697.52	68.92	-16.81	-78.49	0.20		
7800.00	1.020	151.710	7797.50	69.49	-18.73	-77.48	0.45		
7870.00	1.120	153.630	7867.48	69.84	-19.89	-76.88	0.15		

Planned Wellpath Report

Plan #1

MARATHON

BAKER HUGHES INTEQ

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Operator	**Marathon Oil Company**	Slot	**#20_SHL**
Area	**Eddy County, NM**	Well	**North Indian Basin Unit #20**
Field	**Indian Basin Field**	Wellbore	**#20 PWB ST01**
Facility	**Indian Basin**	Sidetrack from	**#20 AWB at 8042.00 MD**

WELLPATH DATA (108 stations) **† = interpolated/extrapolated station**

MD [feet]	Inclination [°]	Azimuth [°]	TVD [feet]	Vert Sect [feet]	North [feet]	East [feet]	DLS [°/100ft]	Design Comments	Path Comment
8042.00	0.534	255.954	8039.47	71.02	-21.59	-76.91	0.00	Tie On	
8102.00	0.534	255.954	8099.47	71.51	-21.73	-77.46	0.00	KOP	
8142.00†	1.795	233.060	8139.46	72.30	-22.15	-78.14	3.30		
8207.63†	3.947	228.103	8205.00	75.58	-24.28	-80.64	3.30		Strawn
8242.00†	5.078	227.185	8239.27	78.28	-26.10	-82.64	3.30		
8342.00†	8.373	225.923	8338.57	89.99	-34.18	-91.12	3.30		
8442.00†	11.670	225.371	8437.03	107.38	-46.35	-103.55	3.30		
8542.00†	14.967	225.060	8534.32	130.41	-62.58	-119.89	3.30		
8642.00†	18.264	224.859	8630.13	158.98	-82.81	-140.09	3.30		
8742.00†	21.562	224.718	8724.14	193.00	-106.99	-164.08	3.30		
8802.49†	23.557	224.651	8780.00	216.19	-123.49	-180.40	3.30		Atoka
8842.00†	24.860	224.613	8816.04	232.38	-135.02	-191.78	3.30		
8942.00†	28.158	224.531	8905.51	276.96	-166.81	-223.10	3.30		
9042.00†	31.456	224.465	8992.27	326.61	-202.26	-257.93	3.30		
9122.57†	34.113	224.420	9060.00	370.19	-233.40	-288.47	3.30		Morrow
9142.00†	34.753	224.410	9076.03	381.16	-241.25	-296.16	3.30		
9242.00†	38.051	224.364	9156.50	440.44	-283.66	-337.67	3.30		
9342.00†	41.349	224.324	9233.43	504.23	-329.33	-382.31	3.30		
9442.00†	44.647	224.289	9306.56	572.34	-378.13	-429.94	3.30		
9542.00†	47.945	224.257	9375.64	644.54	-429.89	-480.40	3.30		
9560.56	48.557	224.252	9388.00	658.37	-439.80	-490.06	3.30	EOB	
9578.69	48.557	224.252	9400.00	671.94	-449.54	-499.54	0.00	EOH	
9631.57†	48.557	224.252	9435.00	711.53	-477.93	-527.20	0.00		Main Pay
9642.00†	48.557	224.252	9441.90	719.34	-483.53	-532.66	0.00		
9661.79†	48.557	224.252	9455.00	734.16	-494.16	-543.01	0.00		Chester
9742.00†	48.557	224.252	9508.09	794.21	-537.23	-584.97	0.00		
9842.00†	48.557	224.252	9574.28	869.08	-590.92	-637.28	0.00		
9880.86	48.557	224.252	9600.00	898.18	-611.79	-657.61	0.00	#20 BHL ST01	

HOLE & CASING SECTIONS **Ref Wellbore: #20 PWB ST01** **Ref Wellpath: Plan #1**

String/Diameter	Start MD [feet]	End MD [feet]	Interval [feet]	Start TVD [feet]	End TVD [feet]	Start N/S [feet]	Start E/W [feet]	End N/S [feet]	End E/W [feet]
7in Casing	0.00	8042.00	8042.00	0.00	8039.47	0.00	0.00	-21.59	-76.91
6.125in Open Hole	8042.00	9880.86	1838.86	8039.47	9600.00	-21.59	-76.91	-611.78	-657.61

Planned Wellpath Report

Plan #1

MARATHON

BAKER HUGHES INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	**Marathon Oil Company**	Slot	**#20_SHL**
Area	**Eddy County, NM**	Well	**North Indian Basin Unit #20**
Field	**Indian Basin Field**	Wellbore	**#20 PWB ST01**
Facility	**Indian Basin**	Sidetrack from	**#20 AWB at 8042.00 MD**

TARGETS

Name	MD [feet]	TVD [feet]	North [feet]	East [feet]	Grid East [us survey feet]	Grid North [us survey feet]	Latitude [°]	Longitude [°]	Shape
1) #20 BHL	9578.69	[illegible]	[illegible]	-499.54	[illegible]	[illegible]	[illegible]	[illegible]	point

SURVEY PROGRAM Ref Wellbore: #20 PWB ST01 Ref Wellpath: Plan #1

Start MD [feet]	End MD [feet]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7870.00	Generic gyro - northseeking (Standard)		#20 AWB
7870.00	9880.86	NaviTrak (Standard)		#20 PWB ST01

Marathon Oil Company

Location: Eddy County, NM
Field: Indian Basin Field
Facility Indian Basin
Slot: #20_SHL
Well: North Indian Basin Unit #20
Wellbore: #20 PWB ST01

BAKER HUGHES INTEQ

Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	8042.00	0.534	255.954	8039.47	-21.59	-76.91	0.00	71.02
KOP	8102.00	0.534	255.954	8099.47	-21.73	-77.46	0.00	71.51
EOB	9560.56	48.557	224.252	9388.00	-439.80	-490.06	3.30	658.37
EOH	9578.69	48.557	224.252	9400.00	-449.54	-499.54	0.00	671.94
#20 BHL ST01	9880.86	48.557	224.252	9600.00	-611.79	-657.61	0.00	898.18

Plot reference wellpath is Plan #1	
True vertical depths are referenced to Rig on #20_SHL (RT)	Grid System: NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on #20_SHL (RT)	North Reference: Grid north
Rig on #20_SHL (RT) to Mean Sea Level: 0 feet	Scale: True distance
Mean Sea Level to Mud line (Facility - Indian Basin): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: cadedame on 17/Jan/2007